



**3<sup>rd</sup> ICEBIT  
2019**

**Proceeding:  
3<sup>rd</sup> International Conference on Education,  
Business, Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)**

**Copthorne Hotel, Cameron Highland,  
Malaysia**

**29-30<sup>th</sup> June 2019**

**Published By:**



**eISBN 978-967-2245-13-1**

3rd International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Cophorne Hotel, Cameron Highlands, Malaysia.  
29<sup>th</sup> – 30<sup>th</sup> June 2019

**Copyright 2019**

**Global Academic Excellence (M) Sdn Bhd**

**All rights reserved. No part of this proceeding may be reproduced in any form, except for the inclusion of brief quotations in review, without permission in writing from the author/ publisher.**

**ISBN: eISBN 978-967-2245-13-1**

**GLOBAL ACADEMIC EXCELLENCE**

**Published By:**

**Global Academic Excellence (M) Sdn Bhd**

**(1257579-U)**

**Kelantan**

**Malaysia**



## CONTENTS

1. D-DIRHAM: WHAT INTERESTS FOR THE DIGITIZATION OF DIRHAM? E-DIRHAM : QUELS INTÉRÊTS POUR LA DIGITALISATION DU DIRHAM ? .....	1
2. INVESTIGATING THE RELATIONSHIP BETWEEN WORK SAFETY SCALE AND SAFETY BEHAVIOUR AMONG LABORATORY WORKERS .....	15
3. PROMOTING ACTIVE LEARNING IN THE ESL CLASSROOM: TERTIARY LEVEL STUDENTS' PERSPECTIVE ON LECTURING APPROACHES.....	21
4. DISCOVERING FOOD ALLERGEN AMONG CHILDREN AND ADULTS.....	29
5. PROHIBITED ELEMENTS IN MUAMALAT: COMMON PRACTICE IN LIFE... 38	
6. THE IMPACT OF ANIMATION PROGRAM ON ARABIC LEARNING VOCABULARY RECALL AMONG PRIMARY SCHOOL PUPELS: A CASE STUDY AT AL-AMIN ISLAMIC PRIMARY SCHOOL, GOMBAK .....	48
7. LANGUAGE SPEAKING ANXIETY OF MALAYSIAN UNDERGRADUATES IN UTAR KAMPAR, MALAYSIA. ....	62
8. MUSHROOM TEA PRODUCTION TRAINING PACKAGE IN CAPACITY BUILDING PROGRAM TO INCREASE SMALL MEDIUM INDUSTRY (SME) ENTREPRENEURS IN RURAL AREA.....	80
9. AN ANALYSES REVIEW OF FORMATIVE ASSESMENT TOOLS.....	88
10. PRODUCT ATTRIBUTES AFFECTED MANUFACTURING KPI TO HAVE BETTER CONTROL OF QUALITY: A FURTHER CASE STUDY OF A 500-WORKERD SHEET METAL MANUFACTURER IN CHINA .....	98
11. WORK ETHICS IN ISLAMIC PERSPECTIVES: ANALYSING THE ATTRIBUTES .....	109
12. FACTOR AFFECTING THE ECONOMIC IMPACT OF CHINA ON SELECTED ASEAN COUNTRIES.....	116
13. EXPERIENTIAL LEARNING IN EVENT MANAGEMENT: A CASE STUDY OF EDVENTURE OF BEAUTY & THE BEAST.....	126
14. ENTREPRENEURIAL ORIENTATION AND ORGANIZATIONAL PERFORMANCE OF E-BUSINESS IN MALAYSIA: THE MODERATING ROLE OF EXTERNAL ENVIRONMENT .....	138
15. DIGITAL STRATEGY FOR ISLAMIC BANKS IN MOROCCO .....	153
16. A SYSTEMIC REVIEW OF SOCIAL MEDIA STUDIES IN GOVERNMENT ORGANIZATIONS .....	158
17. PSYCHOMETRIC FEATURES OF MyMICA MULTIPLE INTELLIGENCE INSTRUMENTS AMONG DELINQUENT STUDENT IN PRIMARY SCHOOL	167
18. ISLAMIC PARADIGM ON SOCIAL ENTREPRENEURSHIP IN MALAYSIA ..	180
19. ISLAMIC BUSINESS COACHING FROM THE PERSPECTIVE OF INDONESIAN COACHES .....	188



20. PROPOSAL FOR A HOLISTIC MINDFULNESS-BASED INTERVENTION PROGRAM FOR THE CLASSROOM TEACHERS WITH MENTAL HEALTH PROBLEMS .....	199
21. PROPOSAL FOR A TRAINING MODEL OF SKILLS FOR STUDENTS AS REQUIREMENTS OF INDUSTRIAL REVOLUTION 4.0.....	215
22. TEACHING GEL ELECTROPHORESIS IN A STUDENT-CENTERED ENVIRONMENT .....	233
23. MEMBINA KEUPAYAAN MURID BERINTERAKSI DENGAN MENGGUNAKAN RUTIN BERFIKIR 3-2-1 BINA TITIAN .....	243
24. PEMAHAMAN WATAK DALAM CERITA UNTUK MENCUNGKIL KOSA KATA BERKAITAN NILAI .....	251
25. PERBANDINGAN KESAN MEMORI JANGKA PENDEK DENGAN MEMORI JANGKA PANJANG MELALUI KOSWER PENCERITAAN DIGITAL BAGI MATAPELAJARAN SEJARAH .....	261
26. PENGGUNAAN RUTIN BERFIKIR TUMPUAN UNTUK PENGAJARAN KATA NAMA .....	271
27. PENGGUNAAN APP CERITA RAKYAT NUSANTARA DALAM MEMBINA KEMAHIRAN INTERAKSI LISAN .....	277
28. KEBERKESANAN <i>NEARPOD</i> DALAM MERANGSANG MINAT PELAJAR MEMPELAJARI KATA GANDA.....	285
29. CABARAN PEMBELAJARAN PELAJAR LEPASAN IJAZAH PENGAJIAN ISLAM DI MALAYSIA.....	292
30. GAGASAN PEMIKIRAN TUN DR. MAHATHIR (TDM): ANALISIS RANCANGAN MALAYSIA KE-4 (RMK4) HINGGA RMK8 DAN RMK11.....	304
31. SENARIO PEMBELAJARAN TILAWAH AL-QURAN MURID MASALAH PEMBELAJARAN (KEFUNGSIAN SEDERHANA).....	311
32. KEMAHIRAN MENULIS BAHASA ARAB: ANALISA KELEMAHAN PELAJAR UITM MELAKA .....	318
33. CABARAN KERJAYA KEUSAHAWANAN ATAS TALIAN DALAM KALANGAN PELAJAR UNIVERSITI KEBANGSAAN MALAYSIA.....	325
34. KAEDAH CUES DALAM MENINGKATKAN KEMAHIRAN PENYELESAIAN MASALAH MATEMATIK BERAYAT .....	330
35. PENDEKATAN PERSEMBAHAN TEATER-TEATER BERUNSUR ISLAM DINSMAN.....	342



## D-DIRHAM: WHAT INTERESTS FOR THE DIGITIZATION OF DIRHAM? E-DIRHAM : QUELS INTÉRÊTS POUR LA DIGITALISATION DU DIRHAM ?

M. Laiachi<sup>1</sup>  
S. Amrani<sup>2</sup>  
R. Benabdelouahed<sup>3</sup>

Université Hassan II de Casablanca - Fsjes Ain Sebaâ  
Laboratoire de Modélisation Appliquée à l'Economie et à la Gestion  
Mohamed.laiachi@gmail.com

---

**Abstract:** *The aims of this research are to take insights from the Swedish experiment in terms of digital currency (E-krona), in order to discuss the utility of adoption, by a developing country such as Morocco, of a digital currency issued by the BAM (Bank Al Maghrib ; Moroccan central bank). As a result this paper will present, the advantages and difficulties that the Riksbank had known while implementing the E-krona, and even try to transpose this experience to the digitalize Dirham. The main problematic is : which interest for a rising economy like Morocco, to adopt a digital currency taking in consideration the new economics and securitys requirements?*

**Keywords:** *Digital currency, Riksbank, BAM, E-krona, D-MAD.*

**Résumé :** *Cette recherche s'inspire de l'expérience Suédoise, en relation avec de la mise en place de l'E-krona par la Riksbank (Banque centrale de Suède), afin de discuter l'utilité d'adoption, par un pays en voie de développement comme le Maroc, d'une monnaie digitale par la BAM (Bank Al Maghrib ; banque centrale marocaine). Par conséquent, ce papier présentera les avantages et les difficultés rencontrées par la Riksbank lors de la mise en place de l'E-krona et essayera d'étudier la possibilité de transposition de cette expérience pour un Dirham digitalisé. La problématique centrale serait : quel intérêt à l'adoption d'une monnaie digitale dans un pays en voie de développement comme le Maroc pour tenir compte des nouvelles exigences économiques et sécuritaires ?*

**Mots clés :** *Monnaie digitale, Riksbank, BAM, E-krona, E-MAD.*

---

### Introduction

Since the Alyattes royal era, money has always been one of the best ways of making payments, it has known a lot of evolutions since, the three famous ones were (gold, silver, or a mix between the two) to the modern forms of today's society (coins, bills, and the scriptural found in the banks). But as technology progresses especially when going online and for security reasons, new methodes of making payments have emerged. In fact, digital currency is being developed and it's only a matter of time before they take over their predecessors.



Digital currency opens up new world of opportunities and offers so many advantages, speed and security wise, it'd also help minimizing frauds in all shapes and forms, moreover tracability will no longer be an issue, money laundering, financing extreme activities these things will be things of the past.

The subject of this research is to showcase the opportunities of adopting digital currency as a technology in a developing nation such as Morocco to correspond to the new international security standards.

First of all, we will discuss the digital currency concept, the evolution of the blockchain technology in which Digital currency has been built upon, and we will present the example of the e-krona. Then we will explain the why and the challenges of implementing such technology by the BAM (the Moroccan Central Bank), inspired by the E-krona. And we will finish by the exploration of the possibilities and the utilities of adopting an D-dirham.

## **Digital currency concept**

### **1. Definition of digital currency**

In order to distinct the different forms of digital currencies we will present the definition of digital currency as provided by the European Central Bank (E.C.B.), Commodity Futures Trading Commission (C.F.T.C), European Banking Authority (E.B.A.), the Financial Action Task Force (F.A.T.F.), and French Ministry of Finance and Public Accounts (F.M.F.P.A).

For the E.C.B. « *Virtual currency can therefore be defined as a digital representation of value, not issued by a central bank, credit institution or e-money institution, which, in some circumstances, can be used as an alternative to money.* »<sup>1</sup>

For the CFTC « *Virtual currency, or virtual money, is a type of unregulated, digital money, which is issued and usually controlled by its developers and used and accepted among the members of a specific virtual community* »<sup>2</sup>.

For the E.B.A. « *Virtual currencies are a digital representation of value that is neither issued by a central bank or a public authority, nor necessarily attached to a fiat (conventional) currency, but is accepted by natural or legal persons as a means of payment and can be transferred, stored or traded electronically* ».

For the F.A.T.F. « *Virtual currency is a digital representation of value that can be digitally traded and functions as (1) a medium of exchange ; and/or (2) a unit of account ; and/or (3) a store of value, but does not have legal tender status (i.e. when tendered to a creditor, is a valid and legal offer of payment) in any jurisdiction* ».

Virtual currency can be defined as a digital money stored in electronic chip. It's a digital representation of value that is neither issued by a central bank or a public authority, nor necessarily attached to a conventional currency. It can only be accessed through software and applications. Almost all digital currencies share a common feature is that they don't have a legal status and it doesn't apply a debt for the producer, except the ones issued by monetary authorities of a state. In this case it refers to Central bank digital currencies (C.B.D.C).

---

<sup>1</sup> «Virtual currency schemes »: BCE, Oct. 2012. – «Virtual currency schemes – a further analysis »: BCE, Février 2015.

<sup>2</sup> Commodity Futures Trading Commission (February 15, 2018) "Beware Virtual Currency Pump-and-Dump Schemes"

## 2. Evolution de la structure sous-jacente de la monnaie digitale

With the emergence of the RSA encryption algorithm to State's United in 1977 all commence because if the digital money is a reality today its development was based mainly on technologies that provide security, traceability and data transmission s.

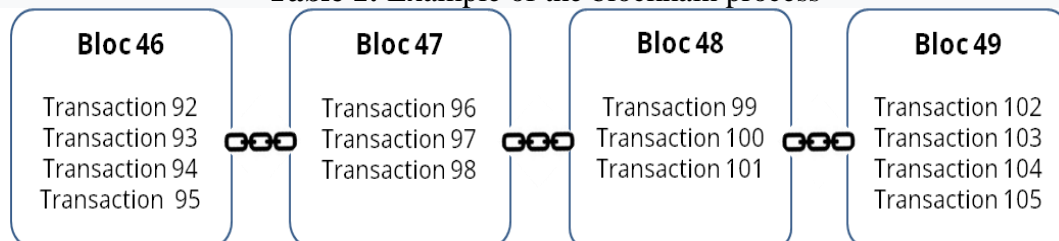
### *RSA encryption*

The RSA algorithm for the names of its creators, Ronald Rivest , Adi Shamir and Leonard Adleman, is an asymmetric encryption widely used in e-commerce and more generally for exchanging data on the Internet, this encryption system uses unlike systems. symmetric, two keys said a key pair consisting of a public key to encrypt and a private key to decrypt confidential data.Both keys can only be created by one person . Of this A person can send crypted information that will only be decrypted by specific people who have received the so-called private key decryption key directly from their owner.

### *La blockchain*

A blockchain is a decentralized and unmeasurable register of all transactions since its creation which groups together consecutive block transactions. This decentralized protocol can find a multitude of applications when it comes to registering and certifying and timestamping information, exchanges or identifications. A blockchain can therefore be defined as an active, chronological, distributed, verifiable and cryptographically protected against falsification by a distributed trust system. This requires the participation of a large number of non-coalition actors. The blockchain is sometimes called Distributed Ledger (Distributed Ledger).

**Table 1:** Example of the blockchain process



The blockchain phenomenon is similar to that of 1994 with the Internet and the emergence of the web. To better understand the phenomenon let us situate it in time with 3 major highlights:

- In the 1970s, the IP communication protocol made it possible to decentralize communications.
- In the 1990s, the web made it possible to decentralize the publication. The web becomes a great copy machine.
- In the 2000s, the blockchain protocol proposes to decentralize transactions.

Blockchain technology provides the network with a trustworthy infrastructure to guarantee, in a transactional process, a decentralized guarantee that the "object" that one is willing to dispose of is legitimately available to the recipient. in a legitimate way, that when

the transaction is validated, one can no longer claim possession of the "object" assigned, and that the one who received it can take advantage of it.

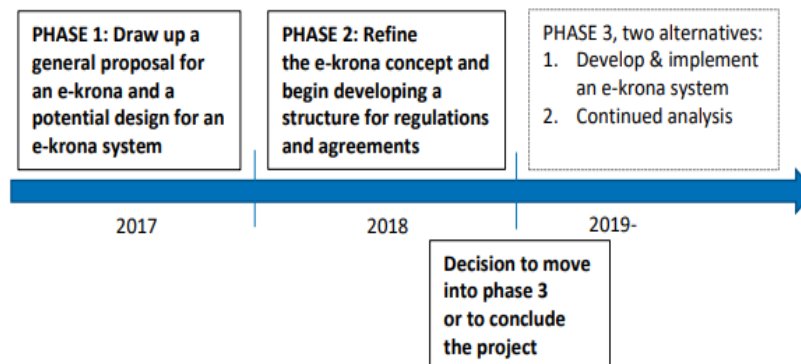
### 3. The E-krona experience

Although the concept of central bank-controlled cryptographic currency remains highly controversial, efforts are being made to make it a reality. Sweden is one of the first countries to embark on such a project. The cryptocurrency is called E-Krona. The idea of a cryptographic currency issued by a central bank offers several advantages, and in a company like the Swedish which is in a steady decline in the use of cash, finding an alternative has become an issue for the Swedish central bank.

After two years of its launch Cecilia Skingsley, said in a report before the "SNS finance panel of RISKbank" that the E-krona digital currency is a complement to cash that is less and less used and marginalized by its fellow citizens. And she says that we need to work on 3 other aspects, from one, to explore the technical possibilities and the technological opportunities, from two, to analyze the consequences of the adoption of a digital currency on the monetary policy, and lately, to anticipate the potential legal problems caused by this digital currency.

In March 2017, the launch process of the E-krona was launched following three development phases as shown in the figure.

**Table2** : The various phases of the project E-krona



#### *Phase 1 : dresser une proposition générale pour l'E-krona et une modélisation du système E-krona*

The first phase of E-Krona project was to implement a framework for the introduction of this new form of currency (which will initially be additional time to cash). This consisted of conceptualize E-krona, adopt a reference model to choose the technology, to study the impact on monetary policy and on legislation.

#### A. The concept of E-krona

The project proposes the following scheme for an E-krona in case the Riksbank Executive Board deems it necessary to introduce the digital currency of the central bank to the general public:

- i. E-krona is primarily intended for consumers, businesses and authorities ;



- ii. The E-krona constitutes a direct claim on the Riksbank is specified in Swedish kronor and can be owned by the public, financial institutions and companies. It is accessible in real time, 24 hours a day, seven days a week, 365 days a year ;
- iii. The E-krona generates no interest, but should have an integrated function to generate interests at a later stage ;
- iv. A registry-based E-krona is associated with a value-based solution that allows offline payments of small quantities and increases their availability for groups that do not want or can not have an E-krona account ;
- v. The Swedish central bank provides the basic functions of the E-krona system, and studies the possibility of using existing digital infrastructure and by the same to invite external actors to propose an interaction term with the end user.

This concept is the result of the first preliminary findings of the project and could be modified as the analysis and investigation work continued and after the project engaged in a dialogue with interested stakeholders.

#### **B. An E-krona based on value or a register**

An E-krona based on a register or on a value are presented as two imaginable models of E-krona. With a register-based E-krona, the balance would be stored in accounts located in a database, whereas a value-based solution would be more, as the money is at present, as the value would be stored locally in an application or on a map. The current assessment is that a simple value-based solution would have more limited development potential than a registry-based solution. A solution, but it could possibly be introduced more quickly. A registry-based solution is considered to be more complex, but at the same time would provide greater scope for extending the model in stages and making adjustments to future demands. A registry-based solution is considered to be more complex, but at the same time would provide greater scope for extending the model in stages and making adjustments to future demands. The project offers a combination of both models, where a registry-based solution is complemented by a value-based E-krona, primarily suited for small offline payments. The value-based solution will make E-krona more accessible to groups who can't or do not want to have an E-krona account and the solution can be further developed to meet the needs of special groups and basic payment services.

#### **C. The choice of technology**

The question that arises is to find the most suitable technology for this new concept, several choices are offered including new technologies tested and proven as the blockchain that offers as previously seen traceability and very high security by working public authorities and private actors at the same time, not to mention that the use of available banking infrastructure is not a remedy dismissed.

#### **D. The repercussions on monetary policy and financial stability**

In a primary analysis of the consequences of adopting an E-krona, according to the report of the Swedish central bank in (The Riksbank's e-krona Project, Report 1), the implementation of the E-krona will not have a great influence on monetary policy, the payments market and financial stability, the authorities say that the general framework of monetary policy will be well adapted to the new reality. The Swedish central bank determines the aggregate M1 which



refers to the necessary fiducial money supply, in the same way the Swedish central bank can determine this time the quantity needed in E-krona.

### **E. A question of legislation**

The issues that are raised are so broad and so important that they require extensive deliberations by the legislator. The introduction of E-krona is obviously not compatible with the legislation in force concerning the Riksbank's monetary policy mission. However, according to a preliminary assessment in the report "The Riksbank's e-krona Project, Report 1", an E-krona could be compatible with the statutory mandate of the Swedish central bank to promote a secure and efficient payment system. . The report believes that the Sveriges Riksbank law needs to be adapted so that the Riksbank can issue a digital payment method. Sveriges Riksbank's mandate to issue an e-krona and the question of whether the e-krona should or should not be legal tender, ultimately fall within the purview of the legislator.

#### ***Phase 2 : Refine the E-krona concept and begin the development of a regulatory and regulatory structure***

During Phase 2 (see Figure 1), the project will be presented in a more concrete way and will develop the e-krona concept developed in Phase 1. During this phase, proposals will also be developed for a governance model. and management of the e-krona system. Thus other legal issues, such as regulations and agreements will be developed and processed .

The Phase 2 action plan should first and foremost be based on the findings and results achieved during the first phase of the project.

The introduction of a digital payment instrument issued by the Riksbank, E-krona, may solve some problems that may arise in the future of the payments market. While E-krona can operate with an alternative platform or infrastructure, it can also operate independently of private bank owned infrastructure and thus help payment systems to withstand disruptions. technological problems and situations of financial malaise.

In 2018 work on the E-krona project will focus on:

- The E-krona system is not intended to replace cash or other payment solutions, but to complement them.
- E-krona aims to preserve public access to central bank money in a situation where cash is no longer considered to be generally accepted.
- E-krona can serve as a means of payment such as cash, but also as a store of value as it is cash.
- An E-krona is intended for payments between consumers, companies and authorities. It is not meant for big payments that go through RIX4 [\[7\]](#) and is not primarily an instrument of monetary policy.
- E-krona is a direct claim on the Riksbank, specified in Swedish kroner, and may be held by financial institutions, corporations, public authorities and members of the general public. The Riksbank will provide accounts for E-krona. E-krona must be accessible electronically 24 hours a day. Seven days a week, 365 days a year in real time.
- The supply of the E-krona is determined by the demand of the latter.
- An e-krona must allow offline payments of small amounts.
- The E-krona will not generate interest but will have to integrate system to allow it later

- The Riksbank will be responsible for the issue, redemption and settlement of the E-krona. All or part of the interaction with e-krona users will be through private or public sector agents authorized to make payments.
- The technical solution produced for an e-krona must be flexible in order to adapt to new technologies developed over time. It must also be possible to modify its functions and characteristics over time.
- The economic effects of introducing the E-krona system in the medium and long term should be analyzed .

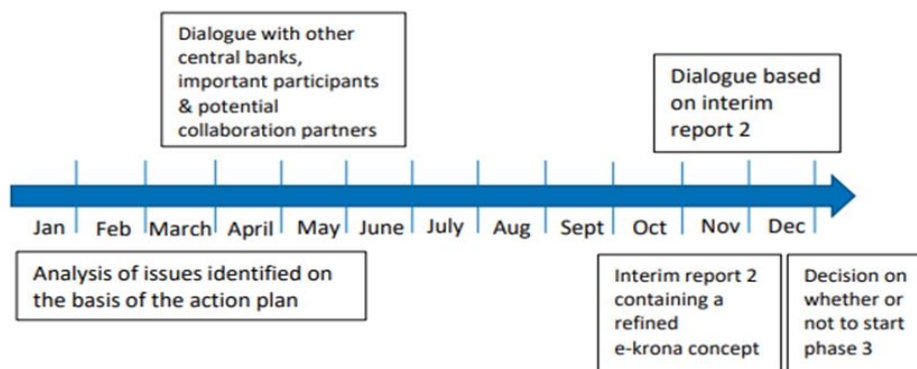
Project work must be carried out in three sub-projects; infrastructure and technology, legal issues and policy issues.

The subproject of the infrastructure and technology aims at going out with a correct proposal for a value-based E-krona system first, secondly the project will bring to provide a conceptual proposal of a system E-krona based on registers

The legal issues relating to the sub-project will continue to examine the legal conditions of an E-krona and to present a concrete proposal for the modifications to be made on the basis of the E-krona concept developed in phase 1. This sub-project -project with the help of the other sub-projects, will begin to design a global model of governance and management for an E-krona system.

Subproject policy issues will address issues identified in the areas of monetary policy, financial stability and the functioning of the payments market.

**Table 3 : Phase 2 ; Overall timetable E-Krona for 2018**



## The interest and the difficulties of the conception of a central digital currency

### 1. Interest of a central digital currency

As security and computing power measures advance, the world can no longer deny the enormous promise of digital currency, the experience of cryptocurrencies and bitcoin in particular has revealed that digital currency can function even without government control and that's due to an auto-regulated system called « proof of work » which adjusts bitcoin creation accordingly to the network computing power which implies that every 10 minutes transactions will be recorded and validated by a calculator (miner). This experience proved that the modern society is ready to fully trust immaterial currencies.

In general, digital money offers several perspectives and advantages in terms of the possibility of adoption as a form of national currency.



Issuing central digital The issuance of a central digital currency offers several advantages because the latter is easier to control and regulate but also as a transition phase to a highly dematerialized economic system. In this perspective, digital currency will facilitate access to the digital economy. As a result, it offers a number of advantages and issues, including :

**A. Fight the underground economy**

When we talk about underground economy, we do not point out just illegal activities, but all kinds of income-generating activities that are not declared to the tax authorities.

The digital currency will be one of many solutions to overcome the underground economy, because if the currency is completely dematerialized transactions will be more transparent and at the same time easier to monitor.

Money laundering will then become an almost impossible task because we can easily trace the flow of money to identify its source. Ultimately, the tax system will benefit enormously from this change because of the near-taxability of tax evasion.

**B. Transaction security**

Security was always a tricky issue to deal with especially when it comes to computer systems, because cyberattacks have not ceased to multiply since the creation of the internet. But the creation in 1977 of the RSA encryption method, and combined with the blockchain technology to drastically reduces the possibility of hacking or falsifying the data logging system. First the RSA encryption method unlike conventional encryption methods that use a single key to encrypt and decrypt, the RSA uses two so-called public encryption keys that encrypt the data and the second so-called private decrypts data, in this way a person can send encrypted information that will only be decrypted by specific people who have received by lover the decryption key called public key directly by its owner.

Using the RSA data encryption algorithm, part of the security problem has been solved. But encryption alone does not ensure the security of the network, it is with the advent of the blockchain that the entire network can benefit from immunity against all attempts of falsification or modification. The first study on cryptographically secure blockchains was described in 1991 by Stuart Haber and W. Scott Stornetta. They wanted to implement a system where timestamped documents could not be falsified or backdated. The first chain of blocks was conceptualized by a person (or team) known as Satoshi Nakamoto in 2008. It was implemented the following year by Nakamoto as the main component of Bitcoin, where it serves as a public registry to all transactions on the network.

**C. Lower cash production costs**

Creating money is not free, even for a central bank. For example, the Fed to disclose the cost of production of the currency compared to 2019:

**Tableau 1:** How much does it cost to produce currency and coin ?  
Combien ça coute la production du dollar ?

Catégorie	Cout de production
1\$ et 2\$	5,5 centimes par billet
5\$	11,4 centimes par billet
10\$	11,1 centimes par billet
20\$	11,5 centimes par billet



<b>50\$</b>	<b>11,5 centimes par billet</b>
<b>100\$</b>	<b>14,2 centimes par billet</b>

Source: 2019 Currency Budget of Federal Reserve (FED) <sup>3</sup>

The FED said in its 2019 Currency Budget report that the operating budget for Dollar 2019 is \$ 955.8 million.

We have suggested the cost of producing US dollar notes as an indication. This cost varies from one country to another, and for each currency according to several parameters (Quantity of tickets produced, level of requirement in terms of security ...).

Dematerializing money creation with digital currency would drastically reduce the costs of its creation, and could encourage central banks to take the plunge. And the commercial banks would be in favor, if we keep only the cost angle. For it is they who must for example maintain the network of cash dispensers, ensure security with money conveyors etc. Managing cash is a pure cost center for banks, while conversely, they receive commissions on electronic transactions, with bank cards for example. In Europe, coins and notes in circulation represent about 10%, the United States is rather around 8%, but in Sweden, it is reduced to 1%.

#### **D. Facilitated international trade**

Today, the vast majority of international transactions are made in dollars or euros, at 40% and 35% respectively. Morgan Stanley notes in "Bitcoin, Cryptocurrencies and Blockchain" that there are currently many discussions on blockchain technologies and cryptocurrencies, in order to create alternative international payment systems. Countries that have a large share of international trade, import or export, or those that use many foreign currencies for trade would be the natural candidates for the issue of cryptocurrencies. And this is not just about big economies. The report notes, for example, that the Marshall Islands, which uses the US dollar as its domestic currency, has passed a law to launch their own cryptocurrency. The latter, in addition to the US dollar, will then be accepted in this country. It should be noted that this example is atypical, since it is an oceanic archipelago with a small economy and a population of 70,000 inhabitants.

#### **E. Morocco's interest in adopting a central digital currency**

Morgan Stanley's report recalls that more than 80% of currencies in the world do not follow a floating exchange rate regime, ie they fluctuate according to the supply and demand for the relevant currency in the market exchange. Only 16% of the 184 countries surveyed by the IMF have a truly floating exchange rate. For all others: exchange control is exercised, to a greater or lesser extent.

For Morgan Stanley, a digital form of the currency would better track international transactions in this colossal exchange market, which records a volume of 5000 billion per day. Because this is not a single market place, such as a stock market, where all exchanges are recorded. And it seems that some countries, like China, are very interested in this option. According to Thomson Reuters, out of more than 400 patents in the blockchain filed globally last year, more than half come from China. Morgan Stanley makes it clear that the Central Bank of China is evaluating the opportunities of using the blockchain, as has the introduction of a digital version of the yuan.

---

<sup>3</sup> [https://www.federalreserve.gov/faqs/currency\\_12771.htm](https://www.federalreserve.gov/faqs/currency_12771.htm)



## **2. Morocco's interest in adopting a central digital currency**

With the development of Moroccan and foreign online trading platforms (jumia, AliExpress, Amazon ...) approval by the general public are dematerialized forms of payment continues to grow. Indeed, Moroccan consumers are increasingly using e-line shopping (statistic% growth of purchases of Moroccans online) and an online payment therefore it became plausible to discuss the possibility of adopting a digital currency as a means of payment because of several advantages to know including :

### **A. Reduce fraud and tax evasion**

According to Omar Faraj [11], tax evasion (or rather tax evasion) is around 6 billion dirhams. 170 000 Moroccan companies have never made a tax return.

The Director General of Taxes of Morocco also claims "We discovered 53 billion dirhams in fake bills from 47,000 companies. We found them in the deduction statements of other companies that they include in expenses. Just for VAT, the shortfall amounts to nearly 8 billion DH, not to mention the SI." [12]

The introduction of a digital currency would make it easier to track down fraudsters, expand the taxable base thanks to the traceability and the ease of controls on the transactions carried out by the digital currency.

### **B. Fighting the informal economy**

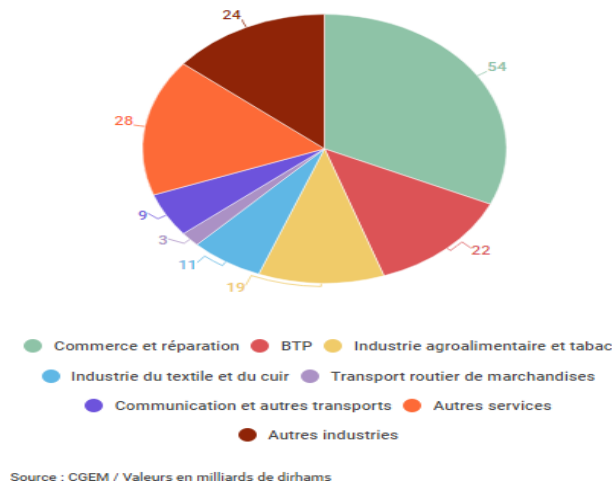
In a study conducted by Roland-Berger<sup>4</sup> the CGEM (General Confederation of Enterprises of Morocco) the informal economy in Morocco is 170 billion dirhams, which is an estimated shortfall of 40 billion dirhams for the state.

For Bensalah-Chaqroun [14], president of the CGEM at the time of the presentation of the study, "The informal is doing with impunity, it is unacceptable, while taxpayers are trying to pay their taxes and social contributions and are undermined by this unfair competition".

One of the great advantages that digital money offers is the ability to control transactions in real time and to determine the subjects of this shadow economy without taking too much time or budget in terms of control.

---

<sup>4</sup> Roland-Berger : cabinet d'étude



### C. Eradicate money laundering

Money laundering is a real danger for the Moroccan economy as it is used by organized crime networks, which structure increasingly sophisticated circuits, in order to conceal dirty money from various crimes. and very often used as resources for terrorist financing. Faced with these considerable movements of money obtained illicitly, facilitated by the free movement of capital and the freedom of financial services delivery, a digital currency could easily cope with this problem by the perfect traceability of flows and in addition to this traceability, the ease of this task.

### D. Fostering the transition to a digital economy

In a context increasingly focused on new technologies, the transition to the digital or dematerialized economy has become a major issue to win or at least keep the same level of regional competition and international attractiveness . Morocco aims , through the " Maroc Digital 2020 " strategy , to maintain its position as the leading digital hub in French-speaking Africa and Africa's second largest digital hub, after South Africa [16] . It aspires in particular to develop activities related to offshoring by implementing the recommendations of the " Maroc Digital 2020 " strategy , which will generate additional growth of between 5% and 10% in this activity .

The economic reality today is moving increasingly in all areas to a high digitalization between particular s , private actors and public authorities. The introduction of a central digital currency will boost this transition, notably by facilitating online access and payment.

### 3. Difficulties in setting up a central digital currency in Morocco and its limits

The Moroccan context even if in the last e s years opened on the Internet worlds, there is always a privileged context because the majority of the Moroccan population is not yet adapted to the virtual which makes the implantation of the digital currency a work of sensitization above all, because the value of the currency is in the confidence that one grants him, and therefore if the majority of the population is not able to understand how a digital value can have a real value, they will be unable to place their trust in this currency.

Beyond the population, the establishment of a digital currency imply well-adapted infrastructures and skills in the field, without forgetting the current banking system which will



have to adapt with the new reality if it is decided to introduce this digital currency. We can also talk about the monetary policy that depends on the Moroccan central bank and that will not only study the economic and social impact of this digital currency, but also its impact on monetary policy.

The question of legislation is also to be taken into account because obviously the current legislation is not at all adapted to this new context. And therefore the legislator must study the question and its implications.

The idea of adopting digital currency, even with the tremendous benefits it offers, will not be tolerated by everyone because it will help put an end to many illegal and informal activities, which will push several lobbies to hinder path to this transition that is a threat to them.

For Morocco the transition is a future, but must be prepared, especially following the Swedish model started in 2017 and why not a collaboration between the two central banks BAM and Riksbank to come out with a model of the E-dirham system in the near future.

## **Conclusion**

Although the idea of a central digital currency is not very clear in the eyes of the general public because it is a new concept and requires a global knowledge including how we manage the transaction and how we ensure the security of the latter. It is clear that digitalization of communications has led to a trust that is being digitized and is being extended to a digitalized currency.

The blockchain combined with encryption technologies has enabled this achievement and we are witnessing more and more the launch of private or decentralized digital currencies, but they can not fully verify the principle of store of value because their volatility is very high. and present several risks to their users, because for the moment they are apprehended more like property of speculations than instruments of payments.

The problem of this research was to reveal that the interest for Morocco to adopt a digitized form of Dirham to take into account new economic and security requirements? She led us to talk of the digital money and present its definitions as several gold international organisms, presenting the structure's underlying (Blockchain and RSA asymmetric encryption) bases to dematerialize trust.

Was exposed Example E-krona which is the first global project since 2016 and have established a digital monetary system were exposed how the Riksbank first concept of digital currency and central key features of this system.

Subsequently, the question of interest in the adoption of a central digital currency was raised, notably through the war on fiscal France and the subterranean economy, the eradication of money laundering. and the fight against the financing of terrorism.

And finally we stopped on the case of Morocco to expose the benefits to be derived from this revolution. On found that the Moroccan government has marked win including VAT, which amounts to nearly 8 billion dirhams and 40 billion dirhams in terms of economy informal. Des are that the state could easily recovered in the event of adoption of a D digitized.

In addition, we have exposed the e-krona experiment according to which the digital central money will be made with a view to a partial transition of the moment that it is not intended to directly replace other forms of money, but to initiate the transition. towards a totally digitized system in the future. It's about just for now of additional cash, which can primarily be monitored and regulated more easily as fiat money.



Several countries such as china, japan, Singapore, the United States and the c anada, studying the launch of their own currency 's central s digital s in the future because it offers several benefits as mentioned earlier , but for a country of Like Morocco, digital currency is an opportunity that will allow for a transition to the digital economy , combat fraud and tax evasion, help structure the informal economy, and put an end to the financing of terrorism.

The introduction of a digital currency in Morocco will be very useful, but before making such a decision, it is essential to study the repercussions of this decision on the economy in general and especially on monetary policy, without forget the legal question that needs to be revised.

To conclude , we can say that the central digital currency is a transition that will facilitate and stimulate the digital economy. Admittedly, it has a cost to bear especially in terms of system management, but in view of the expected benefits this represents only a small part.

### Bibliographie

- AM M C. (2017), Annual Report  
[http://www.ammc.ma/sites/default/files/AMMC\\_Rapport%20Annuel%202017.pdf](http://www.ammc.ma/sites/default/files/AMMC_Rapport%20Annuel%202017.pdf)
- Bank of Japan. (2019), Digital Innovation, Revolution Data and Central Bank Digital Currency, Japan: Hiromi Yamaoka, Noriyuki Yanagawa  
[https://www.boj.or.jp/en/research/wps\\_rev/wps\\_2019/data/wp19e02.pdf](https://www.boj.or.jp/en/research/wps_rev/wps_2019/data/wp19e02.pdf)
- Bank of Canada . (2017). Central Bank Digital Currency: Motivations and Implications. Walter Engert and Ben SC Fung. <https://www.bankofcanada.ca/wp-content/uploads/2017/11/sdp2017-16.pdf>
- Bech, M., and Garratt, R. (2017), "Cryptocurrencies issued by central banks? BIS Quarterly Report, September 2017. [https://www.bis.org/publ/qtrpdf/r\\_qt1709f\\_fr.pdf](https://www.bis.org/publ/qtrpdf/r_qt1709f_fr.pdf)
- Cecilia SKINGSLEY. (2018), *Considerations for a cashless future*, Riksbank Documentation, SNS finance panel, [https://www.riksbank.se/globalassets/media/tal/engelska/skingsley/2018/skingsley\\_considerations-for-a-cashless-future.pdf](https://www.riksbank.se/globalassets/media/tal/engelska/skingsley/2018/skingsley_considerations-for-a-cashless-future.pdf)
- CGEM . ( 2018 ), The informal economy: impacts on business competitiveness and proposals for integration measures . Morocco : Roland Berger  
<http://www.cgem.ma/upload/687807921.pdf>
- Dabrowski Marek and Janikowski Lukasz. (2018), Virtual currencies and central banks. Monetary Dialogue <http://www.europarl.europa.eu/committees/en/econ/monetary-dialogue.html>
- Department of the treasury financial crimes enforcement network. (2013). *Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies* .  
[https://web.archive.org/web/20130319213642/http://fincen.gov/statutes\\_regs/guidance/html/FIN-2013-G001.html](https://web.archive.org/web/20130319213642/http://fincen.gov/statutes_regs/guidance/html/FIN-2013-G001.html)
- European Central Bank. (2015). Virtual currency schemes - a further analysis. February 2015  
<https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemesen.pdf>
- EBA . (2014). Opinion on 'virtual currencies'  
<https://eba.europa.eu/documents/10180/657547/EBA-Op-2014-08+Opinion+on+Virtual+Currencies.pdf>



3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Cophorne Hotel, Cameron Highland, Malaysia  
29<sup>th</sup>-30<sup>th</sup> June 2019

- FATF. (2014 ). Virtual Currencies Key Definitions and Potential AML / CFT Risks  
<https://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf>
- EDF. (2019). 2019 , *Currency Budget .*  
<https://www.federalreserve.gov/foia/files/2019currency.pdf>
- Philippe Marrast. Blockchain: Elements of explanation and popularization, Why be interested in the blockchain today ? Blockchain and Health: Perspectives of Applications and Legal Issues (IFERISS Seminar), IFERISS, Oct. 2018, Toulouse, France. ffhal-01973507f  
<https://hal.archives-ouvertes.fr/hal-01973507/document>
- 2016 - 2017 Activity Report of the Financial Intelligence Processing Unit of the Government of Morocco.
- Riksbank. (2017). The Riksbank's e-krona project Action plan for 2018  
[https://www.riksbank.se/globalassets/media/rapporter/e-krona/2017/handlingsplan\\_ekrona\\_171221\\_eng.pdf](https://www.riksbank.se/globalassets/media/rapporter/e-krona/2017/handlingsplan_ekrona_171221_eng.pdf)
- Riksbank. (2018). *The Riksbank's e-krona project Report 2*  
<https://www.riksbank.se/globalassets/media/rapporter/e-krona/2018/the-riksbanks-e-krona-project-report-2.pdf>



## INVESTIGATING THE RELATIONSHIP BETWEEN WORK SAFETY SCALE AND SAFETY BEHAVIOUR AMONG LABORATORY WORKERS

Zuraida Hassan<sup>1</sup>  
Kong Sau Mun<sup>2</sup>  
Fadzli Shah Abdul Aziz<sup>3</sup>

<sup>1</sup>School of Business Management, Universiti Utara Malaysia (UUM), Malaysia, (E-mail: h.zuraida@uum.edu.my)

<sup>2</sup>Ministry of Health, (MOH), Malaysia, (Email: kongsaumun@gmail.edu.my)

<sup>3</sup>School of Business Management, Universiti Utara Malaysia (UUM), Malaysia, (E-mail: [f.shah@uum.edu.my](mailto:f.shah@uum.edu.my))

---

**Abstract:** *Workplace safety is of important irrespective whether it is manufacturing, construction or healthcare industry because it will affect the workers or the organization itself that may cause accidents that leads to death, injury, damage of machines or loss in profit. This study was held to determine the relationship between safety management practices and compliance behaviour among medical laboratory workers. A total of 191 questionnaires had been distributed to the medical laboratory workers which include pathologists, medical officers, science officers and medical laboratory technologists by using stratified random sampling method. A 141 questionnaire were returned, however seven of them were dropped from the study due to incomplete responses in the questionnaire. The data collected from the study were analysed using Statistical Package for Social Sciences (SPSS) version 23. The result revealed the safety management practices by the laboratory management had a significant influence on compliance safety behaviour among the medical laboratory workers.*

**Keywords:** *compliance safety behaviours, work safety scale, medical laboratory workers*

---

### Introduction

Accidents happen due to several causes such as fault of the person, untrained workers or lack of proper standard operation procedures (SOP's). The earlier investigation revealed that majority of accidents were caused by unsafe work behaviour or human errors (Wiegmann, & Shappell, 2017). Past researches have indicated that various factors have contributed to unsafe work behaviour with perceived organization safety practices is one of the pertinent determinants (Wallace & Ross, 2016). A several of organization safety practices factors were studied in previous researches such as management support, training, personal protective equipment and others (Unnikrishnan et al., (2015). Their findings showed that the company's dedication and commitment toward positive safety practices from the employees' perception has been influential corresponding to the accident reduction and positive safety culture at workplace (Hassan & Loong, 2017). However there is much scarcity to studies being done to employees working specifically in a medical laboratory to measure their perception regarding organization safety practices. Like nurses and doctors, medical laboratory workers also faced various occupational hazards while working (Kong, 2017). For example, chemical substances used in the laboratories can caused skin irritation and burn (Kong, 2017). The main essential of this study is to examine the workers' perception of organization safety practices at the workplace and it relationship with safety behaviour.



## **Literature Review**

### **Safety Behaviour**

Safety behaviour is being defined as the positive work behaviour that related to the job (Christian et al., 2009). Safety behaviour is the behaviour that supports safety activities and practices where it is also an important key in reduces workplace injuries (Lyu et al., 2018). Safety behaviour can be expressed as safety compliance and safety participation (Neal et al., 2000). Safety compliant behaviours are not only limited to using or wearing personal protective equipment where necessary, but also following safety procedures and adhering to the rules and regulation that are implemented by the organization. Safety participation behaviour include workers voluntarily participating and involving themselves in safety activities, program or attending safety meetings, whistle-blowing or exercising their rights, helping other in safety related measures, initiating safety-related change, communication and voice, stewardship, and civic virtue (Neal et al., 2000). Studies have proved that perceptions of positive workplace safety are significantly associated to safety compliance and show negative association to accidents at different level of analysis, such as at individual, group and organization. (Hofmann et al., 2017).

### **Medical laboratory**

Medical laboratory is the clinical laboratory that provides laboratory services for the analysis of substances obtained from the body of a human with the motive of providing information which aids in diagnosis, treatment and prevention of diseases or disorders, determining the well-being of human being and providing consultant advisory services of laboratory investigation (Ministry Of Health Malaysia, 2011). Medical laboratory workers refer to personnel that work in a medical laboratory which include pathologists, medical officers, science officers, medical laboratory technologists, clerical staffs and health attendances (Ministry Of Health Malaysia, 2011).

### **Work Safety Scale**

**Work Safety Scale** is an instrument that developed by Hayes, Perander, Smecko, & Trask (1998) to assess employees' perceptions of workplace safety. This Work Safety Scale measures five factually distinct variables namely job safety, co-worker safety, supervisor safety, management safety practices, and satisfaction with the safety program.

**Job safety** is the nature of work or condition that protect employees and prevent them from occupational injuries or diseases during their employment (Hayes et al., 1998).

**Co-worker safety** describes the extent to which workers perceive their peers as valuing safety; it provides safety cues for the types of behaviours regarding safety that are appropriate and expected within the organization (Hayes et al., 1998).

**The supervisor safety** refer to safety responsibilities of a supervisor to ensure that their subordinates are adequately protected from workplace hazards (Hayes et al., 1998).

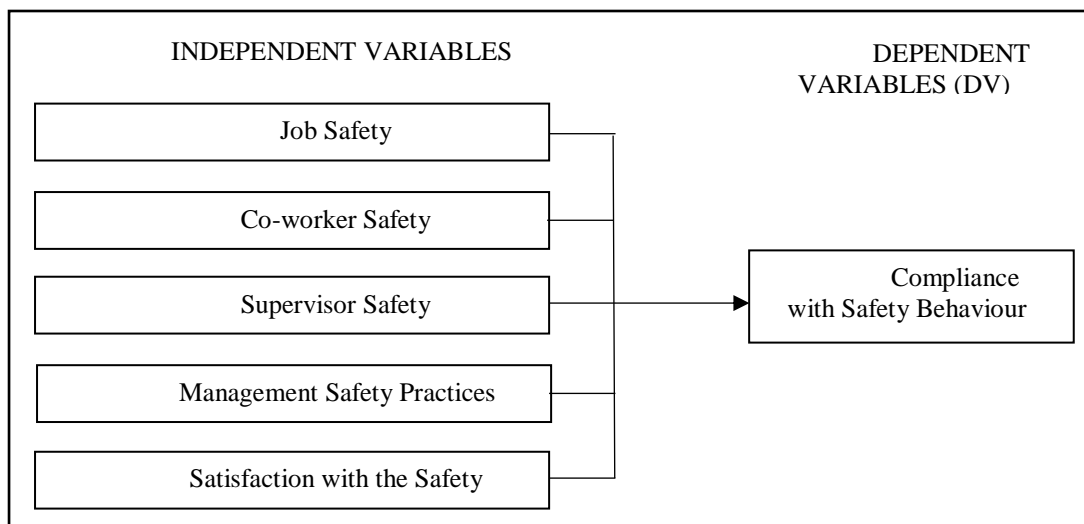
**Management safety** denotes as workers' perceptions of their management's or administration's value of safety and engagement in communication and actions that support safety (Christian, Bradley, Wallace & Burke, 2009).

**Satisfaction with safety programs** is the employees' review and contentment regarding the quality of policies, procedures, or interventions implemented by an organization with the intention of improving safety outcomes (Hayes et al., 1998).

**Compliance with the safety behaviour** is described as the degree to which the workers abide with any safety procedures, rules, ordinance, and set of standard practices, as in the guiding principle of their organization (Hayes et al., 1998).

### Methodology

Based on the literature review, the relationships between five facets of Work Safety Scale and compliance with safety behaviour requisite further investigation. The relationships between job safety, co-worker safety, supervisor safety, management safety practices, satisfaction with safety program and compliance with safety behaviour was illustrated in Figure 1 as below.



**Figure 1:** Research Framework

### Measurement

Two instruments namely Work Safety Scale and compliance with safety behaviour are used in this study. Work Safety Scale measures five facets of employees' perception of work safety, namely (i) job safety, (ii) co-worker safety, (iii) supervisor safety, (iv) management safety practices and (v) satisfaction with the safety program. A five rating Likert scale rating by 1 to 5 was used to measure this five variables. The five point rating Likert scale are; 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

### Population, Sampling Technique and Sampling Size of Study

This study is based on the population of medical laboratory workers from Department of Pathology, in one public hospital in Kuala Lumpur. This involved pathologists, medical officers, science officers and medical laboratory technologists. The total population is 363 workers. The sample size for this study is 191 people. This study used the stratified random sampling. The unit of analysis is individual.

### Result

The multiple correlation co-efficiency (R) between the dependent variable and the independent variables is 0.374. In addition, the coefficient of determination, R square = 0.140 means that only 14 percent of the variance in compliance with safety behaviour explained by the five independent variables examined in this study. From the analysis, the largest beta coefficient is

0.240, which is for management safety practice. The beta value for satisfaction with safety program was the lowest (0.001). The summary of the multiple regression analysis was summarized in Table 1 as below.

**Table 1:** Results of Linear regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.840	.501		5.673	0.000
Job Safety	-.053	.071	-.065	0.752	0.454
Co-worker Safety	.107	.090	.120	1.193	0.235
Supervisor Safety	.060	.128	.058	0.470	0.639
Management Safety Practice	.249	.127	.240	1.965	0.052
Satisfaction with Safety Program	-.001	.110	-.001	0.013	0.989
R = 0.374 <sup>a</sup>		R <sup>2</sup> = 0.140	Adjusted R <sup>2</sup> = 0.106		

**Notes:**

a. Predictors: (Constant), Job Safety, Co-worker Safety, Supervisor Safety, Management Safety Practices, Satisfaction with Safety Program

b. Dependent Variable: Compliance with Safety Behaviour

**Discussion**

This aims of this study is to examine the effect of Work Safety Scale on compliance with safety behaviour among medical laboratory workers. The result showed that none of the facet under Work Safety Scale has a significant relationship with workers safety behaviour. The R-square value also indicated that other factors may affect the workers safety behaviour such as work pressure, job demands, environmental factors et cetera. Further enhancement on these factors should be carried out in order to investigate the relationship and helping the management of the medical laboratory in improving their workers safety behaviour, thus reducing and preventing workplace accidents from happen.



## Conclusion

The study on compliance with safety behaviour is not only fundamentals to the academic world but also to the operation of an organization. It is obligatory for all organizations in Malaysia to abide, follow and implement Occupational Safety and Health Act and Regulations 1994. It's to make sure that the workers safety, health and welfare are protected and to avoid them against the work risk that may come with their work. Occupational safety and health practices play a vital part in improving organizational overall performance by reducing labour cost and loss-of-work hours due to accidents which is an important prerequisite for national safety index. A study on workers' safety perception offers a proactive measure for the management to design a safer workplace environment for their workers. Thus, this study is needed to look into the effectiveness of safety application of the organization. By conducting more studies on workers' safety behaviour, management could see the weaknesses and shortcomings in enforcement to provide a safe working environment to the staffs and to improve the overall quality of work. Moreover, safety training and workplace inspection should be held more frequently and there should be a two-way communication between the management and its staffs to ensure successful implementation of safety practices and safety awareness in the organization.

## References

- Christian, M. S., Bradley, J. C., Wallace, J. C., & Burke, M. J. (2009). Workplace safety:meta analysis of the roles of person and situation factors. *Journal of applied psychology*, 94(5), 1103.
- Hassan, Z., & Loong, T. W. (2017). Level of organizational safety climates and its relationship to employees compliance behaviour in the Department of Emergency and Trauma, Ministry of Health, Malaysia, *International Journal of Economic Research*, 14(15), 121-129
- Hayes, B., Perander, J., Smecko, T., & Trask, J. (1998). Measuring Perceptions of Workplace Safety: Development and Validation of Work Safety Scale. *Journal of Safety Research*, 29, 145-161.
- Hofmann, D. A., Burke, M. J., & Zohar, D. (2017). 100 years of occupational safety research: From basic protections and work analysis to a multilevel view of workplace safety and risk. *Journal of applied psychology*, 102(3), 375.
- Kong, S. M. (2017). *Assessment of medical laboratory workers compliance to safety behaviour*. (Unpublished Master's Dissertation). Universiti Utara Malaysia, Sintok, Malaysia.
- Lyu, S., Hon, C., Chan, A., Wong, F., & Javed, A. (2018). Relationships among safety climate, safety behavior, and safety outcomes for ethnic minority construction workers. *International journal of environmental research and public health*, 15(3), 484.
- Ministry Of Health Malaysia. (2011). National Strategic Plan on HIV and AIDS 2011-2015, Disease Control Division.
- Nagaraju B, Padmavathi Gv, Puranik Ds, Shantharaj Mp, Sampulatha Sp. (2013) A Study To Assess The Knowledge And Practice On Bio-Medical Waste Management Among The Health Care Providers Working In Phcs Of Bagepalli Taluk With The View To Prepare Informational Booklet. *Int J Med Biomed Res*;2(1):28-35
- Neal, A., Griffin, M. A., & Hart, P. M. (2000). The impact of organizational climate on safety climate and individual behavior. *Safety science*, 34(1-3), 99-109.
- Unnikrishnan, S., Iqbal, R., Singh, A., & Nimkar, I. M. (2015). Safety management practices in small and medium enterprises in India. *Safety and health at work*, 6(1), 46-55.



*3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Cophorne Hotel, Cameron Highland, Malaysia  
29<sup>th</sup>-30<sup>th</sup> June 2019*

- Wallace, B., & Ross, A. (2016). Beyond human error: taxonomies and safety science. CRC Press.
- Wiegmann, D. A., & Shappell, S. A. (2017). A human error approach to aviation accident analysis: The human factors analysis and classification system. Routledge.



## PROMOTING ACTIVE LEARNING IN THE ESL CLASSROOM: TERTIARY LEVEL STUDENTS' PERSPECTIVE ON LECTURING APPROACHES

Noor Alhusna binti Madzlan<sup>1</sup>

<sup>1</sup>Department of English Language and Literature, Faculty of Languages and Communication,  
Universiti Pendidikan Sultan Idris (UPSI), Malaysia (E-mail: nooralhusna@fbk.upsi.edu.my)

---

**Abstract:** *The present study aims to explore students experience in the teaching of English as a Second Language (ESL) through various lecturing approaches, ranging from traditional to interactive lectures that include e-learning tools. The purpose of adopting different lecturing approaches is to promote active learning as part of learner-centred education among students at tertiary level. This exploratory study examined responses from over 70 ESL students of their preferences in the lecturing approaches presented to them. Results indicated that the students selected the game-based online platform, Kahoot!, as the best lecturing approach for better understanding of the course.*

**Keywords:** *student-centred learning, active learning, e-learning tools*

---

### Introduction

It is a global movement in education where the shift from the traditional didactic role of the teacher to a more student centric approach is becoming increasingly prominent. It is believed that students could benefit more in their independent role as regulator of their own learning. Learner-centred education has become prominent in the 21<sup>st</sup> Century teaching and learning. In the era of the 4<sup>th</sup> Industrial Revolution by which we find advancement of technology, the area that is impacted is education. Through Education 4.0, there is an increase in awareness for revolutionising the classroom environment towards a more learner-centred approach. As Hussin (2018) purports, Education 4.0 is a response to the needs of the 4<sup>th</sup> Industrial Revolution where humans and technology meet. From the aspect of education, providing learners with an innovative environment and resources through e-learning tools is crucial to ensure learning takes place effectively. It is a major concern for educators when students constantly struggle to pay attention and remain focused in the classroom. Not only that, with the rapid growth of technology, this has become a major source of distraction for learners. In order to exploit the use of technology to capture student interest, education-based e-learning tools are introduced into the classroom setting as one of the various lecturing approaches. This study intends to explore the learners' preferences of the various lecturing approaches that they experience, particularly in acquiring language skills. These lecturing approaches range from traditional lectures, questions and answers, blended learning to online game-based applications. The outcome of this study potentially sheds light to promoting active learning through several lecturing approaches for tertiary students with the hope to encourage more interaction among students, not only with their peers and learning resources but essentially, with the content of the course.

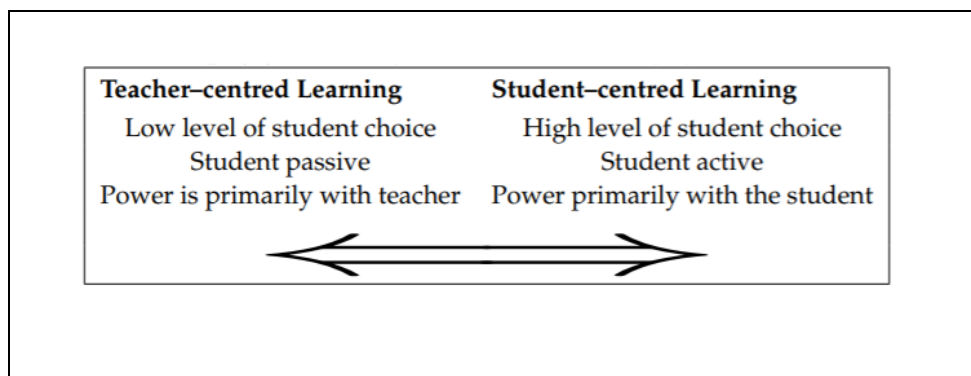
### Literature Review

#### Teacher-Centred Learning vs Student-Centred Learning

Teacher-centred learning is described as similar to traditional classroom instruction that involves the teacher having the primary role and power as the instructional agent, whilst students have limited choice in determining their learning and this results to them becoming passive in class (O'Neill and Macmahon, 2005; Elen et.al, 2007). Emaliana (2017) states that the teacher's role here is to become the major source of information and this method of learning poses several benefits. It is advantageous in terms of preparing learning materials and conducting learning activities within a shorter span of time. Emaliana (2017) also notes that teachers have full control of the classroom as they have full authority to set certain criteria and rules to ensure the main purpose of transferring knowledge to learners can be successfully achieved.

Kember (1997) describes student-centred learning as the knowledge that is constructed by students, guided by the lecturer as merely a facilitator of the construct, not as the provider of information. Lea et.al (2003) further details features of student-centred learning: i) active over passive learning; ii) deep learning and understanding; iii) students' increased responsibility and accountability; iv) learner autonomy; v) teacher-learner interdependency; vi) mutual respect between teacher and learner; vii) reflexive approach to the teaching and learning process. Student-centred learning provides teachers with the capacity to consider learners' needs and encourage them to participate actively in the learning process by guiding, managing and directing their students' learning (Emaliana, 2017).

Besides that, O'Neill and Macmahon (2005) state that learning can be seen as a continuum of both teacher-centred and student-centred learning where it is not perceived dualistically. This continuum is illustrated below:



**Figure 1:** Learning Continuum (O'Neill and Macmahon, 2005)

From Figure 1 above, student-centred learning involves students' high level of choice and power in determining their learning experience. Additionally, one of the aspects of student-centred learning is their active mannerism during the learning process. This study seeks to examine how active learning could be implemented in lecturing delivery so that students could benefit from this approach.

### **Active Learning**

Prince (2004) notes active learning as having students to conduct meaningful learning activities and to consciously reflect on the practice. Active learning, as part of student-centred learning, does not merely involve physical active movement during the learning process. It also entails active enquiry by which students resort to self-directed learning, deciding which



information is relevant to a specific topic and critically question content to make sense of new information. Biggs (1999) mentioned that questioning and collaboration is crucial to develop deep learning, through the practice of relating new concepts to pre-existing knowledge. This form of active learning shifts further away from rote memorisation, which limits information retainment. This high level of involvement in the learning process is seen as beneficial for students to ascertain effective learning of new concepts. Prince (2004) also states that active learning has two essential elements, i) introducing student activity into the traditional lecture; ii) promoting student engagement. In relation to the present study, these two elements are explored through student feedback on the lecturing approaches implemented within a specific language course.

**Methodology**

This exploratory study attempts to examine students’ perspectives on the lecturing approaches presented to them in the form of a questionnaire, with a 3-point Likert scale, ranging from Not Interesting to Most Interesting. The lecturing approaches are listed in Table 1. The number of participants in this study are 73 tertiary level English major students undertaking a specific course; Listening and Speaking Skills. These students were actively involved with the various lecturing approaches over the course of one full semester; specifically 14 weeks.

**Table 1: Summary of lecturing approaches**

<b>Approach</b>	<b>Details</b>
Padlet	Online application that creates a bulletin board for display of information
Kahoot!	Game-based online platform in the form of multiple-choice quizzes
Role-play	Students’ imitation of a character or role different from their own
Jigsaw	Cooperative learning approach to increase student engagement
Quizizz	Multiplayer classroom review tool for collaborative learning
Flipped classroom	Blended learning that delivers instructional content outside of the classroom
Question and answer	Traditional question and answer session between lecturer and students during and after the lesson
Normal lecture	Powerpoint presentation prepared by lecturer

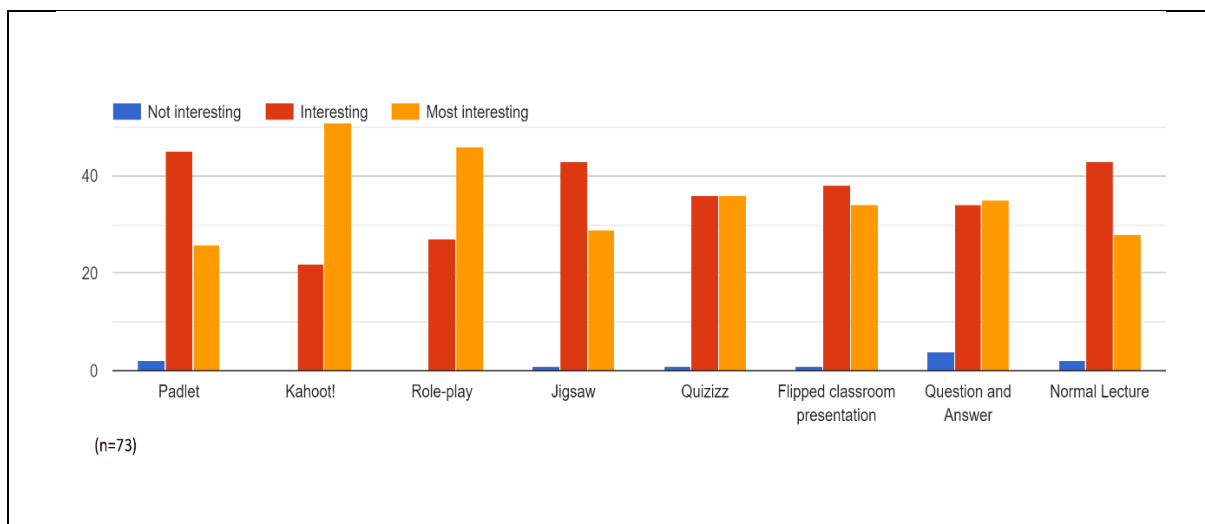
The various lecturing approaches were specifically planned and executed with specific criteria. The first criterion of selection is lecturing approaches that elicit active physical involvement of the students in class, such as role-play and jigsaw activity. The second criterion is to include the element of technology in the lecture so this would be able to capture students’ attention toward the lesson. An online application such as Padlet is an example of technology-

based education platform that is applied in one of the lessons. The third criterion is the element of competition to prompt students' active learning and memory through game-based assessment in the form of quizzes such as Kahoot! and Quizizz. The last criterion of lecturing approach is the traditional normal lecture followed by question and answer session.

Apart from the questionnaire, students were asked to elaborate on their experience after they had undergone the lessons through a feedback form. Their feedback provided richer details of the lecturing approaches that they find most interesting and helpful for them to gain deeper understanding of the course.

### Results and Discussion

Results from the survey, as presented in Figure 2, indicated that the game-based online application Kahoot! was voted as the most interesting lecturing approach, with over 69%, followed by Role-Play, 63%, and Quizizz, 49.3%. Meanwhile, 4% of students find that the least interesting lecturing approach is the Question and Answer session.



**Figure 2:** Lecturing approaches introduced in the course

Further analysis of lecturing approach is elicited from students' feedback. They express their learning preference through different learning approaches presented to them. Table 2 summarises interesting feedback given on the use of Kahoot!:

**Table 2:** Feedback on Kahoot!

KAHOOT!	
Student	Feedback
S5	<i>Obviously, I love it when the lecturer made a Kahoot! game because for me, playing games are one of the best way to study.</i>
S32	<i>The Kahoot game was interesting. It tested on our understanding on the class lectures and at the same time enjoy ourselves.</i>
S16	<i>Kahoot! because the online game lets me to evaluate myself on a certain topic.</i>

S19	<i>I would say Kahoot! because it not only helped me recall what I learned but it kind of created a small competition among us to be the first and correct one to answer.</i>
S23	<i>In my opinion, Kahoot activity was the best. The questions were very useful for me especially for my upcoming exams. The fact that the game has 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> ranking boosts up my urge to try it again and again and to also thrive a better score each and every time I play the game. I love Kahoot very much.</i>
S38	<i>In my opinion I really like competitive and yet fun situations for example when we play kahoot or quizizz. This is because these tools encourage MOST of the students to do well in their classes and to focus more so that they will not miss out from their classmates.</i>

Results find that students mostly prefer an online game-based learning platform, Kahoot!, as the best lecturing approach for this particular course. This application is indeed interesting as it promotes an active learning environment by adopting a gamification element, that is competition (Johns, 2015). As shared by S38, playing Kahoot! allows the student to awaken their competitive side to compete with their fellow classmates. Apart from that, Kahoot!'s function as an online assessment method is also useful for students to recall and better understand the lesson, as mentioned by S19 and S32. This provides the lecturer an initial idea of the students' level of understanding and knowledge. Meanwhile, Table 3 displays feedback on the Role-play session:

**Table 3:** Feedback on Role-play

ROLE-PLAY	
Student	Feedback
S22	<i>It was the role play and the normal lectures because I managed to learn how to improve my listening and speaking skills.</i>
S25	<i>The role Play because it really expand my knowledge in writing scripts.</i>
S28	<i>The activity that I find the most beneficial would be the role play. This activity really engaged the students with the listening and speaking skills. As we use our listening skills to gather information and speaking skills to converse our opinion on certain topic. Overall, I believe the activity conducted in class is relevant to the course itself and will surely help me in the working world.</i>
S50	<i>Role-play as from this activity i can try to adapt what we learn from the class and somehow it creates understanding to me.</i>
S51	<i>Role-play. Because being able step outside my box of shyness and introvertedness and being able to entertain the class for at least a bit was very beneficial for me.</i>

S62	<i>Role play. Because i get to show how i apply the skills taught in this course.</i>
-----	---

Feedback from Table 3 suggests that students also find Role-play session as an interesting lecturing approach for them to better understand the course. Seeing that the course is specifically focused on listening and speaking ability, engaging students with active listening and speaking during the role-play session is believed to be suitable for them to adopt theory into practice. For example, when given a role of a bossy manager, the student will apply the correct and incorrect techniques on communicating at the workplace. As supported by the feedback given by S28, by providing the avenue for students to simulate the ideal working environment, they would be able to apply communicative strategies and ultimately, improve on their overall speaking ability. Apart from that, students benefit from this role-play session as it promotes active physical learning where they move about and perform roles in front of others with minimal intervention from the lecturer. This offers them an opportunity to boost their self-confidence and overcome fear or shyness, as experienced by S51.

When discussing about physical movement as a crucial element of active learning, conducting the Jigsaw lecturing approach has helped students understand the course better. This is stated by S30, “*This may not apply to everyone but I think that I learn better while I'm moving or thinking creatively, so by doing the jigsaw activity it required us to move around and explaining to each other different things and then at the end of the class, everyone was included and questioned so it was very fair and beneficial for me.*” From this feedback, the Jigsaw technique as a cooperative learning approach allows each student in a group to search for relevant information regarding a bigger topic. After information gathering, they are then required to share the information with the rest of their groupmates. Collaborative learning comes into play when each group member ensures their groupmates understand the topic in its whole entirety. This technique is seen as beneficial not only to encourage active learning, but to also avoid free-riding in group projects and discussions (Dingel et.al, 2013).

**Table 4:** Traditional lecturing approaches

QUESTION AND ANSWER AND NORMAL LECTURE	
Student	Feedback
S4	<i>Question and answer. Because i can exchange my opinions with the lecturer and others.</i>
S12	<i>Question and answer. Because we can ask some questions and know new answers from different students as well as the lecturer herself</i>
S14	<i>It was the normal lectures because i managed to learn how to improve my listening and speaking skills.</i>
S35	<i>Normal lecture because the lecturer's explanation is very detailed therefore it gives me a better and clearer understanding of the subject.</i>
S55	<i>Question and answer because i get to ask questions if i don't understand something.</i>



Results from feedback on traditional lecturing approach, as displayed in Table 4, brings forth interesting points of discussion. Despite obtaining the highest number of students not interested with this approach in the survey, several students still prefer the approach of traditional classroom lecture and question and answer session with the lecturer. These approaches, although do not primarily promote active learning, appear to become effective approaches to delivering lectures and ensuring students are able to better understand the topics. Active learning suggests the central role of students as taking charge of their own learning process, whereas the lecturer functions as merely a facilitator to their students. In the traditional lecturing approach, the role of imparting knowledge is heavily teacher-centred, where teachers focus primarily on content dissemination, and they are the main source of information (Smit et.al, 2014). In this context of study, several students still prefer the teacher-centred approach of delivering knowledge, as mentioned by S35. This is notable in their comment by which the lecturer provided detailed explanation, hence resulting to clearer understanding. This teacher-centred learning preference over learner-centred learning maybe a result of designing of activities by which they must be properly planned and executed to promote meaningful engagement for students. As Felder & Brent (1996) argue, student-centred learning takes a considerable amount of time and effort on the teacher's part to design innovative teaching methods for the benefit of the students. If the activities are not meaningful or not properly guided towards the new concepts, students would prefer the traditional method of learning; that is through the lecturer as the primary instructional agent.

### **Conclusion**

Overall, it can be concurred that language learners respond positively to lecturing approaches that encourage active engagement. Findings revealed that students particularly enjoyed lessons that require them to compete with fellow peers and pose as a challenge for them to search for new information, such as game-based online application, Kahoot! and Quizziz. However, it is worth noting that some students also prefer normal lectures over less traditional teaching approaches as they find the depth of knowledge, new concepts and information can be acquired more effectively through the lecturer's traditional lecture. It is therefore observed that the role of the teacher as the main instructional agent is still relevant in the context of teaching and learning language skills. Although, shifting towards self-directed learning where the teacher merely functions as the facilitator, may be the direction to take towards pedagogical reform in this 21<sup>st</sup> Century, it is still a work in progress for lecturers as well as students to fully equip themselves with the right design, planning, and resource to cater for a more engaging learning environment.

### **References**

- Biggs, J. (1999). What the student does: Teaching for enhanced learning. *Higher education research & development*, 18(1), 57-75.
- Cavanagh, M. (2011). Students' experiences of active engagement through cooperative learning activities in lectures. *Active Learning in Higher Education*, 12(1), 23-33.
- Dingel, M. J., Wei, W., & Huq, A. (2013). Cooperative learning and peer evaluation: The effect of free riders on team performance and the relationship between course performance and peer evaluation. *Journal of the Scholarship of Teaching and Learning*, 45-56.
- Elen, J., Clarebout, G., Leonard, R., & Lowyck, J. (2007). Student-centred and teacher-centred learning environments: What students think. *Teaching in higher education*, 12(1), 105-117.



- Emaliana, I. (2017). Teacher-centered or Student-centered Learning Approach to Promote Learning?. *Jurnal Sosial Humaniora*, 10(2), 59-70.
- Felder, R.M. & Brent, R. (1996) Navigating the bumpy road to student-centred instruction, *College Teaching*, 44(2), pp. 43–47
- Hussin, A. A. (2018). Education 4.0 made simple: Ideas for teaching. *International Journal of Education and Literacy Studies*, 6(3), 92-98.
- Johns, K. (2015). Engaging and assessing students with technology: a review of Kahoot!. *Delta Kappa Gamma Bulletin*, 81(4), 89.
- Kember, D. (1997). A reconceptualisation of the research into university academics conceptions of teaching. *Learning and Instruction* 7(3), 255–275.
- Lea, S. J., D. Stephenson, and J. Troy (2003). Higher Education Students' Attitudes to Student Centred Learning: Beyond 'educational bulimia'. *Studies in Higher Education* 28(3), 321–334.
- O'Neill, G., & McMahon, T. (2005). Student-centred learning: What does it mean for students and lecturers.
- Plump, C. M., & LaRosa, J. (2017). Using Kahoot! in the classroom to create engagement and active learning: A game-based technology solution for eLearning novices. *Management Teaching Review*, 2(2), 151-158.
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of engineering education*, 93(3), 223-231.
- Puncreobutr, V. (2016). Education 4.0: new challenge of learning. *St. Theresa Journal of Humanities and Social Sciences*, 2(2).
- Smit, K., de Brabander, C. J., & Martens, R. L. (2014). Student-centred and teacher-centred learning environment in pre-vocational secondary education: Psychological needs, and motivation. *Scandinavian Journal of Educational Research*, 58(6), 695-712.



## DISCOVERING FOOD ALLERGEN AMONG CHILDREN AND ADULTS

Norrina Din<sup>1</sup>  
Basri Rashid<sup>2</sup>  
Kamal Izzuwan Ramli<sup>3</sup>

<sup>1</sup> Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, 13500 Permatang Pau, Penang, Malaysia. (E-mail: [norrina.din@ppinang.uitm.edu.my](mailto:norrina.din@ppinang.uitm.edu.my))

<sup>2</sup> School of Tourism, Hospitality and Event Management, UUM College of Law, Government and International Studies, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah Darul Aman, Malaysia.  
(Email: [basri@uum.edu.my](mailto:basri@uum.edu.my))

<sup>3</sup> School of Tourism, Hospitality and Event Management, UUM College of Law, Government and International Studies, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah Darul Aman, Malaysia,  
(E-mail: [izzuwan@uum.edu.my](mailto:izzuwan@uum.edu.my))

---

**Abstract:** *Food allergy has been recognised by the World Health Organisation as a chronic disease that could lead to fatality. The symptoms can mediate from mild to severe consequences. Some cases have reported that food allergy sufferers are bullied and are discriminated at workplace, thus increasing their stress level, apart from facing difficulty in consuming certain food due to allergy. This has an adverse effect on the quality of life amongst food allergy sufferers. Medical bills are increased when food allergy sufferers become unknowingly exposed to food allergen. Hence, this study investigated food allergens among food allergy sufferers in order to make their lives better. A total of 250 respondents participated in an online survey. Surprisingly, apart from chicken, soybean and other food allergens that have been listed under the Big Eight Allergens, the respondents mentioned some fruits that could trigger allergic reactions, such as rambutans and watermelons. Food allergy sufferers can be allergic to seafood and seafood products as well, such as shrimp paste or locally known as belacan, which refers to fermented shrimp paste cured under the sun. It is a common food ingredient used among Malaysians. The study findings offer practical insights, such as avoidance of food allergens amidst food allergy sufferers and help the government to carefully manage for menu planning. The knowledge contribution of this study reveals several specific food and fruits, as aforementioned, which appear to be common and nutritious food, yet harmful to food allergy sufferers.*

**Keywords:** *food allergy, food allergen, food allergy sufferers, children and nursery*

---

### Introduction

Food allergy refers to the opposing reaction to food allergen. Food allergy reactions can be mild, severe, or even lead to fatal consequences (Urrutia-Pereira et al., 2018), hence an important area of study. This is the reason on why food allergy has been listed by the World Health Organisation as a chronic disease (Pawankar et al., 2011). Despite the chronic nature of this disease, people tend to ignore the severity of food allergy due to limited knowledge pertaining to food allergy (Yanagida, Katsunuma, Ebisawa, & Yoshizawa, 2019; Urrutia-Pereira et al., 2018; Din, Rashid, & Ramli, 2015; Choi & Rajagopal, 2013). Awareness seems to be given more focus on cardiovascular diseases and cancer, while omitting food allergy



(Pawankar et al., 2011). Interestingly, more people are affected by food allergy than the mentioned diseases being given focus.

### **Literature Review**

The prevalence of food allergy among people worldwide cannot be denied. The number of global population affected by food allergy had been estimated to be 220-250 million people (Pawankar et al., 2011). In Europe, the number stood at 11-26 million, while in Malaysia, the percentage escalated up to 10-15% amongst the children population (Pawankar et al., 2011). Some 877 severe food allergy sufferers were reported in Norway and this population has kept increasing (Namork, Fæste, Stensby, Egaas, & Løvik, 2011). The United States reported a 10% increase in food allergy population (Sicherer & Sampson, 2017), while in the United Kingdom, 1-2% of adults were affected by food allergy and 5-8% amidst the children population (Buck, Hattersley, & Kimber, 2010). In Taiwan, about 2,108 people out of 30,018 were estimated to be food allergy sufferers (Wu et al., 2012). To date in Japan, about 45,807 children were affected by food allergy and 3,499 experienced food allergy reactions (Yanagida, Katsunuma, Ebisawa, & Yoshizawa, 2019). As aforementioned, the population of food allergy sufferers seems to be increasing in many parts of the world.

Food allergy can affect many people at any stage in their lives. It could be anywhere between infancy and adulthood (Muraro et al., 2017). Food restriction is one of the many methods to avoid food allergy by sufferers from allergic reactions (Sicherer & Sampson, 2018; Burks, Sampson, Plaut, Lack, & Akdis, 2018). Some symptoms of food allergy include swelling in the face regions (e.g. lips, tongue, and throat), difficulty in breathing, stomach cramps, diarrhoea, and vomiting (Pawankar et al., 2011). The symptoms of food allergic reactions appear immediately and the victims are bound to suffer from food allergy (Teufel et al., 2007). All the symptoms tend to increase the level of anxiety, absenteeism from work or school by both parents and food-allergic children (Abdurrahman et al., 2013), bully (Sicherer & Sampson, 2018; Russell & Huber, 2013), and face discrimination at workplace (Waibel, Lee, Coop, Mendoza, & White, 2018). All these consequences incur medical costs and can lead to low quality of life (Odhav, Lanser, & Rabinovitch, 2018).

More than 170 food allergens have been identified (Burks et al., 2012). In the Asia Pacific, foods that are known to cause allergies that should be avoided are shellfish because they could trigger anaphylactic shock that may be fatal. Shellfish has been identified as the top ranking food allergen (Lee, Gerez, Shek, & Lee, 2012). Food allergens classified in the Big Eight Allergens are eggs, cow's milk, fish, shellfish, peanuts, tree nuts, wheat, soya (Olson, Teuber, & Bruhn, 2009), sesame seeds (Burks et al., 2012), birds nest (Lee, Shek, Gerez, Soh, & Van Bever, 2008), cheese, beef, chocolate (Leung, Yung, Wong & Wong, 2009), ham, duck, chicken, and some fruits namely rambutans, bananas (Goh, Lau, Chew, Shek, & Lee, 1999) watermelons, apples, oranges, kiwis, and strawberries (Han, Kim, & Ahn, 2012). Besides fruits, one of the most common ingredients used in Malaysian cooking, which is 'belacan' or shrimp paste, a seafood product (Redhwan et al., 2011), appears to be a type of food allergen as well.

The three major ethnic groups in Malaysia are Malays, Chinese, and Indians, along with other minor ethnic groups. These ethnic groups differ in various respects, namely food habits, practices, and food restrictions (Fournier et al., 2016). Previous studies have identified that food allergens among the Malaysian population include crab, prawn, squid, cockle, mackerel, anchovy, milk, egg, soy, wheat, rice, mutton, beef, chicken, and banana (Gendeh et al., 2000, Gendeh, Mujahid, Murad, & Rizal, 2004; Zahedi, Gendeh, & Husain, 2011). The skin prick test verified that rice and shrimp were found to cause allergic reactions amongst



food allergy sufferers. This study was conducted to further investigate the food allergens among food allergy sufferers, both adults and children which is not previously integrated examined by other researchers.

### **Methodology**

An online survey was distributed to the respondents who worked in the nursery. Out of 600 of the total population, only 250 responded. The sample population were nursery employees. The reason for choosing the sample was because more working women in the workforce require them to send their children to care centres for early education. Children are easily affected by food allergies, thus demand special attention. Consent was obtained from the nursery authorities. A pilot study was conducted among 30 respondents, which were excluded from the sample size. Open-ended questions were embedded to gather information pertaining to food allergens for both groups - nursery adult employees and children at the nursery. The Malay language was used in the survey as it is the national language and officially used in Malaysia. The survey was divided into several parts; Part A dealt with the demographic profile, and Part B was about food that they were allergic to. Open-ended questions were included to gain information about food allergies from the respondents. The results were analysed descriptively using Statistical Analysis for Social Science (SPSS) version 22 software program. The study outcomes are tabulated in Tables 1, 2, and 3.

### **Results and discussion**

The respondents were females, similar to the study conducted by Greiwe, Newton, Pazheri, and Schroer (2014), which investigated the management of food allergy among nannies. Turning to this study, the respondents were confined to the Malays. A total of 93 (37.2%) respondents accounted for those aged between 26 and 35. The second largest number of the respondents was 46-55 (24.8%), followed by age groups of 36-45 (23.2%), 18-25 (9.2%), and 55 (5.6%) years old and above. Based on their working experiences, most of the respondents had worked for more than 5 years (74.4%), while 11.2% had working experience below 6 months. Some respondents had worked for 1-2 years and 3-4 years (7.2%). The summary of the demographic profile is depicted in Table 1.

**Table 1:** Summary of the Demographic profile (n=250)

<b>Demographic Profile</b>	<b>Frequency (%)</b>
Gender	
Female	250 (100)
Race	
Malay	250 (100)
Age	
18-25	23(9.2)
26-35	93(37.2)
36-45	58(23.2)

46-55	62(24.8)
55 and above	14(5.6)
Working experience	
6 months and below	28 (11.2)
1-2 years	18 (7.2)
3-4 years	18 (7.2)
5 years and above	186 (74.4)

Source: Researcher

**Table 2:** Food allergens among children (n=250)

Food allergen	Frequency (%)
Chicken	3 (1.2)
Egg	2 (0.8)
Meat	1(0.4)
Meat and milk	1(0.4)
Nut	30 (12)
Nut & egg	1(0.4)
Nut & meat	1(0.4)
Nut & milk	3 (1.2)
Seafood	52 (20.8)
Seafood & chicken	2(0.8)
Seafood & egg	3 (1.2)
Seafood & meat	1(0.4)
Seafood & milk	2 (0.8)
Seafood & nut	22 (8.8)
Seafood, nut & egg	4 (1.6)
Seafood, nut & fruits	4 (1.6)
Seafood, chicken, egg & meat	1(0.4)
Soybean	2(0.8)

Watermelon & Rambutan	2(0.8)
Total	250

Source: Researcher

**Table 3:** Food allergen among adults (n=250)

Food allergen	Frequency(%)
No	217 (86.6)
Chicken	1 (0.4)
Nut	5 (2.0)
Seafood and seafood products	25 (10.0)
Seafood & chicken	1 (0.4)
Seafood & Nut	1(0.4)
Total	250

Source: Researcher

### Food allergens among children

The most significant information retrieved in this study is food allergen. The abundance of food makes food allergy sufferers, who are mainly children and their parents, to carefully check and select suitable food prior to consumption. The respondents (nursery employees) were required to report the food allergens of their students and the results are given in Table 2. 20.8% of the respondents reported that the food allergy sufferers were allergic to seafood, such as prawn, squid, crab, cockles, and oyster (Lopata, O'Hehir, & Lehrer, 2010; Soogali & Soon, 2018). In Malawi (Soogali & Soon, 2018) and in Malaysia (Gendeh et al., 2000; Gendeh, Mujahid, Murad, & Rizal, 2004; Zahedi, Gendeh, & Husain, 2011), seafood seems to be the major contributor that can trigger allergic reactions among food allergy sufferers. Another 12% of the respondents reported that the food allergy sufferers were allergic to nuts. Nuts are identified as a higher contribution for the food allergy reaction in the United Kingdom (Soon, 2018).

A total of 8.8% of the respondents reported that the food allergy sufferers were allergic to seafood and nuts, while 2% of the respondents said that the food allergy sufferers were allergic to multiple food allergens, such as seafood, nuts, eggs, and fruits. Another 1% of the respondents informed that the food allergy sufferers were allergic to chicken, meat, and 1% of them also reported to have multiple food allergens like meat and milk, nut and eggs, nut and meat, seafood and egg, seafood, nut and egg, seafood, nut and fruits. Meanwhile 1% reported that they have the combination of food allergens such as seafood, chicken, egg and meat. Nonetheless, only 0.8% of the respondents informed that the food allergens of their students were eggs, seafood, milk, chicken, and soybean, similar with previous studies (see Gendeh et al., 2000; Gendeh, Mujahid, Murad, & Rizal, 2004; Zahedi, Gendeh, & Husain, 2011). Additionally, fruits, such as watermelons and rambutans, were reported to cause allergies in this study, which appear to be in line with prior studies (see Gendeh et al., 2000; Gendeh, Mujahid, Murad, & Rizal, 2004; Zahedi, Gendeh, & Husain, 2011). The minority of the food



allergy sufferers were allergic to meat, milk, nuts, eggs, seafood, and chicken, as reported by 0.4% of the respondents. This included ingredients, such as milk, which are used in making other foods (e.g. cakes, butter, and cheese) (Greiwe et al., 2014). The results revealed that the food allergy sufferers were allergic not only to the one food allergen, but also to multiple food allergens (Din, Ramli, & Rashid, 2013). This means; extra precaution must be taken to avoid such food and the ingredients that go into other food types as well (Soogali & Soon, 2018).

### **Food allergen among adults**

Nursery employees were required to report on the food that they were allergic to as well. As a result, 86.6% of the respondents claimed that they had no food allergy, whereas 10% of them were allergic to seafood and seafood products, such as prawns, squid, crab, cockles and anchovies (Gendeh et al., 2000; Gendeh, Mujahid, Murad, & Rizal, 2004; Zahedi, Gendeh, & Husain, 2011; Lee et al., 2012; Soogali & Soon, 2018). The respondents were not only allergic to seafood, but also to the by-products of seafood, such as shrimp paste (*belacan*), *cencalok*, and fermented anchovies (*budu*). '*Belacan*' or shrimp paste is a common food ingredient consumed daily in the Northern part of Malaysia, while '*cencalok*' and '*budu*' are usually consumed in the East Coast of Malaysia. '*Belacan*' is usually used to make chili gravy or '*sambal*', a thick curry paste to be served with popular dishes of Malaysia, namely *Nasi Lemak*. The condiments for *Nasi Lemak*, such as peanuts and anchovies, are also classified under the Big Eight Allergen food group. Only 2% of the respondents reported that they were allergic to nuts. A very small percentage, 0.4% of the respondents, reported to be allergic to chicken, seafood, and nuts. All information pertaining to the nursery employees is summarised in Table 3. The results from this survey signify that most of the food allergy sufferers are allergic to similar food reported from across the globe ( Gendeh, & Husain, 2011; Lopata, O'Hehir, & Lehrer, 2010; Soogali & Soon, 2018).

### **Conclusion**

In conclusion, it is important to investigate food allergies among food allergy sufferers. This helps sufferers to identify and to avoid foods that trigger allergic reactions. Hence, they will not suffer allergic reactions, simply by eliminating the source. Another significant aspect refers to the hidden ingredients used in cooking and served together with certain food, which may cause food allergies. Hence, awareness on the ingredients is integral in eliminating food allergies among food allergy sufferers. Once they are aware of the ingredients used, they can ask and check prior to consumption, particularly the 'hidden' ingredients. In addition, studies related to food allergies are in scarcity. Food allergy sufferers face extreme challenges because they are exposed to risks that may even jeopardise their lives. Public awareness on food allergy is considered minor, as they underestimate the impact of it upon food allergy sufferers, unless and until they experience the seriousness of this disease. Wrongly taken, a morsel of ingestion, cross-contact or direct contact with the food allergen can trigger the allergic reaction, and even fatality. The impact of food allergic reactions increases stress level, rate of absenteeism, and medical costs, while deteriorating quality of life. Investigation of food allergens among adults and children in Malaysia ought to help the government to carefully choose the ingredients for menu planning, especially at nurseries and schools. Finally, investigations on managing and looking into the needs of food allergy sufferers must be further explored.

### **References**

Abdurrahman, Z. B., Kastner, M., Wurman, C., Harada, L., Bantock, L., Cruickshank, H., &



- Waserman, S. (2013). Experiencing a first food allergic reaction: a survey of parent and caregiver perspectives. *Allergy, Asthma, and Clinical Immunology : Official Journal of the Canadian Society of Allergy and Clinical Immunology*, 9(1), 18. <http://doi.org/10.1186/1710-1492-9-18>
- Buck, J., Hattersley, S., & Kimber, I. (2010). Food allergy – science and policy needs – The UK Food Standards Agency Research Programme. *Toxicology*, 278, 319–325. <http://doi.org/10.1016/j.tox.2010.08.007>
- Burks, A. W., Sampson, H. A., Plaut, M., Lack, G., & Akdis, C. A. (2018). Treatment for food allergy. *Journal of Allergy and Clinical Immunology*, 141(1), 1–9. <http://doi.org/10.1016/j.jaci.2017.11.004>
- Burks, A. W., Tang, M., Sicherer, S., Muraro, A., Eigenmann, P. A., Ebisawa, M., ... Sampson, H. A. (2012). ICON: food allergy. *The Journal of Allergy and Clinical Immunology*, 129(4), 906–20. <http://doi.org/10.1016/j.jaci.2012.02.001>
- Choi, J. H., & Rajagopal, L. (2013). Food allergy knowledge, attitudes, practices, and training of foodservice workers at a university foodservice operation in the Midwestern United States. *Food Control*, 31(2), 474–481. <http://doi.org/10.1016/j.foodcont.2012.10.023>
- Din, N. B., Rashid, B., & Ramli, K. I. (2015). Gauging Food Allergy Knowledge among Hospitality Students. *Journal of Management Research*, 7(2), 252. <http://doi.org/10.5296/jmr.v7i2.6947>
- Din, N., Ramli, K. I., & Rashid, B. (2013). The Cognizant of Allergy Diseases and Climate Change, 1(2), 83–91.
- Fournier, T., Tibère, L., Laporte, C., Mognard, E., Ismail, M. N., Sharif, S. P., & Poulain, J. P. (2016). Eating patterns and prevalence of obesity. Lessons learned from the Malaysian Food Barometer. *Appetite*, 107, 362–371. <http://doi.org/10.1016/j.appet.2016.08.009>
- Gendeh, B. S., Mujahid, S. H., Murad, S., & Rizal, M. (2004). Atopic sensitization of children with rhinitis in Malaysia. *The Medical Journal of Malaysia*, 59(4), 522–9. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/15779586>
- Gendeh, B. S., Murad, S., Razi, a. M., Abdullah, N., Mohamed, a. S., & Kadir, K. a. (2000). Skin prick test reactivity to foods in adult Malaysians with rhinitis. *Otolaryngology -- Head and Neck Surgery*, 122(5), 758–762. <http://doi.org/10.1067/mhn.2000.100445>
- Greiwe, J. C., Newton, L. P., Pazheri, F., & Schroer, B. C. (2014). Nannies Knowledge, Attitude and Management Of Food Allergies In Children; An Online Survey. *Journal of Allergy and Clinical Immunology*, 133(2), AB124. <http://doi.org/10.1016/j.jaci.2013.12.462>
- Han, Y., Kim, J., & Ahn, K. (2012). Food allergy. *Korean Journal of Pediatrics*. <http://doi.org/10.3345/kjp.2012.55.5.153>
- Lee, A. J., Gerez, I., Shek, L. P., & Lee, B. W. (2012). Shellfish allergy-an Asia Pacific perspective. *Asian Pacific Journal Immunology*, 30(3:10), 1–10.
- Lee, B. W., Shek, L. P.-C., Gerez, I. F. a, Soh, S. E., & Van Bever, H. P. (2008). Food allergy-lessons from Asia. *The World Allergy Organization Journal*, 1(7), 129–33. <http://doi.org/10.1097/WOX.0b013e31817b7431>
- Lopata, a L., O’Hehir, R. E., & Lehrer, S. B. (2010). Shellfish allergy. *Clinical and Experimental Allergy: Journal of the British Society for Allergy and Clinical Immunology*, 40(6), 850–8. <http://doi.org/10.1111/j.1365-2222.2010.03513.x>
- Muraro, A., Jr, R. F. L., Castells, M., Torres, M. J., Khan, D., Simon, H., ... Nadeau, K. C. (2017). Precision medicine in allergic disease — food allergy , drug allergy , and anaphylaxis — PRACTALL document of the European Academy of Allergy and Clinical



- Immunology and the American Academy of Allergy , Asthma and Immunology. <http://doi.org/10.1111/all.13132>
- Namork, E., Fæste, C. K., Stensby, B. A., Egaas, E., & Løvik, M. (2011). Severe allergic reactions to food in Norway: a ten year survey of cases reported to the food allergy register. *International Journal of Environmental Research and Public Health*, 8(8), 3144–55. <http://doi.org/10.3390/ijerph8083144>
- Odhav, A., Lanser, B. J., & Rabinovitch, N. (2018). Food Allergy-Related Anxiety and Quality of Life in Parents and Children Transitioning to School. *Journal of Allergy and Clinical Immunology*, 141(2), AB65. <http://doi.org/10.1016/j.jaci.2017.12.208>
- Olson, B. F., Teuber, S., & Bruhn, C. M. (2009). Development of an Educational Packet for Persons with Life-Threatening Food Allergies. *Journal of Food Science Education*, 8(3), 73–77. <http://doi.org/10.1111/j.1541-4329.2009.00077.x>
- Pawankar, R., Canonica, W. G., Holgate, S. T., Lockey, R. F. (2011). *WAO White Book on Allergy 2011-2012: Executive Summary*.
- Russell, A. F., & Huber, M. M. (2013). Food Allergy Management in Elementary School : Collaborating to Maximize Student Safety. *Journal of Asthma & Allergy*. <http://doi.org/10.1177/2150129713486671>
- Sicherer, S. H., & Sampson, H. A. (2018). Food allergy: a review and update on epidemiology, pathogenesis, diagnosis, prevention, and management. *Journal of Allergy and Clinical Immunology*, 141(1), 41-58.
- Sicherer, S. H., & Sampson, H. A. (2017). Food Allergy: A review and update on epidemiology, pathogenesis, diagnosis, prevention and management. *Journal of Allergy and Clinical Immunology*, 141(1), 41–58. <http://doi.org/10.1016/j.jaci.2017.11.003>
- Soogali, N. B., & Soon, J. M. (2018). Food allergies and perceptions towards food allergen labelling in Mauritius. *Food Control*, 93(April), 144–149. <http://doi.org/10.1016/j.foodcont.2018.06.012>
- Soon, J. M. (2018). ‘ No nuts please ’ : Food allergen management in takeaways. *Food Control*, 91, 349–356. <http://doi.org/10.1016/j.foodcont.2018.04.024>
- Teufel, M., Biedermann, T., Rapps, N., Hausteiner, C., Henningsen, P., Enck, P., & Zipfel, S. (2007). Psychological burden of food allergy. *World Journal of Gastroenterology : WJG*, 13(25), 3456–65. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/17659692>
- Urrutia-Pereira, M., Mocellin, L. P., de Oliveira, R. B., Simon, L., Lessa, L., & Solé, D. (2018). Knowledge on asthma, food allergies, and anaphylaxis: Assessment of elementary school teachers, parents/caregivers of asthmatic children, and university students in Uruguaiana, in the state of Rio Grande do Sul, Brazil. *Allergologia et Immunopathologia*. <http://doi.org/10.1016/j.aller.2017.09.018>
- Waibel, K., Lee, R., Coop, C., Mendoza, Y., & White, K. (2018). Food allergy guidance in the United States military: A work group report from the American Academy of Allergy, Asthma & Immunology’s Military Allergy and Immunology Assembly. *Journal of Allergy and Clinical Immunology*, 142(1), 54–59. <http://doi.org/10.1016/j.jaci.2018.05.002>
- Wu, T.-C., Tsai, T.-C., Huang, C.-F., Chang, F.-Y., Lin, C.-C., Huang, I.-F., ... Tang, R.-B. (2012). Prevalence of food allergy in Taiwan: a questionnaire-based survey. *Internal Medicine Journal*, 42(12), 1310–5. <http://doi.org/10.1111/j.1445-5994.2012.02820.x>
- Yanagida, N., Katsunuma, T., Ebisawa, M., & Yoshizawa, J. (2019). Risk factors of severe accidental ingestion in nursery school: A nation-wide survey. *Journal of Allergy and Clinical Immunology*, 143(2), AB148.



*3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Cophorne Hotel, Cameron Highland, Malaysia  
29<sup>th</sup>-30<sup>th</sup> June 2019*

Zahedi, F. D., Gendeh, B. S., & Husain, S. (2011). Sensitisation to common allergens in children with allergic rhinitis, 7(4), 200–206.



## PROHIBITED ELEMENTS IN MUAMALAT: COMMON PRACTICE IN LIFE

Wan Musyirah Binti Wan Ismail<sup>1</sup>  
Noor Rafhati Binti Romaiha<sup>2</sup>  
Ida Rahayu Binti Mahat<sup>3</sup>  
Nurul Asma Mazlan<sup>4</sup>

<sup>1</sup>Faculty of Business Management, department of finance, Universiti Teknologi MARA (UiTM),(email: musyirah792@bdrmelaka.uitm.edu.my)

<sup>2</sup>(email: [noorrafhati@uitm.edu.my](mailto:noorrafhati@uitm.edu.my))

<sup>3</sup>(email: [idarahayu@uitm.edu.my](mailto:idarahayu@uitm.edu.my))

<sup>4</sup>(email: [asmamazlan@uitm.edu.my](mailto:asmamazlan@uitm.edu.my))

---

**Abstract:** *Muamalat in Islam literally means “transaction” and technically means any mutual dealing exist between two parties in order to solve their everyday needs, normally in trade and commerce. Muamalat consists of both economic and non-economic activities. In Islamic economy, it is based on fiqh al-muamalat, which it is the foundation to regulate the rules in trading and commercial. There are three elements prohibited in Islam in any transaction occur, which is riba (interest), gharar (uncertainty), and maysir (gambling). There a lot of dalil (verses) in Quran stated regarding the prohibition of these elements. However, Muslim community nowadays still practice the trading that consist of these elements as well as in banking and finance. An existence of many Islamic banking in Malaysia since 1993, however, looks unable to eliminate the prohibition of riba, gharar and maysir in the daily life of Muslim. Therefore, this paper aims to identify the common transactions or practice that could occur in our daily life consist of these three elements. The common practice highlighted is not for financial activities, however focus on day to day activities that Muslim did not realize it is lead to haram transaction.*

**Keywords:** *Muamalat, transaction, riba, gharar, maysir.*

---

### Introduction

According to Oxford Dictionary of Islam, muamalat means dealings, which refer to commercial and civil acts or dealings under Islamic law. Islamic law also called as *Shariah* which divides all legal acts into either ibadah or muamalat. Ibadah means any acts of ritual worship such as prayer or fasting, hajj, while muamalat are acts that involve an interaction and exchange among people such as sales and sureties. (Oxford Islamic Studies Online, 2019).

Muamalat is Arabic word which means dealings. Literally, it means transaction, while technically it means any form of mutual dealings held between people to do a transaction for their needs, such as in trading and commerce. Basically, muamalat is seen as economy activities. However, muamalat is a social relationship which consist of various economic and non-economic activities (Saifudin, 2017). In addition, an elements of muamalat or the factor that bind the activities called as muamalat are when the activity creates a responsibility among people, the activity comes from mutual agreement, and last but not least, the activity has formality which bind the activity such as by offer and acceptance by two parties.

Islamic economy is driven by fiqh muamalat. Fiqh muamalat is an Islamic regulation that relate to trading and commercial rules. Based on encyclopedia, Fiqh Muamalat defined as a branch of Islamic jurisprudence that cover the area of commercial and business activities in



economy. Originally, Fiqh understanding of rulings, and *mumalat* refer to the transaction and activities related to the economy such as in Islamic banking offer *bai' ijarah*, *ijarah*, *murabahah* and *mudharabah*. Fiqh Muamalat deals with the rulings which define and govern the relationship between humans, for example in term of financial right and obligation among them. (Encyclopedia, 2013)

Muamalat means transaction. According to Islam, any transaction occur must be in line with Syariah. It is because, Islam regulate certain criteria that will make the transaction becomes *haram*. First, the transaction or contract bound should not be made for selling or buying forbidden products. Forbidden products in Islam such as alcohol and pork. Second, the contract occur must be not included any interest (*riba'*). *Riba* is addition from the principal amount. The lender asks for extra amount from the principal for borrower to pay. Third, the contract involves uncertainty (*gharar*) is prohibited. *Gharar* is any transaction of probable objects whose existence or description are not certain, it may because of information and knowledge of the ultimate outcome of the contract or the nature and quality of the subject matter of it. Fourth, the transaction that involves gambling (*maysir*) is strictly prohibited in Islam. *Maysir* means any gains derived based on opportunity or luck. It also can be defined as easy acquisition of wealth by chance, and also any business activity where monetary gains are deriving from mere chance and speculation. Prohibition of *Riba*, *Gharar* and *Maysir* in financial transactions is the fundamental of Islamic finance which distinguishes it from conventional finance. Therefore, it is a must for Muslims to avoid these elements from exist in their daily transaction. (Uddin, 2015)

### **Problem Statement**

In daily life, many transactions occur as well as economy and non-economy activities. For example, buying and selling is one of common activity that people do every day. As a Muslim, every transaction must be done in line with syariah. In muamalat or transaction, there are a few prohibitions that Muslim must be avoid. Islam underlying three prohibited elements which is strictly prohibited or *haram* to apply in any transaction or trading. These three elements were clearly stated in the Holy Quran regarding its prohibition. The prohibition of interest (*riba*), uncertainty (*gharar*) and gambling (*maysir*) that Muslims need to ensure to avoid from implement in any transaction they do. According to Saifudin, 2017, all economic activities are legally permissible, as long as they do not commit with any prohibition stated in Islamic law or *Shariah*. It is in line with all four scholars which are Hanafi, Maliki, Shafi'e and Hanbali that all forms of transaction or business that include in any of these prohibited elements considered as invalid transaction.

There are a lot of verses in the Holy Quran regarding the prohibition of *riba*, *gharar* and *maysir*. Among the verses of prohibition of *riba'* are:

Based on surah Al-Baqarah: 275 ;

وَأَحَلَّ اللَّهُ الْبَيْعَ وَحَرَّمَ الرِّبَا

“ and Allah permitted trade and prohibited *riba'*” (Al-Baqarah; 275)

يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَأْكُلُوا الرِّبَا أَضْعَافًا مُضَاعَفَةً وَاتَّقُوا اللَّهَ لَعَلَّكُمْ تُفْلِحُونَ . وَاتَّقُوا النَّارَ الَّتِي  
أُعدَّتْ لِلْكَافِرِينَ

“O you who have believed, do not consume usury, doubled and multiplied, but fear Allah that you may be successful” (Al-Imran: 130)

Prohibition of uncertainty (*gharar*) also stated in the Holy Quran. Among the verses in Surah Al-Baqarah: 188;

وَلَا تَأْكُلُوا أَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ وَتُدْءِلُّوا بِهَا إِلَى الْحُكَّامِ لِتَأْكُلُوا فَرِيقًا مِّنْ أَمْوَالِ النَّاسِ بِالْإِثْمِ وَأَنْتُمْ  
تَعْلَمُونَ

“And do not consume one another's wealth unjustly or send it [in bribery] to the rulers in order that [they might aid] you [to] consume a portion of the wealth of the people in sin, while you know [it is unlawful].” (Al-Baqarah:188)

يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَأْكُلُوا أَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ إِلَّا أَنْ تَكُونَ تِجَارَةً عَن تَرَاضٍ مِّنْكُمْ ۗ وَلَا تَقْتُلُوا  
أَنْفُسَكُمْ ۗ إِنَّ اللَّهَ كَانَ بِكُمْ رَحِيمًا

“O you who have believed, do not consume one another's wealth unjustly but only [in lawful] business by mutual consent. And do not kill yourselves [or one another]. Indeed, Allah is to you ever Merciful.” (Surah An-Nisa: 29)

While verses for prohibition of *Maysir* (gambling) stated in Surah

يَا أَيُّهَا الَّذِينَ آمَنُوا إِنَّمَا الْحَمْرُ وَالْمَيْسِرُ وَالْأَنْصَابُ وَالْأَزْلامُ رِجْسٌ مِّنْ عَمَلِ الشَّيْطَانِ فَاجْتَنِبُوهُ لَعَلَّكُمْ  
تُفْلِحُونَ

“O you who have believed, indeed, intoxicants, gambling, [sacrificing on] stone alters [to other than Allah ], and divining arrows are but defilement from the work of Satan, so avoid it that you may be successful.” (Surah Al-Maidah: 90)

يَسْأَلُونَكَ عَنِ الْخَمْرِ وَالْمَيْسِرِ ۚ قُلْ فِيهِمَا إِثْمٌ كَبِيرٌ وَمَنْفَعَةٌ لِلنَّاسِ وَإِنَّهُمْ لَكَبِيرٌ مِّنْ نَّفْعِهِمَا ۗ وَيَسْأَلُونَكَ  
مَادًا يَنْفَعُونَ قُلِ الْعَفْوَ ۗ كَذَلِكَ يُبَيِّنُ اللَّهُ لَكُمْ آيَاتِهِ لَعَلَّكُمْ تَتَفَكَّرُونَ

“They ask you about wine and gambling. Say, "In them is great sin and [yet, some] benefit for people. But their sin is greater than their benefit." And they ask you what they should spend. Say, "The excess [beyond needs]." Thus, Allah makes clear to you the verses [of revelation] that you might give thought.” (Surah A-Baqarah:219)

Islam strictly prohibited these three elements in any transaction occur. However, in common practices, these elements are still existing in transaction either directly or indirectly. Therefore, this paper aims to identify the common transactions or practice that could occur in our daily life consist of these three elements. The common practice highlighted is not for financial activities, however focus on day to day activities that Muslim did not realize it is lead to haram transaction.

## Literature Review



### **RIBA (INTEREST) IN COMMON PRACTICE**

A root word of *riba* is *ribh*. It means increase in or addition to. *Riba* can be define as additional amount to the original amount, or an excess to the principal amount, which the extra is charge by the lender to the borrower of money. It means for example, the buyer lends for Rm 1000 but the lender ask to pay for RM 1500. It was existing since in pre Islamic period in money lending and barter system activities. During that period, it is like a common practice as it lead to the rich become richer and poor become poorer. It is because the poor will borrow the money form the rich to buy something for their needs. However, they need to pay extra amount compared to the amount they borrow. Thus, it will make hardship to the poor to pay their loan. (Mohammed, 2013)

In addition, during that period, because of the hardship then the borrower asks to extend the period for payment. As the period extend, the amount of payment also increases. It was really burdening the borrower and because of this, many verses in the Holy Quran reveals to prohibit *riba* from implement in daily life. Allah was stated the sins of committing *riba* is not restricted to the who give the *riba*, but all people either directly or indirectly committing with *riba* also involved. It is as in the hadith;

Muslim (1598) narrated that Jaabir said:

*“The Messenger of Allah (blessings and peace of Allah be upon him) cursed the one who consumes riba and the one who pays it, the one who writes it down and the two who witness it, and he said: they are all the same.”*

Allah prohibited *riba* and mention the punishment of *riba* as in surah Al-Baqarah verses 275;

لَّذِينَ يَأْكُلُونَ الرِّبَا لَا يَقُومُونَ إِلَّا كَمَا يَقُومُ الَّذِي يَتَخَبَّطُهُ الشَّيْطَانُ مِنَ الْمَسِّ ذَلِكَ بِأَنَّهُمْ قَالُوا إِنَّمَا الْبَيْعُ مِثْلُ الرِّبَا وَأَحَلَّ اللَّهُ الْبَيْعَ وَحَرَّمَ الرِّبَا فَمَنْ جَاءَهُ مَوْعِظَةٌ مِنْ رَبِّهِ فَانْتَهَى فَلَهُ مَا سَلَفَ وَأَمْرُهُ إِلَى اللَّهِ وَمَنْ عَادَ فَأُولَئِكَ أَصْحَابُ النَّارِ هُمْ فِيهَا خَالِدُونَ

Those who consume interest cannot stand [on the Day of Resurrection] except as one stands who is being beaten by Satan into insanity. That is because they say, "Trade is [just] like interest." But Allah has permitted trade and has forbidden interest. So, whoever has received an admonition from his Lord and desists may have what is past, and his affair rests with Allah. But whoever returns to [dealing in interest or usury] - those are the companions of the Fire; they will abide eternally therein. (Al-Baqarah:275)

Nowadays, many Islamic banks exist in order to provide Islamic products and services to the Muslims. Generally, Muslims aware on existing of Islamic products to eliminate the consuming of conventional products. Therefore, for those who want to avoid from taking any prohibited element would go for transaction and trading offered by Islamic institution such as Islamic bank. It is because, chosen Islamic institution is the best solution to confirm it is free from any prohibited elements. However, there are certain transaction in our daily life that could be as a normal practice by citizen without they realize, it also contains prohibited elements.



It is common for citizen who practice multi level marketing or called as MLM. It is similar to pyramid marketing. MLM is haram because the purpose of MLM is to earn commission not to buy the product. The person at upper level will get commission from below line of level. It is like to get profit without doing nothing and not selling a product. According to Shaykh Muhammad, 2004, the commission may reach tens of thousands, while the product is not worth more than a few hundred. The companies depend on marketing and advertising of their product that will contribute to a large profit to their companies. Besides, the prohibition of MLM is because of it contains *riba* al-fadhl as well as *riba* nasiah. *Riba* al-fadhl is when exchange of good with the same type but different quantity and *riba* nasiah is regarding the time of payment where when the payment makes later, the amount of payment will increase. In case of MLM, the participant pays a small amount of money in order to gain a lot of money or can be conclude that they pay cash for cash of a different amount and with deferred payment. In addition, the product which the company sells to the agent is actually a screen for this transaction, which intend to trick others, however, it makes no difference to the ruling.

Insurance also is a common practice by citizen. Insurance is haram because of a few factors and one of it because of *riba*. Insurance clearly contains *riba*. Insurance is the sale of money for money, of a greater or lesser amount, with delay in one payment. In case of insurance, it contains *riba* al-fadhl and *riba* al-nasiah. *Riba* al-fadhl is when the amount of money is not equal, thus it contains interest, and *riba* al-nasiah is based on time. These both *riba* incurred because in insurance, company take people's money and promise to pay them either an amount is more or less than the amount they had pay and the payment will be made because of specific accident happen and stated in the policy. Thus, the amount of money they pay is not equal to the amount they receive, and the amount paid is in the future, thus this will make *riba* existed and *riba* is strictly prohibited.

### **GHARAR (UNCERTAINTY) IN COMMON PRACTICE**

*Gharar* commonly known as uncertainty. *Gharar* literally means peril, hazard, undisclosed and uncertainty. *Gharar* can be describe as to take the plunge yourself from an act which carries the risk which do not know what exactly could be happen. It also like enter into something risky without thinking the consequences, or consequences are hidden or ignorance during the transaction or sale. In sales activities, uncertainty or *gharar* could happen when there is uncertainty in the quality, or quantity in the subject matter, time of payment of deferred sales, value of subject matter, uncertainty of existence of subject matter, ownership, deliverability and uncertainty of nature of the object. All these unknown specifically regarding the subject matter could lead to the existence of *gharar*. (Muhammad Iman, 2016)

According to Muhammad Iman, 2016, it has some reasons why *gharar* is strictly prohibited in Islam. One of it is to avoid fraudulence. It is purposely to secure the buyer especially in sales activities. It can be avoid from selling non existence product, avoid from misleading the price, and ensure that both parties agree with the contract. Besides that, this will keep the property among the people as one element in the maqasid shariah. It will help to protect the wealth and goods from the loss and teach both contracting parties to be honest and disclosed everything regarding the subject matter.



There is a few verses in the Holy Quran regarding the prohibition of *gharar*. One of it is in Surah Al-Baqarah: 188;

وَلَا تَأْكُلُوا أَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ وَتُدُلُّوا بِهَا إِلَى الْحُكَّامِ لِتَأْكُلُوا فَرِيقًا مِّنْ أَمْوَالِ النَّاسِ بِالْإِثْمِ وَأَنْتُمْ تَعْلَمُونَ

“And do not consume one another's wealth unjustly or send it [in bribery] to the rulers in order that [they might aid] you [to] consume a portion of the wealth of the people in sin, while you know [it is unlawful].” (Al-Baqarah:188)

And also stated in the hadith, for example in hadith Narrated by Abu Hurairah:

نَهَى رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ عَنْ بَيْعِ الْحَصَاةِ وَعَنْ بَيْعِ الْغَرَرِ

“The Prophet SAW has prevented (us) from (doing) a sale (by means of a small stone throw) and sale of goods in a *gharar*” (HR Muslim)

*Gharar* is uncertainty where people do not know an exact detail on transaction occur. This is not limited to the banking and financial transaction only. It is because, in our daily life activities could also exist this prohibited element in Islam. An example for the common practice of activities involve *gharar* is clinic or hospital bill and consultation. According to Dr Zaharuddin Abd Rahman, 2017, when the patient get the treatment in the clinic or hospital, all the information regarding the price and details of services and medicine need to be disclosed clearly at the beginning of the contract. If it is not doing so, it will lead to *gharar* fahish. It is important to give information on the consultation fees or treatment fees before it would be done. It must be clearly stated for example RM20 per 10 minutes consultation. The clinic or hospital cannot just assume that patient already know. Therefore, it is a must for the clinic or hospital to disclose the charges including medicine price.

Another example is *gharar* existed in restaurant. It is happened when owner of the restaurant did not disclose the price of the food. Therefore, when the customer orders the food, then they eat without knowing the price of the food. It will result when they want to make a payment, sometimes they will surprise with the food price. It may be too expensive. This is involved *gharar* fahish in the transaction. Therefore, it is important for the owner to disclose all the price to avoid *gharar*. In Islam, elimination of *gharar* is important to protect both side from mistreated. (Tasim, 2018)

### **MAYSIR (GAMBLING) IN COMMON PRACTICE**

*Maysir* is known as gambling. Literally it means gambling. It is defining as easy acquisition of getting something by chance towards money, wealth or product. *Maysir* also defined as any form of business activity where monetary gains are derived from mere chance, speculation or conjecture. In case of gambling, all parties involve will put something usually money, however only one party will get profit and the other will lose. Common example of gambling is



uncertainty of the timing of benefits of a pure life insurance and Casinos where it simply transfers of wealth take place from losers to winner without creating a new stock of wealth.

*Maysir* is prohibited in Islam because it is speculative of something either it could be profit or loss. it is more to analysis of a lot of economic and financial data, and involves the investment of assets, skills and labour. Besides, *maysir* is effortless which people just need to speculate and depend upon to the luck. In Islam, money should be earned by work it and put on effort which able to achieve by knowledge and skill. (Saiful Azhar, 2005)

The prohibition of *maysir* also stated in Surah Al-Maidah: 91;

طَائِفًا يُرِيدُ الشَّيْطَانُ أَنْ يُوقِعَ بَيْنَكُمُ الْعَدَاوَةَ وَالْبَغْضَاءَ فِي الْخَمْرِ وَالْمَيْسِرِ وَيَصُدَّكُمْ عَنْ ذِكْرِ اللَّهِ وَعَنِ الصَّلَاةِ  
فَهَلْ أَنْتُمْ مُنْتَهُوْنَ

“Satan only wants to cause between you animosity and hatred through intoxicants and gambling and to avert you from the remembrance of Allah and from prayer. So, will you not desist?” (Al-Maidah:91)

In the hadith, Narrated by Abu Hurairah:

عَنْ أَبِي هُرَيْرَةَ - رضي الله عنه - قال: قال رسول الله - صلى الله عليه وسلم: “لا سَبَقَ إِلَّا فِي خُفِّ أَوْ  
نَصْلِ أَوْ حَافِرٍ” رواه أحمد والثلاثة، وصححه ابنُ جَبَّانَ

The prophet peace be upon him said, “you should not bet an amount of money except on races of camels, arrows or horses”

This hadith shows that betting is something that we need to avoid. Betting is similar as gambling because one part will win, and the others will lose. It is incurred possibilities or chance of loss.

Lucky draw is one of the activities that is very common but may involve gambling. As a common activity, it looks like it is common, and nothing is wrong in doing this. However, it is actually prohibited because the way of applying this activity included prohibited element. Lucky draw is the fortune of the draw which means the consequences of opportunity and it is based on luck. It is like a competition where the ticket will be chosen, and only selected people based on the ticket chosen will get the reward. Therefore, it is an opportunity where all people have the same opportunity but only selected will get the reward. According to Dr Hanudin Amin, 2018 lucky draw is a game of chance in which people may give a money for small amount but will get back for a higher amount. There is not restricted to money only, but it could be in terms of prize or things. In Islam, lucky draw is strictly prohibited. It is because, lucky draw put an individual without any control towards an outcome. It is based on luck, therefore in this case, it is very high degree of *gharar*. Besides that, people put a little amount of money and managed to get huge amount. This is a concept of *maysir*. This is common practice of lucky draw where the present of lucky draw is bought by part of participant's money. However, if the present is buy by organizer's money, without involved any money by participant, then it is allowed and halal.

Another common practice that including gambling is contest. When entering contest, usually we need to pay fee. Therefore, if part of the fee is purposely to buy the prize, then it will consider as gambling. It is because, the concept of gambling is there. All participants pay



equally for certain amount, then some of them will get prize with certain amount. It can be summarizing that, some of them will get profit on it by getting prize, and some of them loss of their money paid earlier. According to Saiful Azhar, 2005, people are willing to risk their money in the hope of winning a larger amount. This is very common practice in Malaysia and sometimes has a wide scale promotion by media. It is for example SMS contest, puzzle contest, and game show contest.

### Findings

Prohibited elements in banking and finance which are *riba*, *gharar* and *maysir* commonly known by the Muslims. However, majority of us do not realize that all these elements could involve in our daily life activities. Muamalat covered economic and non-economic activities. Thus, prohibited elements in Muamalat may occur without the Muslims realized it. It is because some of the activities were become a custom or tradition from past years ago.

Among the common practice by Muslims which they unrealized it contains *riba* are activities of Multi level Marketing (MLM) and insurance. MLM contains *riba* al-fadh and *riba* al-nasiah (Shaykh Muhammad, 2004). *Riba* al-fadh is when exchange of good with the same type but different quantity and *riba* nasiah is regarding the time of payment where when the payment makes later, the amount of payment will increase The concept of MLM lead to haram is because the purpose of MLM is to earn commission not to buy the product. The person at upper level will get commission from below line of level. It is like to get profit without doing nothing and not selling a product. It same goes to insurance whereby many Muslim buy Insurance. Insurance is the sale of money for money, of a greater or lesser amount, with delay in one payment. Insurance also contains both *riba* al-fadh and *riba* al-nasiah. *Riba* al-fadh is when the amount of money is not equal, thus it contains interest, and *riba* al-nasiah is based on time. These both *riba* incurred because in insurance, company take people's money and promise to pay them either an amount is more or less than the amount they had pay and the payment will be made because of specific accident happen and stated in the policy. Thus, the amount of money they pay is not equal to the amount they receive, and the amount paid is in the future, thus this will make *riba* existed and *riba* is strictly prohibited. (Shakyh Muhammad, 2004)

Activities that is commonly practice that contains *gharar* are transaction in clinic or hospital for their bill and consultation. According to Dr Zaharuddin Abd Rahman, 2017, when the patient gets the treatment in the clinic or hospital, all the information regarding the price and details of services and medicine need to be disclosed clearly at the beginning of the contract. If it is not doing so, it will lead to *gharar* fahish. Next is *gharar* which could happen in restaurant. It is happened when owner of the restaurant did not disclose the price of the food. Therefore, when the customer orders the food, then they eat without knowing the price of the food. It will result when they want to make a payment, sometimes they will surprise with the food price. It may be too expensive. This is involved *gharar* fahish in the transaction. (Tasim, 2018)

For activities that contains *maysir*, and it is common practice in our life for example lucky draw (Hanudi, 2018) and contest (Saiful Azhar, 2005). Lucky draw is a game of chance



in which people may give a money for small amount but will get back for a higher amount. There is not restricted to money only, but it could be in terms of prize or things. In Islam, lucky draw is strictly prohibited. It is because, lucky draw put an individual without any control towards an outcome. It is based on luck, therefore in this case, it is very high degree of *gharar*. Besides that, people put a little amount of money and managed to get huge amount. This is a concept of *maysir*. This is applied if the participants contribute money for the prize. Contest also similar like gambling. It is because entering into contest, usually we need to pay fee. Therefore, if part of the fee is purposely to buy the prize, then it will consider as gambling. In this case, all participants pay equally for certain amount, then some of them will get prize with certain amount. It can be summarized that, some of them will get profit on it by getting prize, and some of them loss of their money paid earlier. This is very common practice in Malaysia such as SMS contest, puzzle contest, and game show contest.

### Conclusions

The Islamic teachings need the Muslim to follow Allah's directives for earning a living, to use natural laws and direct means for the attainment of his objectives, and to employ such causes to produce the desired effects. Islam prohibits from practice *riba*, *gharar* and *maysir* in any transaction in our life. Therefore, as a Muslims, we need to avoid from any activities contains those prohibited elements.

Some activities contain these three elements indirectly which lead the Muslims did not realize that the concept is similar to the prohibited elements. However, these activities identified are activities that are commonly practice by Muslims. In further research may identify either these activities still practice if the Muslims know that there are contain prohibited elements. In contrast, if they have that knowledge of the prohibition, they will avoid from practicing those activities, or because of tradition, they ignore the hukm and insist to do so. By the further research, we may know either the hukm or tradition is priority for Muslims.

### References

Al-Quran Al-Karim

Hanudin Amin, Unlocking lucky draw from an Islamic perspective, 2018. Retrieved at <https://www.pressreader.com/>

<https://www.investment-and-finance.net/islamic-finance/f/fiqh-muamalat.html>

<http://www.financialislam.com/prohibition-of-riba-maysir-and-gharar.html>

Oxford Islamic Studies Online, retrieved at <http://www.oxfordislamicstudies.com>

Saiful Azhar, Islamic Banking and Financial Market, 2005.

Saifudin, Basic principles of Muamalat, 2017. Retrieved at <http://ustazsaifudin.wakaf.org/v1/2017/05/30/basic-principles-of-muamalat/>

Shaykh Muhammad Saalih al Munajjid, retrieved at <https://islamqa.info/en/answers/42579/fatwa-from-the-standing-committee-on-the-business-and-hibbat-al-jazeera-companies-and-pyramid-marketing-schemes>

Shaykh Muhammad Saalih al Munajjid, retrieved at <https://islamqa.info/en/answers/8889/the-true-nature-of-insurance-and-the-rulings-concerning-it>

Rakaan Kayali, What is *Maysir*?, 2018. Retrieved at <https://practicalislamicfinance.com/2018/11/11/2-questions-to-help-anyone-identify-maysir-gambling/>



*3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Cophorne Hotel, Cameron Highland, Malaysia  
29<sup>th</sup>-30<sup>th</sup> June 2019*

Zaharuddin Abd Rahman, *Gharar & Gambling In Daily Transactions*, 2017



## THE IMPACT OF ANIMATION PROGRAM ON ARABIC LEARNING VOCABULARY RECALL AMONG PRIMARY SCHOOL PUPELS: A CASE STUDY AT AL-AMIN ISLAMIC PRIMARY SCHOOL, GOMBAK

Ismaiel Hassanein Ahmed<sup>1</sup>  
Mahani Bt. Mokhtar<sup>2</sup>

<sup>1</sup>Kulliyah of Education, International Islamic University Malaysia (IIUM). (Email: [tulib52@iium.edu.my](mailto:tulib52@iium.edu.my))

<sup>2</sup>Al-Amin Islamic School Gombak. (Email: [mahanimokhtar21@gmail.com](mailto:mahanimokhtar21@gmail.com))

---

**Abstract:** *An effective way of learning language vocabulary requires various types of teaching and learning pedagogy. The animated cartoon or films can accelerate the learning curve of learners and assists them to expand their Arabic vocabulary recall. This research aimed to investigate the effectiveness of the usage of animation program in Arabic language learning and its effect on vocabulary recall and basic verbal skills among the first year pupels in Al-Amin Islamic Primary School Gombak. To achieve the objectives of the study, the researchers adopted the experimental approach. Two classes of similar academic level were selected comprising 40 students, 20 students in each class. One was the experimental group whilst the other, the control group. Animation was used with the experimental group, while normal teaching techniques were used with the control group. The study was done during the second term of the school year 2016. The vocabulary recall tests consisted of twenty (20) words whilst the verbal skills test consisted of six (6) sentences. Descriptive analyses was done on the data. The results showed that level of effectiveness of the usage of animation program in achieving the objectives of this study. In the light of those findings, the study urged the usage of animation programs in Arabic language learning for primary school students to enhance the learning of vocabulary and basic verbal skills, not as an alternative but as an additional technique. It was also suggested that further researches be done on how to maximise the usage of animation programs in Arabic Language Learning in primary school and what kind of animation programs would be most effective in Arabic language learning amongst primary school students.*

**Keywords:** *effectiveness, animation, vocabulary recall, verbal skills.*

---

### Introduction

Vocabulary is the most important factor in academic achievement for a second or foreign language learners (Laufer, B. (1997). Without vocabulary building, it is difficult for students to learn grammar, speech, listening, and writing etc. Studies show that without an adequate knowledge of relevant vocabulary; the students will have difficulty in performing the tasks required of them in school (Harley, 1996). While many researchers accept the importance of vocabulary learning in language proficiency and academic achievement, their ideas about how vocabulary should be learned have varied widely because remembering and recalling a large amount of vocabulary is not an easy task. It is relatively difficult to learn new words, to keep those words in mind and recall them when needed (Tozcu, A., & Coady, J. 2004). Through the multimedia technology, animation programs are an innovation that creates an atmosphere which is capable of aiding student's achievements in learning a foreign language. Wood



(2001), mentioned that as a tool, the animated images cause the students to be more focused on the vocabulary learning because the animated images are interactive and addresses almost all senses. While trying to understand the meaning of words associated to the scenes that they watch on the screen, students are also exposed to the pronunciation and written form of words simultaneously. To learn words in context with the help of animated images is considered to make the learning process much easier for the students (Yüksel & Tanrıverdi, 2009).

Animation allows real-motion scenes, and provides interactive tools. Vocabulary learning would be an interesting and exciting activity for the students in the language learning process. Thus, this study aims at determining the effectiveness of using animation in Arabic Language Learning in a selected primary school.

### **Al-Amin Schools**

Al-Amin Gombak Islamic Primary School was established in 1986. It is a part of a network of schools under Pusat Pendidikan Al-Amin Berhad. Other schools under the same network are Al-Amin Kuala Lumpur Islamic Primary School, Al-Amin Gombak Islamic Primary School, Al-Amin Gombak Islamic Secondary School and Al-Amin Wangsa Maju Islamic Primary School. There are six levels of students in Al-Amin Gombak Islamic Primary School comprising of seven to twelve years of age. In year 2016, there were four classes of Year One, four classes of Year Two, four classes of Year Three, four classes of Year Four, four classes of Year Five and five classes of Year Six. Each class comprises of about thirty-one or thirty-two students.

Arabic Language has been taught in the school as a second language since its establishment. For Year One to Three, the allocated time for this subject is three hours per week. As for Year Four to Six, the allocated time is four hours weekly. At the end of each year, the students will sit for a written and oral evaluation to assess their achievement. For year One to Five, the assessments are done internally. As for year Six, the examination is centralised among all schools under Pusat Pendidikan Al-Amin Berhad.

### **Statement Of The Problem**

One of the most difficult aspects of teaching Arabic Language is vocabulary recall and acquisition of basic verbal skills. The teaching techniques and learning materials play an important role in helping students to acquire the skills. At times using the classical teaching techniques and learning materials has become ineffective in ensuring the acquisition of the skills. In this twenty first century, learning materials are not limited to textbooks and activity books only, but should also include those based on the information technology such as computers, internet, LCDs, CD-ROMs, digital cameras and etc. This includes animation which can be used effectively. In Al-Amin Gombak Islamic Primary School, vocabulary recall and acquisition of verbal skills is a major concern in Arabic Language Learning. Over the years, teachers have been given various trainings in second language teaching techniques. Workshops has been organised to improve their skills in producing various learning materials. Quite a big sum has been invested in organising those trainings and workshops. Yet, the level of vocabulary recall and the acquisition of verbal skills still remains an issue that requires further attention. Although each class is equipped with a HD television that can be connected to a laptop via a USB cable, animation programs have yet to be used by the teachers in teaching Arabic Language. Hence, this research aims to provide some findings that will motivate the teachers to use animation in their teachings.



### **Objectives Of The Research**

This research is aimed at achieving the following objectives: 1) To determine the performance of Year One students in vocabulary recall and verbal skills in learning Arabic Language, after watching animation programs. 2) To determine the perception of Year One students, in learning Arabic Language through animation programs.

### **Research Questions**

This research proposes the following major questions: 1) How do the students perform on the vocabulary recall and basic verbal skills after watching animation programs? 2) What are the students' perceptions towards the use of animation programs in learning Arabic language?

### **Significance Of The Research**

It is hoped that this research could: 1) Provide a deeper insight and information to teachers on how the animation programs can be used in teaching the Arabic language, 2) Motivate students to perform better in the vocabulary recall and verbal skills, 3) Highlight how the students can continue to like learning Arabic language even after they have completed primary school, 4) Encourage the production of animation programs that will promote Arabic language learning amongst young children, 5) Motivate more researchers to conduct new studies on using animation programs or images in Arabic language classes.

### **Definition Of Terms**

#### **Animation Program**

The two programs entitled "Food" and "Bath Time" from the series of Little Pim Arabic 2009, Little Pim Corporation, which consisted of two motion pictures that are made from a series of drawings, photographs and video clips of objects that simulates movement by minuscule progressive changes in each frame.

#### **Arabic Language Learning**

The formal learning of Arabic language in Year One classroom of Al-Amin Gombak Islamic Primary School.

#### **Vocabulary Recall**

Remembering or retrieving words or set of words that have been chosen from the animation programs.

### **Review Of Literature**

Animation, Vocabulary and Verbal Skill. Three sub-topics will be discussed in Vocabulary i.e. Definition of Vocabulary, Importance of Vocabulary and Acquisition of Vocabulary. As for the topic Verbal Skills, the sub-topics are Definition of Verbal Skills, Importance of Verbal Skills and Acquisition Of Verbal Skills. The topic Animation will discuss Definition of Animation, Animation in Education and Animation in Language Learning.

### **Vocabulary**

The word 'vocabulary' originated from the middle of 16th century, denoting a list of words with definitions or translations. It was derived from a Medieval Latin word 'vocabularius' and from the Latin word, 'vocabulum'. According to Merriam-Webster dictionary, vocabulary is "a list or collection of words or words and phrases usually alphabetically arranged and explained or defined". In the LearnersDictionary.com, vocabulary means "the words that make up a language or all of the words known and used by a person".



Vocabulary can also be defined as “words we must know to communicate effectively; words in speaking (expressive vocabulary) and words in listening (receptive vocabulary)” (Neuman & Dwyer, 2009, p. 385). Hornby (1995) defined vocabulary as “the total number of words in a language; vocabulary is a list of words with their meanings”. Ur (1998) stated: “Vocabulary can be defined, roughly, as the words we teach in the foreign language”. More specifically, we use vocabulary to refer to “the kind of words that students must know in order to understand increasingly demanding text with comprehension” (Kamil & Hiebert, 2005).

### **Importance of Vocabulary**

According to Zimmerman, cited by Coady and Huckin (1998), “vocabulary is central to language and of critical importance to the typical language learning”. Vocabulary, as one of the knowledge areas in language, plays a great role for learners in acquiring a language (Cameron, 2001). Linse (2005) as well as Harmon, Wood, & Keser, (2009) stated that learners’ vocabulary development is an important aspect of their language development.

In terms of second language learning, researchers such as Laufer and Nation (1999), Maximo (2000), Read (2000), Gu (2003), Marion (2008), Nation (2011), Yunus and Krishnan (2018) and others have realised that the acquisition of vocabulary is essential for a successful second language use and plays an important role in the formation of complete spoken and written texts. When introduced into the L2 classroom, students need a “very concrete vocabulary that connects with objects they can handle or see” (Cameron 2001: 81). They usually learn the vocabulary incidentally, through use, but intentional learning tends to be more effective and efficient. In fact, second language readers rely heavily on vocabulary knowledge and the lack of that knowledge is the main and largest obstacle for L2 readers to overcome (Huckin, 1995). Vocabulary has also been acknowledged as L2 learners’ greatest single source of problems (Meara, 1980). Oxford (1990) claimed that vocabulary is “by far the most sizeable and unmanageable component in the learning of any language, whether foreign or one’s mother tongue, because of tens of thousands of different meanings”. Knowing a word involves more than knowing a word’s definition (Johnson & Pearson, 1984; Nagy & Scott, 2000).

Some experts divide vocabulary into two types: active and passive vocabulary. According to Harmer (1991), an active vocabulary refers to the words the students have been taught and they are expected to be able to use them. Meanwhile, a passive vocabulary refers to the words which students will recognize when they come across those words, but they might not be able to pronounce them. Haycraft, as quoted by Hatch and Brown (1995), identified two types of vocabulary known as receptive and productive vocabulary. Stuart Webb, 2009, defined receptive vocabulary as a vocabulary that learners recognize when they see or meet in reading a text but do not use it either in speech or writing. Productive vocabulary involves what is needed in receptive vocabulary but includes the ability to speak or write at the appropriate time. Therefore, productive vocabulary can be addressed as an active process, because learners can produce words to express their thoughts to others.

Expressive and receptive vocabulary, grammar and syntax, and verbal memory are related skills that reflect a common factor in language skills development in children as a unitary construct (MacDonald, 2013 MacDonald, M. C. (2013). Mat Taib Pa in his writings 'Issues of Arabic language teaching and literary studies at the institute of higher learning' (2008: 51) notes that since ancient times the mastery of Arabic speaking skills among students is extremely weak, even though they are from the specialization of the language itself. This is because most of them are weak in mastering vocabulary, morphology, syntax and language style. Hence, they will lose their confidence to speak the language best. This issue is clearly



mentioned by Ismail Ibrahim (1994: 12) in his study entitled 'Studies and learning of Arabic in Malaysian schools and centers'. The major factor that contributes to a student's inability to communicate fluently and clearly is the lack of vocabulary (Gan, 2012). Other factors are the use of inaccurate vocabulary in speech, the use of unnecessary vocabulary in speech and not using the vocabulary that should be in the structure of the sentence (Azani, Azman & Mat Taib, 2012).

### **Verbal Skills**

Verbal skills refer to the extent to which a person can approach words, sentences, written texts verbs, adjectives, as well as, the extent to which he/she can comprehend meanings, produce synonyms and antonyms, know the meaning and use of words, complete sentences with words omitted based on the word context and have a critical view towards a written speech. Speaking which requires verbal skills, is not merely producing correct pronunciations, accurate grammars and vocabularies, but also fluency, which is speaking without pauses and the ability to keep going without hesitation. Gurbuz (2011:54) comments that "fluency" in everyday life often refers to "oral proficiency" in a given language be it native or foreign. In brief, if accuracy is to know what to say, fluency is to know how to say it.

### **Importance of Verbal Skills**

Speaking (verbal) skill reflects people's traits and personalities. This is in accordance to Hedge's definition (2000: 261) of speaking: "A skill by which interlocutors are judged while first impressions are being formed." It is also important because sending and receiving of messages is done through it. Verbal communication is the beginning of the communication process, followed by nonverbal communication that validates or contradicts the verbal communication. Besides being used daily in schools, offices, malls, library, public places or anywhere else, it is also used in business, technology, tourism, public relations, social media etc. on a variety of topics from updates to new policies and procedures. To be able to speak competently is a 'complex task' (Hedge, 2000: 261). Hence, developing speaking skills for students might be a complex task as well. For that reason, teachers should be aware of this phenomenon. Being completely trapped within situations that allow certain particular issues, whilst rejecting to consider other issues, will make the designed speaking activities tend to be slightly imbalance.

An essential component of second-language learning is helping students (a) understand what is being said (input) and (b) formulate appropriate verbal utterances (output). In acquiring second-language, learners benefit from explicit and intentional opportunities to learn how a second language functions and how to become an increasingly proficient user of the target language. Verbal communication also has the power of influence. What someone says can have a deep affect on his subordinates.

### **Animation**

The word 'animation' is derived from the Latin word "anima", which means "having breath or spirit". It refers to a process whereby an object that is essentially static, but looks alive or the object is designed in such a way so as to create an apparently spontaneous lifelike movement. According to Merriam-Webster dictionary, an animation is "a way of making a movie by using a series of drawings, computer graphics, or photographs of objects (such as puppets or models) that are slightly different from one another and that when viewed quickly one after another, would create the appearance of movement. Morrison, Tversky and



Betrancourt (2000) stated that animations are “any application which generates a series of frames, so that each frame appears as an alteration of the previous one”. As for Henry and Laura (2010), they refer animation as “a rapid display of a sequence of static images that create the illusion of movement”. This optical illusion is often called perception of motion, persistence of vision, illusion of motion, or short-range apparent motion. Animated Cartoon, according to Webster’s New World Dictionary (1991), is a motion picture made by photographing a series of drawings, each showing a stage of movement slightly changed from the one before, so that the figures in them seem to move when the drawings are projected in rapid succession.

### **Animation in Education**

Many researches has been done to find new and better ways to educate the young. It has been suggested that children tend to learn better when they are having fun. Generally, animation plays an important role in attracting student's interest besides helping teachers to motivate students towards a more fun learning environment. This is supported by (Aminordin, 2007); who stated that animation is an effective way to attract attention and has the potential to make learning more exciting and fun. Animations are able to support students’ cognitive processes that ultimately result in them understanding the subject matter. It can be used to demonstrate things and concepts visually and precisely. It can be used to show how things come together and work together. Further studies by Baharuddin et al. (2003) stated that interactive multimedia materials that have visual graphics, texts, music, videos and animations, are capable of increasing the rate of acceptance of a subject to be learned, as much as 30% compared to the traditional learning materials. It allows students to utilize more sense in collecting information. Besides, the process of understanding will indirectly accelerate and improve (Ko, S & Rossen, S., 2008). Hence, the information will be retained longer in their memory (Paivio, 2006). Learning with animation is theoretically based on the dual-coding theory. As described by Paivio (2006), the dual-coding theory stated that language knowledge processing is in both verbal and visual channels which make learning more effective. The animation functions by addressing all 5 senses and its interactivity can contribute to students’ autonomous learning. These features mentioned above results in permanent learning as well. Banez (2009:33-35) recognized the power of using animation in the educational process, where a form of entertainment could be designed and used as an educational tool. He also noticed that animation tools made teaching easier for teachers and helped them think of more creative activities in teaching children. It also became easier for children to retain the lesson as it was both fun and educational.

### **Animation in Language Learning**

Based on the findings from a research done by Baharuddin Aris, Mohd. Bilai Ali, Norah Md. Noor, Mohd. Nihra, Haruzuan Mohd. Said & Noor Azean Atan (2003), the use of animation in learning Arabic language can create a more cheerful learning environment. This may be due to the animation which is complete with suitable pictures, videos, sounds and songs, and manage to create a fun and attractive learning environment for students. Results of a study conducted by Lin and Tseng (2012), showed that there were significant differences between three groups of 88 students of junior high school in northern Taiwan who had to learn difficult words in English language. Those who studied through texts and video animations outdid those who used texts and images, or texts only. Another study by Che Hat, N et al (2013), aimed at identifying the effectiveness of the use of animation in learning the Arabic language among diploma students at Universiti Sultan Zainal Abidin (UniSZA), Terengganu, Malaysia. The



results obtained showed that the use of animation in learning sessions helped to increase the students' performances in learning the Arabic language. This study supports the idea that animation applications can be integrated in learning a language not as an alternative but as a teaching aid that contributes positively to students' achievements, classroom learning and students' motivations. Results from a study on the effectiveness of using Animated Pictures Program in learning English vocabulary amongst 64 Fifth Grade students in the Gaza (Najah Mohammed Wafi, 2013), reflected the effectiveness of using animated pictures in developing receptive and productive vocabulary. Another researcher conducted a research on the Effectiveness of teaching Vocabulary by using Cartoon Film towards Vocabulary Mastery EFL Students, based on his finding, he suggest to the English teachers that cartoon film is effective to teach vocabulary for young learners (Fathul Munir 2016).

### **Research Methodology**

The researcher intended to go in depth with the subject selected in one particular school. The quasi experimental design was employed in this research because the researcher could not randomly assign the participants to either the experimental or control groups. This is because the participants have already been assigned to their respective classes since the beginning of the year.

### **Population And Sample Of The Research**

The population were year one students from Al-Amin Gombak Islamic Primary School who were seven years of age. They were chosen because they have just started school that year and presumably they were at a lower basic language-proficiency level and have not been exposed to learning of Arabic language through animation. After a discussion with the Vice Principal, the researcher then chose two classes of students as samples of the study. One class was selected to be the experimental group whilst the other class the control group. The selection was based on the feasibility of the usage of the animation program during the specific period allocated to the class chosen as the experimental group. Both the experimental and control group consisted of 20 students, with a total of 40 students. These selected students' academic levels were within the same range. This was determined from the test that was done prior to the duration of the program, which was used as a pre-test. In order to eliminate gender variable, the students were chosen randomly irrespective of their gender.

### **Context And Setting**

In this study, the main context is the classroom where teaching and learning took place is explained. This is to ensure that the environment for both experimental and control groups were the same. All classrooms in the school were equipped with an HD television that can be connected to a laptop via a USB cable. Every two teachers were provided with a laptop. Hence, this would eliminate any unfamiliarity that might arise when the devices were being used. Finally, to avoid the occurrence of any major problems, an arrangement was made with the teachers prior to the teaching and learning so that the routines and procedures of normal teaching and learning will be maintained.

### **Methods Of Data Collection**

The two methods of data collection for this research are:

#### **Achievement Test**



There achievement test was used to measure the students' achievement on vocabulary recall and verbal skills. The vocabulary consisted of 16 words. Students were to answer the questions when the pictures were shown to them.

There are 4 categories of responses. They are:

- 1 Correct word but wrong pronunciation
- 2 Correct single word answer
- 3 Full sentence answer but wrong grammar
- 4 Correct Full Sentence answer

### **Interview**

An interview was conducted on selected students. This was to assess the students' perceptions towards the use of animation program in learning the Arabic language. The interview was done in the most relaxing way so as not to create pressure to the students.

### **Data Collection Procedure**

This research used the experimental design method. The animation program was used in the experimental group, in addition to the normal teaching techniques, whilst the control group was only exposed to the normal teaching techniques. The program titles shown to the experimental group were the "Food" and "Bath Time" animations from the series of Little Pim Arabic 2009, by Little Pim Corporation. Each program was to be carried out over a span of one week or 3 days of lessons. The first program that was implemented was "Food

In the same week, the control group underwent the normal learning of the same topic with an emphasis on the same words. The teacher was free to use any technique other than animation. After the teaching and learning session, the twenty selected students of each group were tested individually; this was considered the post-test. Their marks were recorded and tabled accordingly. They were then interviewed to answer some questionnaires orally. The whole procedure was repeated for the next animation program i.e. the "Bath Time" clip.

### **Ethical Issues**

The main ethical consideration in a case study research is protecting the confidentiality and anonymity of the participants. Stake (2003), highlighted the privileged position of the case study researcher when he says: "Qualitative researchers are guests in the private spaces of the world. Their manners should be good and their code of ethics strict. The confidentiality and anonymity of the participants were protected by not revealing their names and classes they were in. In maintaining good manners and code of ethics, the researcher first seek permission to meet the Principal of the school. After obtaining permission to conduct the research in the school, the researcher was directed to the Vice Principal for a detailed discussion about the suitable classes and their timetables. Finally, the researcher met up with the teachers and discussed about the teaching techniques.

### **Data Analyses**

To analyse the effectiveness of the animation programs, a column chart of the scores for each word was drawn. Next, the median, mode and mean were calculated for the scores of each word. The researcher then chose the mean as a comparison of the performances between the experimental and control groups. A descriptive analysis was done on the achievement of vocabulary recall and verbal skill of each word. The researcher then made a line chart of the

distribution of mean score of all 16 words to compare the achievement between experimental and control groups. A pie chart was then drawn to see the overall achievement.

To analyse the perception of the participants towards the use of animation programs in learning the Arabic language, the researcher only did a verbal interview because the participants were only seven year's old and some have not acquired good reading abilities. The students' responses were tabulated into a table with only 3 categorised: D = Disagree, NS = Not Sure, A = Agree. The discussion was done based on simple percentages calculated from the findings.

### Data Analysis

The data obtained were analysed using simple descriptive statistical analysis. Students' Performance on Vocabulary Recall and basic Verbal Skills, after watching animated cartoon programs.

**Research Question 1: How did the students perform on the vocabulary recall and basic verbal skills, after watching animated cartoon programs?**

In order to answer the research question above, students of both the control and experimental groups were tested individually on the recall and the related verbal skills of all the 16 words. The scores for the recall and basic verbal skills of each word, of both the control and experimental groups were tabulated in the form of column charts. The mean score for each word were then calculated and tabled. The tables and the analyses are as below.

### Comparison of Achievement Between Experimental And Control Group

**Figure 1:** Distribution of mean score of all 16 words

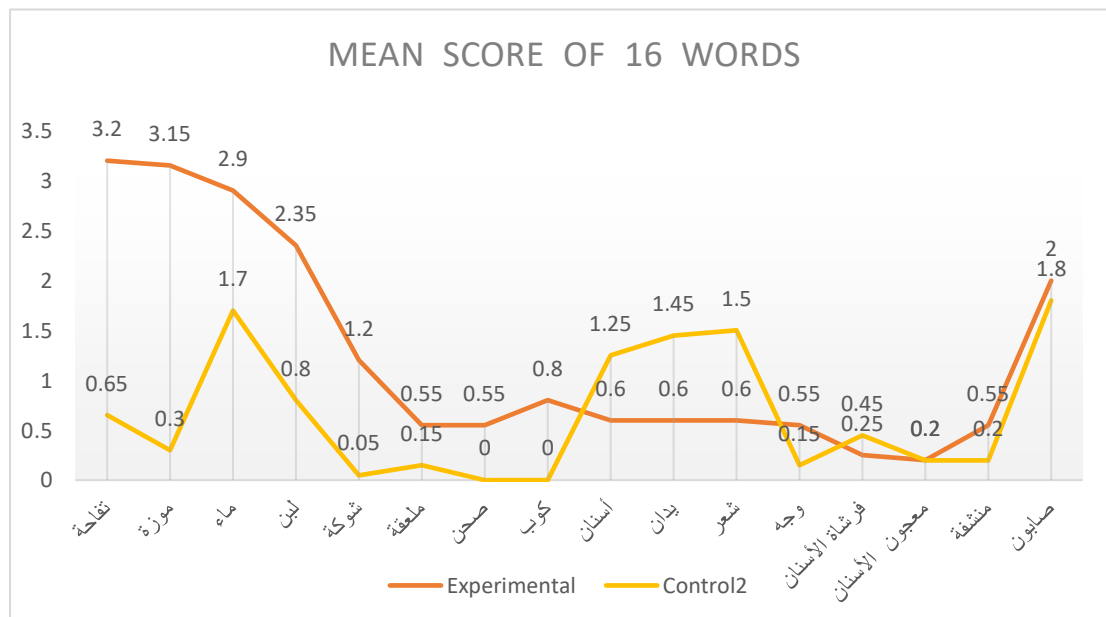
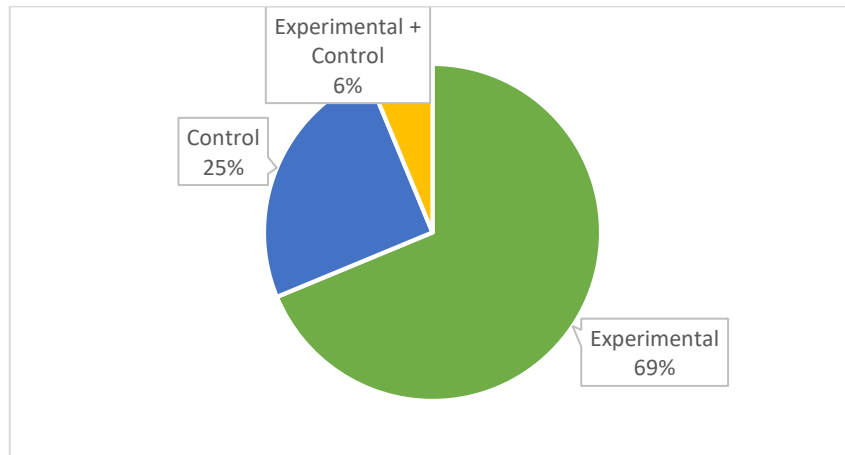


Figure 1 above shows the distribution of the mean score for the recall and the verbal skill of all the sixteen (16) words that were tested. Out of the sixteen (16) words, the mean score for the recall and the verbal skill of eleven (11) words, is higher for the experimental group compared to the control group. As for the remaining 5 words, the mean score for the

recall and the verbal skill of 4 words is higher for the control group compared to the experimental group. The mean score for the recall and the verbal skill of the remaining one word is the same for both the control and experimental groups.

**Figure 2:** Summary of mean score



In order to summarise the achievement between experimental and the control group, a pie chart was drawn as in Figure 2. 69% represents the mean score of the 11 words that the experimental group achieved higher than the control group. 25% represents the mean score of the 4 words that the control group achieved higher than the experimental group. As for the remaining 6% it is a shared achievement for both groups. It can be seen that there is a significant difference of 44% between the mean scores achieved by the experimental and control groups.

In conclusion, the above findings show that after watching animated programs, the students' performance on the vocabulary recall and basic verbal skills was better than those who did not watch the programs.

**Research Question 2: What are the students' perceptions towards the use of animation programs in learning the Arabic language?**

**Table 1:** Students' perceptions towards the use of animation programs

No	Items	D	NS	A
1	I enjoyed watching the animation programs.	20%	20%	60%
2	The animation programs were interesting.	60%	40%	0%
3	The animation programs helped me to understand the lessons.	20%	40%	40%

4	I want to watch the animation programs again.	20%	40%	40%
5	I want my teacher to always use animation programs in our Arabic class.	20%	60%	20%
		28%	40%	32%

D = Disagree, NS = Not Sure, A = Agree

The above table 1, discusses the students' perceptions towards the use of animation programs in learning the Arabic language. From the table, looking at items no 1 and 2, 60% of the students agreed that they enjoyed watching the animation programs. but none (0%) agreed that it was interesting. This seems to contradict. It could be that the students have a different understanding of the word "enjoy" and "interesting" or that, "enjoying something" does not have to synchronise with it being "interesting". As for item no 3, there is a tie between those who were not sure whether the animation programs helped them to understand the lessons (40%), and those who agreed it did (40%). From the 60% who enjoyed watching the animation programs in item 1, only 40% wanted to watch it again as seen in item no 4. The remaining 20% were not sure and joined the other 20%, making them 40%. Interestingly, although earlier, 60% of the students agreed that they enjoyed watching the animation programs, 60% of the students were not sure if they wanted their teachers to always use animation programs in their Arabic classes. The overall result is, whilst 32% agree with using animation programs in learning the Arabic language, and 28% disagree, the remaining 40% are not sure.

### Discussion Of The Main Findings

The first research question is "How did the students perform on the Vocabulary Recall and Basic Verbal Skills tests, after watching the animation programs?"

To answer that, the researcher carried out the vocabulary recall and verbal skill tests on the selected 16 words. Out of the 16 words, the experimental group's mean scores for 11 words (69%) were higher than the control group. Whereas, the control group's mean scores that were higher than the experimental group was for only 4 words (25%). This means that the performance of the students who watched the animation programs, is better than those who did not watch the programs. With a significant difference of 44% between the mean scores of both groups, it also means that the level of acceptance of vocabulary after watching the animation programs is very good. This is in line with studies by Baharuddin et al. (2003) which stated that interactive multimedia materials that have visual graphics, texts, music, videos and animations, are capable of increasing the rate of acceptance of a subject to be learned, as much as 30% compared to the traditional learning materials. One form of media is animation. Paivio (2006), agrees to that by saying that with animation, the information will be retained longer in the students' memory. Hence, in using animation, the vocabulary retain is longer, making vocabulary recall easier. A study on the effectiveness of using Animated Pictures Program in learning English vocabulary amongst 64 Fifth Grade students in the Gaza (Najah Mohammed Wafi, 2013) further proved that animation is effective in developing receptive and productive vocabulary. Animated cartoons included authentic language input which considered as primary tool for second language learning process (Abuzahar, Farrah & Zalloum 2016).



The results from this research also denote that the acquisition of verbal skills is in line with the acquisition of vocabulary. This is supported by researchers such as Laufer and Nation (1999), Maximo (2000), Read (2000), Gu (2003), Marion (2008) and Nation (2011) who mentioned that in terms of second language learning, the acquisition of vocabulary is essential for a successful second language use and plays an important role in the formation of complete spoken and written texts.

The second research question is “What are the students’ perceptions towards the use of animation programs in learning Arabic language?”

From table 1, 60% of the students agreed that they enjoyed watching the animation programs. This is in line with studies made by (Aminordin, 2007); who stated that animation is an effective way to attract attention and has the potential to make learning more exciting and fun. This may be due to the fact that animation has suitable pictures, videos, sounds and songs, and manage to create a fun and attractive learning environment for students. In brief, animation plays an important role in attracting student’s interest besides helping teachers to motivate students towards a more fun learning environment. Based on the findings from a research done by Baharuddin Aris, Mohd. Bilai Ali, Norah Md. Noor, Mohd. Nihra, Haruzuan Mohd. Said & Noor Azean Atan (2003), the use of animation in learning Arabic language can create a more cheerful learning environment. 40% of the students agreed that the animation programs helped them to understand the lessons. As usual, some parts of the lesson may have been abstract. This is in accordance with the study which states that abstract concepts can be visualized through animation (Baharudin et al. (2000). Hence, an explanation of a skill or concept can be easily understood and remembered by students. A substantial 32% agree that animation programs should be used in learning the Arabic language.

### **Conclusion**

It can be concluded that students who watched the animated cartoon programs, were better in recalling the vocabulary of the 16 selected words and in responding correctly verbally, than those who learnt through regular methods. The findings of the study were consistent with the literature on the use of animations programs to help language learners in vocabulary recall and basic verbal skills.

### **Recommendations:**

**For Teachers of Arabic Language.** Teachers can adapt and adopt the animation programs and come out with lesson plans based on the syllabus. Teachers will have to be creative and innovative in teaching Arabic Language. **For Media Production Companies.** Arabic animation programs that are suitable for primary school learners are scarce in Malaysia. Malaysian produced animations would be very useful tools for teachers. It would improve the teaching of Arabic language to children of primary schools if there are ample animation programs to choose from. **For the Ministry of Education.** Arabic language should be given a high status in the education policy in Malaysia.. The status should be the same as English Language. With this being implemented, Arabic language would then be spoken and heard in all aspects of life. This will enhance the vocabulary recall and verbal skills of not only students but all Muslims and non-Muslims alike who endeavour to learn and speak Arabic language.

### **References**



- Abuzahra, Nimer, Farrah, Mohammed Abdel Hakim and Zallum, Sara (2016). *Using Cartoon in Language Classroom from a Constructivist Point of View*. Arab World English Journal, special Issue on CALL no 3 July 2016, pp229-245.
- Baharuddin Aris, Bilal Ali, Jamsuerayaaluddin Harun dan Zaidatun Tasir. (2001). *Sistem Multimedia dan Aplikasinya*. Kuala Lumpur: Venton Publisher.
- Baharuddin Aris, Mohd. Bilal Ali, Norah Md. Noor, Mohd. Nihra, Haruzuan Mohd. Said & Noor Azean Atan. (2003). *Sains Komputer: Teknik dan Teknologi*. Selangor: Venton Publishing (M) Sdn. Bhd
- Bahrani, T & Sim, T.S. (2012). *Audiovisual news, cartoons, and films as sources of authentic language input and language proficiency enhancement*. <http://www.tojet.net/articles/v1i4/1145>.
- Banez, L.B., & Ramos, N.H. (2009). "Using Animations Tools for Teaching Spelling to Pre-Schoolchildren". *Probers*, 10 (1).
- Boswood, T. (1997). *New Ways of Using Computers in Language Teaching*. New Ways in TESOL Series II Innovative Classroom Techniques. USA: TESOL, Inc.
- Cameron, L. (2003). *Challenges for ELT from the expansion in teaching children*. *ELT Journal*, 57(2), 105-112.
- Che Lah, Aminordin. (2007). *Grafik animasi dalam pengajaran dan pembelajaran*. Tesis Pendidikan. Pusat Pengajian Ilmu Pendidikan, Universiti Sains Malaysia, Pulau Pinang.
- Che Hat, N et al (2013). *Persepsi Pelajar Terhadap Penggunaan Animasi dalam Pembelajaran Bahasa Arab*. Pusat Pengajian Bahasa Arab, Fakulti Bahasa dan Komunikasi, Universiti Sultan Zainal Abidin (UniSZA), Malaysia
- Che Hat, N et al (2013). *Implementasi animasi dalam pengajaran dan pembelajaran Bahasa Arab*. Prosiding Seminar Pengajaran & Pembelajaran Bahasa Arab 2014. Fakulti Pengajian Islam, UKM & Fakulti Kontemporari Islam, UniSZA.
- Fathul Munir (2016). *The Effectiveness of teaching Vocabulary by using Cartoon Film towards Vocabulary Mastery EFL Students*. *Journal of English Language Teaching and Linguistics*, e-ISSN: 2502-6062, p-ISSN: 2503-1848, 2016, Vol. 1 (1) Pp 13-37. [www.jeltl.org](http://www.jeltl.org)
- Harley, B. (1996). *Introduction: Vocabulary learning and teaching in a second language*. *The Canadian Modern Language Review* 53 (1), 3-11.
- Harrison, Henry L., et al (2010) *Incorporating Animation Concepts and Principles in STEM*. *Education Technology Teacher*, v69 n8 p20-25 May-Jun
- Jamalludin Harun & Zaidatun Tasir. (2003). *Multimedia Dalam Pendidikan*. Bentong: PTS Publications & Distributors Sdn. Bhd.
- Ko, S & Rossen, S., (2008). *Teaching Online: A Practical Guide*. New York. Routledge Taylor & Francis Group.
- Laufer, B. (1997). *What's in a word that makes it hard or easy: Some intralexical factors that affect the learning of words*. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary Description, acquisition and pedagogy* (pp. 140-180). Cambridge: Cambridge University Press.
- Lin, Chih-cheng, Tseng, Yi-fang. (2012). *Videos And Animations For Vocabulary Learning: A Study On Difficult Words*. *The Turkish Online Journal of Educational Technology*, 11, 346-355.
- MacDonald, M. C. (2013). *How language production shapes language form and comprehension*. *Frontiers in Psychology*, 4, 116.



- Morrison, J. B., Tversky, B., & Betrancourt, M. (2000, March). *Animation: Does it facilitate learning*. In AAAI spring symposium on smart graphics (Vol. 5359).
- Paivio, A. (2006). *Dual Coding Theory and Education*. The Conference on Pathways to literacy Achievement for High Poverty Children: The University of Michigan School of Education.
- Sajana (2018). *Cartoon in Language Teaching and Learning*. International Journal of Pure and Applied Mathematics, Volume 119 No. 12 2018, 2435-2450, ISSN: 1314-3395 (online version)url: <http://www.ijpam.eu>.Special Issue.
- Schmitt, N. (1997). *Vocabulary Learning Strategies*. In: Schmitt, N. and McCarthy, M., Eds., *Vocabulary: Description, Acquisition, and Pedagogy*, Cambridge University Press, Cambridge, 198-227.
- Spangenberg, R.W. (1973). *The motion variable in procedural learning*. AV Communication Review, 21, 419-436.
- Takač, V.P. (2008) *Vocabulary Learning Strategies and Foreign Language Acquisition. Multilingual Matters*, Clevedon.
- Tozcu, A., & Coady, J. (2004). *Successful learning of frequent vocabulary through CALL also benefits reading comprehension and speed*. Computer Assisted Language Learning, 17 (5), 473–495.
- Wafi, N., & Keshta, A. S. (2013). *The Effectiveness of Using Animated Pictures Program in Learning English Vocabulary among the Fifth Graders in Gaza*. Unpublished Master thesis, Islamic University–Gaza: Palestine.
- Webster's New World Dictionary (1991). Prentice Hall: New York.
- Wood, J. (2001). *Can software support children's vocabulary development?* Language Learning and Technology, 5(1), 166- 201
- Yüksel, D. & Tanrıverdi, B. (2009). *Effects of watching captioned movie clip on € vocabulary development of EFL learners*. The Turkish Online Journal of Educational Technology, 8(2), 48-54.
- Yunus, Melor and Krishnan, Prislal Dive (2018). *Animated Cartoons to Develop listening Skill and Vocabulary*. International Journal of Engineering & Technology, 7 (4.21) (2018), 20-25.



## LANGUAGE SPEAKING ANXIETY OF MALAYSIAN UNDERGRADUATES IN UTAR KAMPAR, MALAYSIA.

Indira Malani Munusamy<sup>1</sup>

<sup>1</sup>Utar Kampar, Perak (Email: indiram@utar.edu.my)

---

**Abstract:** *Malaysians graduates are at the high risk of getting unemployed due to their poor communication skill. Chowdhury (2014) said “many teachers at tertiary level do not take learners’ speaking anxiety in classroom into account though they are aware of this problem”. ESL learners suffered from language speaking anxiety which affects their academic performance and daily conversation. Hence, the causes of speaking anxiety need to be investigated and its solutions need to be found. Simple random sampling is used in the study whereby 50 sample participated in answering survey questionnaire (FLCAS) and 5 participants were selected randomly for semi-structured interview. The findings of the study are to investigate the language speaking anxiety of Malaysian undergraduates of a private university and its level; and to investigate the causes and solution of the language speaking anxiety. The results revealed that Malaysian undergraduates of the private university did experience language speaking anxiety and its levels are low and moderate anxiety; and the causes and solutions were found and discussed in this study.*

**Keywords:** *language speaking anxiety; ESL learners; communication skills; Malaysian undergraduates; classroom learning*

---

### Introduction

Language is a mean of communication which human beings rely on to interact with other people. English language is a major language for the people around the world to use to interact with people who are different in ethnicity, country and race and it is where language barrier is solved. “Language makes communication possible; without it, people are unable to convey thoughts and ideas, transmit culture and disseminate information to others” (Chang, 2008). English language has been widely used by people in different dimensions, professions and so on and it is treated as a common language to be used to overcome the language barrier. In other words, English language plays an important role in daily conversation, academic and professions.

According to Darmi and Albion (2013), they mentioned that “Malaysians are bilingual, many are trilingual while a few are multilingual; language is essential for communication and to make connection”. Malaysia is a multi-racial country which means that Malaysians are mostly equipped with more than one language. Learning other new languages during language learning process is a great success and it would be able to provide us more opportunities in life. The official language of the Malaysia is Malay language. On the other hand, English language is treated as the second language (L2) in Malaysia. Malaysians learn not only their first language at home but also learn other languages at school or from the surrounding. However, we tend to use more our mother tongue to communicate which we learned it spontaneously. In another words, we rely on our mother tongue more as we are more familiar with the language itself and it builds the speaker’s self-confidence. This situation will gradually lead to the issue of English as Second Language (ESL) is not emphasizes in the country. Moreover, English is also a compulsory subject to be taken until graduation of high-



school and it is a requirement for higher education and jobs. Darmi and Albion (2013) stated that the unemployed rate of Malaysian graduate's increases year by year due to their poor language proficiency in English language. Although Malaysian graduates might have performed well in the academic performance, however, speaking competency is often not highlighted. Hence, acquiring English is a pivotal for achieving success in academic and in daily life.

As for an English as Second Language (ESL) learner, it is important for learner to acquire English language in the four major skills which are listening, speaking, reading and writing. Speaking skill is a crucial skill for learner who is pursuing one's higher education or to use the language in daily conversation. This is because the medium of instructions and the evaluation in academic performance in most of the tertiary level schools are using English and learners speak a target language to express themselves and to share information with other people. "In other words, speaking makes us visible and is a big part of our social life" (Basic, 2011).

However, there are a number of language speaking anxiety cases found in the ESL learners. The feeling of anxiety is an emotion which one could have in living. "Anxiety is defined as distress or uneasiness of the mind caused by fear of danger or misfortune" (Suleimenova, 2013). Speaking anxiety is a state of nervousness and insecurity which a speaker encounters difficulty in using a target language to speak. "It is most likely that these signs can obstruct and inhibit one's ability to speak since a person who experiences that kind of anxiety will not be able to focus on the speaking process" (Basic, 2011). Anxiety is categorized into three types which are trait anxiety, state anxiety, and situational anxiety. According to Woodrow (2006), when one feels nervous in a diversity of conditions, it is a trait anxiety which is a rather unvarying personality feature; state anxiety is a temporary state faced at a certain moment; and situational anxiety is a trait that happens in a specific situation.

In the process of language learning during the primary and secondary school, communication ability is always neglected and school teachers concern only about assisting learners to score in general examination. Consequently, learners who are pursuing higher education are mostly unwilling or unable to speak a target language as they are incapable in speaking and pronouncing the language. According to Yahya (2013), the communicative skills, which require learners to practice in real situations, are totally ignored; and the use of traditional methods of teaching is still in practice by teachers; and attention is given to reading and writing skills. Consequently, listening and speaking skills are undervalued.

Since there is the language speaking anxiety matter happens in speaking English language (L2), there will have the impacts of language speaking anxiety on ESL learners. According to Diao and Paramasivam (2013), they disclosed that "[...] classroom anxiety as an obvious factor that can hinder students' performance and achievement and decrease their willingness to participate in learning activities, is an issue deserving more investigation." (p. 1). Yahya (2013) stated that language teachers and researchers have noticed that there is a high level of anxiety which negatively affects many language learners' behavior and their educational outcomes. "Anxiety in communicating in a second/foreign language, especially when that language is English can have a debilitating effect and can influence students' adaptation to the target environment and ultimately their educational goals" (Ansari, 2015). To summarize, language speaking anxiety does affect learners' performance in various dimensions.



Many researchers developed studies on the factors of language speaking anxiety, the traits of learners are suffering from language speaking anxiety, the consequences of language anxiety, the solutions for language speaking anxiety and so on. However, most of the researches were done based on other context, but not in Malaysian context. There are only limited number of researches were conducted based on Malaysian context. Hence, I would like to conduct a study on language speaking anxiety of Malaysian undergraduates in Malaysia.

### **Statement of Problem**

Malaysians graduates are at the high risk of getting unemployed due to their poor communication skill. There are variety of causes that lead to their poor speaking skill; such as the education system of the country, teachers, and ESL learners themselves. Malaysia education system did not really emphasize on four language skills equally as it focuses mainly on writing and reading skills for the sake of helping students to pass general examination. According to Spawa and Hassan (2013), they stated that Malaysia “needs people who are orally competent, but the students produced seem to be those who are taught to write and to read rather than to speak”. Spawa and Hassan (2013) also mentioned that language teachers give emphasis on writing skill in students’ language learning although they are acknowledged that the vital skill in their students’ language learning is speaking skill. As the situation continues, learners will not be able to acquire good communication skill during their 11 years of schooling and it gradually will lead to language speaking anxiety when the learners are required to speak, especially when they go on to their further studies. Chowdhury (2014) said “many teachers at tertiary level do not take learners’ speaking anxiety in classroom into account though they are aware of this problem”. ESL learners suffered from language speaking anxiety which affects their academic performance and daily conversation. Some of the ESL learners might be aware about their problem in speaking but no action was taken as it might be the unconcern from teachers and the learners themselves. Awareness of language speaking anxiety should be creating among learners, teachers, and the country. Hence, the causes of speaking anxiety need to be investigated and its solutions need to be found.

### **Objectives**

The first objective of this study is to figure out factors that cause language speaking anxiety among Malaysian undergraduates of a private university in Malaysia.

From the past researches that had been conducted, there are many factors found and solutions suggested from the researchers. However, it would not be possible that all or parts of the factors are found among Malaysian undergraduates’ solutions are applicable to Malaysian undergraduates in Malaysia. Thus, another objective of this study is to identify practical solutions to cope with learners’ language speaking anxiety.

### **Research Questions**

This study intended to answer to following research questions:

1. Do Malaysian undergraduates of a private university experience language speaking anxiety and what is the level?
2. What are the causes that occur language speaking anxiety among Malaysian undergraduates of a private university and the possible solutions for language speaking anxiety?

### **Significance of the Study**



The issues of language speaking competency are always concerning the stakeholders of education; such as the Ministry of Education (MoE), states and districts education officers, school administrators, educators, learners and others. Hence, this study is conducted to reduce the issues and raise the awareness to all stakeholders. This study would be able to inspire English language teachers to be able to identify the reasons why learners are suffering from language speaking anxiety and to create a low-anxiety learning environment for the learners. Furthermore, this study will be able to help the ESL learners to notice their own language speaking anxiety in classroom and to guide the ESL learners to overcome their uneasiness in communication.

### **Literature Review**

Diao and Paramasivam (2013) claimed that “for many learners there is a genuine fear of performing in the second language, a phenomenon known as (foreign or second) language anxiety which can hinder performance and achievement.” (p.1). The purpose of this study was to figure out why international students encountered in language speaking anxiety and what ways they used to overcome their anxiety and fear of language speaking in class. “The study also examines teachers’ perspectives and reactions towards learners’ anxiety and investigates the students’ perspectives of teachers’ reactions to their feelings of anxiety” (Diao & Paramasivam, 2013). The participants of this study are from PhD class of the Faculty of Economy of a local Malaysian university. “The research is a case study of one single class. The researchers select a case study design because they managed to obtain permission to only use and observe one class for the present research from the faculty administration” (Diao & Paramasivam, 2013). The samples are 8 ESL learners from foreign countries. For the data collection, five whole class observations were done in 3 hours each and all semi-structured interviews were conducted with the samples within 10 to 15 minutes. For the data analysis, the researcher used the three features of ESL/EFL language speaking anxiety from Horowitz’s et al. (1986) which are communication apprehension, fear of negative evaluation, and test anxiety. The findings of this study are fear of being in public and shyness, fear of negative evaluation, and fear of speaking inaccurately for the reasons of language speaking among international students; keeping silent, avoiding eye contact, being with friend, and expressive reactions for the ways the students overcome the language speaking anxiety; not calling students’ name, making jokes and stories, appreciating students’ answers, and showing positive gestures for how the lecturer reacts toward students’ language speaking anxiety. The result was the samples struggled in different level of language speaking anxiety based on their different level of proficiency in language. The samples’ strategies in coping language speaking anxiety are varying because of their culture background. The actions taken by the lecturer in the issues were very effective and successful. Although this research was developed in a Malaysian university, yet the samples were international learners. Hence, there is a question that whether the findings will be the same or similar, or different compare to Malaysian undergraduates in Malaysian university.

“Anxiety plays an important role in second language learner’s classroom performance” (Hizwari, Ahmad, Hifzurrahman & NorHaizar, 2008). They disclosed learners who are proceeding to their further studies are assumed to have achieved the standard level of English proficiency as English is the means of instruction for teaching and learning and different types of programme which actually a great chance for learners to bring language learnt into practical. They targeted to look for the relation between language anxiety and achievement in their study. The study was carried out in Malaysian context. FLCAS was translated in Malay language and



distributed to 55 respondents. They concluded that “the higher the fear of a person, the higher communication anxiety, and vice versa.” Furthermore, they recommended several affective solutions founded by language experts to ease the anxiety which are teachers should make sure learners are well-informed that fluency is more important than accuracy, apply positive reinforcement as to motivate learners, and offer individual assistance. Besides that, teachers may change their teaching strategies, such as employ group work in learning process in order to know the learners well, to diagnose learners’ level of anxiety and to help them in minimize the anxiety.

Nazir, Bashir and Raja (2014) said that ESL/EFL learners are seem to be weak in speaking competence although they could be good in other 3 skills. They studied on figuring out the scale of anxiety in classroom speaking among the intermediate students. In Pakistan, the ability to speak in English is regarded as an important skill, yet it was neglected. In turn, they found out that the samples of their study were struggling with the feeling of anxiety or nervousness while speaking the language. In addition, other than the lack of exposure of the target language, they stated that there are a number of factors that had further hindered the learners’ ability in speaking target language. There are two research questions depicted by the researchers which are the doubt of whether students are suffering English language speaking skill and the uncertainty of whether students feel distressed from negative evaluation. There are 50 intermediate students of different sections in the college chosen out of 253 students by using Systematic Random Sampling. However, there was no reasons for selecting this systematic technique were mentioned in the article. The authors have adapted a questionnaire from Foreign Language Classroom Anxiety Scale by Horwitz, Horwitz and Cope (1986). From the results, the researchers concluded that the Pakistani ESL learners do suffer from communication-anxiety and are afraid of negative evaluation which hindered their language classroom speaking ability. Based on the findings, students suffered anxiety from different aspects, although it is important to point out that half of the respondents will not be worried about classroom speaking if they were able to prepare themselves beforehand. The researchers concluded that those with high levels of anxiety will feel the difficulty in second language classroom speaking. In addition, the participants showed signs of anxiety towards communicative activities. Therefore, the researchers provided seven helpful suggestions to decrease the anxiety of communicating the second language, the fear of negative evaluation and the general feeling of anxiety in the classroom. In short, the research aims to emphasize the speaking anxiety level among the students, discover the obstacles in communication, and provide solutions to decrease their speaking anxiety levels. There is a doubt whether the solutions stated are applicable to other language speaking anxiety learners from different countries.

“Anxiety in communicating in a second/foreign language, especially when that language is English can have a debilitating effect and can influence students’ adaptation to the target environment and ultimately their educational goals” (Ansari, 2015). This researcher was concerned about the impact, factors, and solutions of English language speaking anxiety towards the oral performance of ESL/ EFL learners in a classroom setting as well as the role of teachers in reducing the learners’ speaking anxiety. In his research, there were three main focuses which are the characteristics of students who suffer from second/foreign language speaking anxiety, the sources of second/foreign language speaking anxiety, and the possibility of the incorporation of case study findings and supportive classroom atmosphere help target students overcome their anxiety. To conduct this research, the researcher selected thirty students from one class in a higher secondary school. Their ages were between seventeen to



nineteen years old. For data collection, the researcher used qualitative research methods which included semi-structured interview, discussion, question and answer session, situation-based interaction with English speaking and observation. He used triangulation method to increase the validity and reliability of results. However, the process and instruments used for data collection were not explained in details. After the researcher used the qualitative research methods on the students within two weeks, the results showed that participants who were experiencing English language speaking anxiety were a result of fear of negative evaluation from their peers and perception of low ability in relation to their peers. Besides, the researcher listed out few sources of speaking anxiety, such as limited vocabulary, lack of fluency, and so on which also means that the participants are mostly poor proficiency in target language. The researcher mentioned that teacher should always be aware of their manners and actions towards learners as their behavior could affect the language speaking anxiety learners.

Another way of overcoming speaking anxiety that the researcher stated was to conduct and select some students centered activities based on students' interests and proficiency levels. He also gave a disclaimer to keep in mind that each learning situation is unique, therefore problems faced in language learning might differ from one situation to another.

Suleimenova (2013) stated that anxiety is the intense feeling which would affects daily routine and language anxiety learners face the problem of speaking and learning English even though speaking is essential in learning. Her concerns are found in her work which are to identify the causes and effects of EFL students who feel stress in speaking and learning the target language in classroom setting, and to create awareness among teachers and learners on this phenomenon. Semi-structured interview and questionnaire were utilized in her study. The researcher adapted FLCAS which developed by Horwitz, Horwitz, and Cope (1986). She selected only 20 questions from it and modification were done on those 20 questions. However, the reason behind of removing the 13 items was not being told. Moreover, semi-structured interview with 15 questions is used on the sample. The researcher found that the participants were having hesitation while answering the interview's questions as the interviews were face-to-face conversation. Despite that, the numbers and the qualifications of participants were not mentioned throughout the whole study. The researcher divided the data into two groups which are high anxiety level and low anxiety level. The results of the main stressors in speaking English that collected from the questionnaire and interviews are performing in front of others, fear of speaking, error-correction from teachers, and so on. The researcher stated that the main factors of causing learners' failure language speaking are the unconsciousness of the language teachers on noticing the anxiety of the learners and the assistances of the language teacher on helping the learners to conquer the anxiety. Some suggestion was given by the researcher to overcome learners' language anxiety. She recommended that teachers need to generate fun atmosphere for learners to learn language; be kind in correcting learners' mistakes and give compliments; be aware of the changes in learners; be patient and listen to learners' view; emphasize the use of English in learning progress; and more. The researcher concluded that notable anxiety brings untold negative effects on the learners and teachers should not only be aware but also help learners to get over the language anxiety.

Yahya (2013) said that anxiety brings positive and negative effects in language learning as it can be learners' motivation in learning and discourage the learners at the same time yet it is still depending on the learners' language speaking anxiety level. Besides that, Yahya (2013) mentioned that university students have difficulty in language learning even though learning English is a demand in the society. Furthermore, the researcher indicated that learners' speaking abilities as well as listening skill were neglected by language teachers as the teachers



are often focusing on assisting learners to score in standardized assessment which emphasise more on writing skill and reading skill and teachers did not provide opportunities to learners to apply the learned target language into real setting. Hence, it is a normal phenomenon that learners are poor in speaking competence where learners could not even communicate in simple context, such as greeting, congratulating, and apologizing. The researcher intended to explore for the elements which lead to speaking anxiety among learners from speech communication course in the English classroom and target to reduce and overcome the speaking anxiety. 104 respondents were selected for the research and questionnaire FLCAS from Horwitz et al. (1986) that adapted by the researcher with modification and extra items was distributed to each respondent for data collection. Data collected was further transform into charts with mean and standard deviation. The researcher concluded that there are many reasons that lead to the difficulties in language speaking and learning. Nevertheless, the researcher stated that knowing the learners' negative feeling and the nature of learners, the aftermath of language speaking anxiety, teachers could actually aid to reduce learners' anxiety in target language speaking and learning by forming friendly language learning environment to create positive feeling in learners, applying theory learnt into practice in the classroom, and marking their attitude in error-correction.

Debreli and Demirkan (2016) claimed that speaking anxiety might not only have related to language proficiency level, but also the difference in gender. They concerned also the level of language anxiety and its sources. Hence, they conducted a research among EFL learners in an EFL context to figure out the relation between learners' speaking anxiety, level of language proficiency and gender; and the sources and level of EFL anxiety among learners. The instruments used in their study are the common measurement scale used for speaking anxiety which is FLCAS from Horwitz, Horwitz, and Cope (1986); and semi-structured interview on EFL learners. They adopted a translated version of FLCAS from Un (2012) after a consideration of participants' language proficiency. On the other hand, the interview questions were not explained and revealed. According to their results, EFL learners with low and high level of language proficiency primarily experience low level of speaking anxiety and the relationship of anxiety and self-esteem did exist. However, EFL learners with good command in English face high level of speaking anxiety at the same time. Furthermore, there is no statically relation found in between speaking anxiety and gender. The results of the sources of EFL anxiety are basically similar as those mentioned previous researchers found in this field.

### **Data Collection**

This study used mixed methods approach. Mixed methods approach consists of qualitative and quantitative approaches to enrich the reliability and the validity of a study. The instruments for this study were survey questionnaire to generate numerical data and interviews on participants for interpretative data for in-depth inference of language speaking anxiety.

### **Participants**

Simple random sampling was used in this study to select the sample for this study. Thus, 50 Malaysian undergraduates with the equal number of 25 male and female from Universiti Tunku Abdul Rahman, Kampar were selected to join this study.

### **Survey Questionnaire**



Questionnaires are the conventional, efficient and straightforward instrument to be used to gather data of a large group in researches. The survey questionnaire, Foreign Language Class Anxiety Scale (FLCAS) of Huang, Eslami and Hu (2010) which they had adapted from Horwitz's et al. (1986) were adopted in this study. This survey questionnaire comprises 33 questions. This questionnaire consists of a Likert scale which vary from strongly agree, agree, neutral, disagree, and strongly disagree. This questionnaire was adopted because most of the researchers who had done on language speaking anxiety in different context which proved that it has high reliable and validity rate of measurement for language speaking anxiety. Siew (2014) said,

*The FLCAS is the best known and most widely used FL/L2 anxiety assessment scale that was originally aimed at measuring foreign language learners' level of anxiety while learning a target language using three anxiety constructs, which are communication apprehension, test anxiety, and fear of negative evaluation. (p.98).*

The participants were given a consent form for agreeing being a part of this study before participating into this study. There were 70 sets of survey questionnaire have been distributed to the participants. However, only 50 sets of survey questionnaire were chosen and used as the data for this study. This is to avoid invalid and unreliable responses from the participants. The participants were given 10 – 15 minutes to complete the questionnaire.

### **Semi-structured Interview**

Furthermore, 5 participants were selected randomly from the 50 selected participants for the semi-structured interviews to elicit their perceptions and thoughts on language speaking anxiety and their sources and solutions of language speaking anxiety. Diao and Paramasivam (2013) developed interview questions which consists of 12 questions for language speaking anxiety were used in this study. However, not all the 12 questions were adopted into this study. There are only 7 questions were selected for the interview of this study which are number 3, 5, 6, 8, 9, 10, and 12. Due to the time constrain, the rest of the interview questions were removed based on its relevancy and importance. The interviews were taken place in an empty room and only the researcher and one interviewee were in the room throughout the whole interview session. Moreover, all the participants will be given another consent form for agreeing being interviewed. Besides that, the interviewees were given a pseudonym so that their privacy will not be revealed in this study. Each interview session was conducted within 15 minutes. All the interviews were recorded for the reference purposes. The interviews were carried out within two weeks' time.

### **Data Analysis**

For the data analysis, the collected data from the questionnaire were further form into charts and percentage for each question was calculated for statistical analysis. The data was analyzed according to 3 categories of foreign language anxiety in the language classroom that developed by Horwitz, Horwitz, & Cope, (1986) which are communication apprehension, test anxiety, and negative evaluation. Furthermore, 11 items (1,4,9,14,15,18,24,27,29,30,32) from the questionnaire represent communication apprehension, 15 items (3, 5, 6, 8, 10, 11, 12, 16, 17, 20, 21, 22, 25, 26, 28) from the questionnaire are associated with test anxiety, and the rest of the items which are 7 items (2, 7, 13, 19, 23, 31, 33) are related to fear of negative evaluation.

The data collected from the interviews were analyzed and used to generate the factors of language speaking anxiety among the Malaysian undergraduates. In addition, a certain crucial part of data collected from the interviews were transcribed to support this study.

## Findings & Analysis

### Questionnaire Analysis

70 sets of questionnaire were distributed to 70 Malaysian undergraduates of a private university in Malaysia. 50 out of 70 sets of questionnaire were chosen which were answered by 25 male and female. The charts of the questionnaire analysis can be found in appendices.

### Communication Apprehension

Communication apprehension is a feeling of nervousness and tension of ESL learners feel when they communicate with others with a target language. This situation usually occurs when learners are lacking of knowledge of the language, especially in terms of speaking and listening skills. From the results gained from questionnaire, majority of the participants are having low anxiety in language speaking. Half of the participants, 50% (SA-14%, A-36%) showed that they are not nervous in terms of speaking with native speakers using English (Question 14) even though in question 32, there are 38% (SD-8%, D-30%) of the participants feel uncomfortable around English native speaker.

On the other hand, minority of the participants are facing high level of language speaking anxiety. A total of 38% (SA-24%, A-14%) disclosed that participants are afraid of speaking English in class without preparation (Question 9); 50% (SA-44%, A-6%) of the participants are upset when they are unable to comprehend teacher's correction towards them (Question 15); and a sum of 26% (SA-4%, A-22%) of the participants showed that they feel anxious when they are speaking in English class (Question 27). These 3 questions mentioned with high percentage revealed that participants are at high-level of language anxiety and these could be the factors that lead to their language speaking anxiety.

From the overall results, participants did not experience high level of language speaking anxiety although question 9, 15, and 27 indicated that they do.

**Table 1:** Communication Apprehension

Questions	SD	D	N	A	SA
1. I never feel quite sure of myself when I am speaking in my English class.	14%	30%	24%	26%	6%
4. It frightens me when I don't understand that teacher is saying in English.	18%	32%	14%	32%	4%
9. I start to panic when I have to speak without preparation in English class.	14%	30%	18%	14%	24%
14. I would not be nervous speaking English with native speakers.	10%	24%	16%	36%	14%
15. I get upset when I don't understand what the English teacher is correcting.	6%	30%	14%	44%	6%
18. I feel confident when I speak in English class.	6%	24%	32%	30%	8%
24. I feel very self-conscious about speaking English in front of other students.	10%	28%	24%	28%	10%
27. I get nervous and confused when I am speaking in my English class.	18%	44%	12%	22%	4%

29. I get nervous when I don't understand every word the English teacher says.	18%	26%	24%	26%	6%
30. I feel overwhelmed by the number of rules you have to learn to speak English.	4%	32%	30%	30%	4%
32. I would probably feel comfortable around native speakers of English.	8%	30%	42%	16%	4%

### Test-anxiety

Test anxiety is where learners are afraid of judgement or evaluation of language oral performance as they view it as an assessment-based setting. Despite of the participants are facing different level of language speaking anxiety, most of them are not facing high level of test anxiety.

The results received from the questionnaire, question 3, 5, 6, 8, 12, 16, 17, 20, 21, 25, 26, and 28 indicated that a high percentage of majority of the participants are at the low level of test anxiety. More than half of the participants, 66% (SA-22%, A-44%) of them do not feel nervous or tension in English language classroom compared to other classes (Question 26) and half of the participants, 64% (SA-6%, A-44%) feel effortless during their English test in class (Question 8).

On the contrary, the participants are only at high level of test anxiety when they are afraid of failure and being called out. The results showed that a total of 48% (SA-14%, A-34%) for question 10 and a total of 30% (SD-12%, D-18%) for question 11 showed that participants are fear of failure. Moreover, in question 20, 48% (SD-10%, D-38%) of the participants showed that they are scared of being called on in classroom.

In short, majority of the participants are not facing high level of language speaking anxiety in language judgement or evaluation by others.

**Table 2:** Test Anxiety

Questions	SD	D	N	A	SA
3. I tremble when I know that I am going to be called on in language class.	16%	40%	12%	28%	4%
5. It wouldn't bother me at all to take more English classes.	6%	14%	16%	46%	18%
6. During English class, I find myself thinking about things that have nothing to do with the course.	10%	18%	30%	32%	10%
8. I am usually at ease during tests in my English class.	8%	12%	30%	44%	6%
10. I worry about the consequences of failing my English class.	16%	22%	14%	34%	14%
11. I don't understand why some people get so upset over English classes.	12%	18%	24%	19%	8%
12. In English class, I can get so nervous I forget things I know.	20%	42%	10%	22%	6%
16. Even if I am well prepared for English class, I feel anxious about it.	20%	30%	22%	24%	4%

17. I often feel like not going to my English class.	32%	32%	18%	10%	8%
20. I can feel my heart pounding when I'm going to be called on in English class.	10%	38%	24%	22%	6%
21. The more I study for an English test, the more confused I get.	20%	50%	14%	14%	2%
22. I don't feel pressure to prepare very well for English class.	10%	14%	18%	52%	6%
25. English class moves so quickly I worry about getting left behind.	20%	48%	14%	14%	4%
26. I feel more tense and nervous in my English class than in my other classes.	22%	44%	18%	14%	2%
28. When I'm on my way to English class, I feel sure and relaxed.	6%	16%	34%	34%	10%

### Fear of Negative Evaluation

When learners are unable to afford or accept their language mistakes and evaluation from teachers or friends as a part of language learning are considered as fear of negative evaluation. As a result, the learners mostly would be hesitated in using the language and unwilling to take part in classroom activities. Fear of negative evaluation is differ from test anxiety as it covers a broader area of evaluation and test anxiety is only limited to test-taking situation. The evaluation of negative evaluation is not only limited to test evaluation but also in social evaluation, such as job interview.

Based on the results collected from questionnaire, the participants are not afraid of negative evaluation. The participants are not scared of error-corrections or evaluation from others as the percentage in question 4, 50% (SA-16%, A-34%), question 13, 52% (SD-20%, D-32%), question 19, 48% % (SD-12%, D-36%), and question 31, 64% (SD-10%, D-54%) had proved that. Furthermore, 64% (SA-30%, A-34%) of the participants from question 7 and 58% (SA-28%, A30%) of the participants from question 23, they believed that their peers have a better command in English than they are. Nevertheless, 48% (SA-36%, A-12%) of the participants from question 33, they experience high language speaking anxiety when they need to answer teacher's question without any preparation is made in advance.

On the whole, the participants did not undergo the fear of negative evaluation. They accept their language mistakes made and willing to receive any error-corrections from others as most of them assume that others are better in the language than they are.

**Table 3:** Fear of negative evaluation

Questions	SD	D	N	A	SA
2. I don't worry about making mistakes in English class.	4%	38%	8%	34%	16%
7. I keep thinking that the other students are better at English than I am.	4%	10%	22%	34%	30%
13. It embarrasses me to volunteer answers in my English class.	20%	32%	14%	24%	10%



19. I am afraid that my English teacher is ready to correct every mistake I make.	12%	36%	18%	24%	10%
23. I always feel that the other students speak better English than I do.	6%	10%	26%	28%	30%
31. I am afraid that other students will laugh at me when I speak English.	10%	54%	10%	14%	12%
33. I get nervous when the English teacher asks questions which I haven't prepared in advance.	12%	20%	20%	36%	12%

In conclusion, based on the results gathered from questionnaire and the analysis, Malaysian undergraduates from the selected private university can be said that they are not experiencing high level of language speaking anxiety.

### Semi-structured Interview Analysis

Interviews in collecting factors and solutions of ESL learners' language anxiety were conducted within 2 weeks. 5 interviewees were interviewed for this study. Those interviewees were chosen randomly and they had agreed on being interviewed voluntarily. In addition, these interviewees were given pseudonym as 'Interviewee A', 'Interviewee B', 'Interviewee C', 'Interviewee D', and 'Interviewee E'.

First and foremost, in the first question of the interview questions which concerned about the feelings of ESL learners to speak in class and reasons behind it. Four out of five interviewees were feeling confident, optimistic and nervous at the same time about speaking in class. They mentioned that if they were required to speak in class, it is mostly depending on the situations whereby if they are familiar and unfamiliar with the content of a specific lesson and audience and consequences of giving incorrect answers. One of the interviewees said that she is confident in speaking in class with the target language as she has been learning and using the language since young age. Nevertheless, only one interviewee finds it difficult to speak in class due to her command in the target language.

*"I'm okay unless I'm not familiar with the content or whatever the teacher is teaching or asking for in class."* Interviewee A

*"Not very difficult depends on the situation. If I need to give answer which I'm not sure then I will be anxious."* Interviewee B

*"I feel very normal very confident because I've been speaking English since I was young; anxious if I'm not sure with the answer or with people that I do not know."*  
Interviewee C

*"I feel nervous and if many people looking at me then I feel afraid of it. I find it difficult to speak in class because of my language proficiency."* Interviewee D

*"I feel confident if I know the answers, then I will be able to speak out the answers confidently, if I don't, I will feel nervous"* Interviewee E

Furthermore, in the interviewees' perceptions and thoughts of talking to teacher or classmates, they think of the content or messages that they wanted to convey in English and listeners' responses towards them. Moreover, their feelings about speaking in class with the existence of audience is nervous when the audience are not someone they are familiar or close with.



*"The content or maybe worry about whether they understand my...the things I'm trying to convey in English; nervous especially those a lot of unfamiliar faces."*

Interviewee A

*"What I want to say and I feel scared if the answer is wrong; if the audience is someone I don't know then the anxiety would be higher, unless if the peers that I know then I won't feel that anxious."*

Interviewee

B

*"About the topic that I want to ask them and maybe just find something to talk about when they're not replying; if the audience are the people that I know then I will feel more comfortable not so anxious and I would feel happier to reply unless I am not sure with the answer. If I don't know the audience, then I would take some time to actually reply and I would feel a little bit anxious."*

Interviewee C

Other than that, according to the gained interview data, the reasons of the interviewees' possible anxiety are self-language proficiency level, audience and audience's proficiency level, giving incorrect response and the topic. The interviewees were worried about their proficiency level as in terms of vocabulary, grammar, sentence structures, enunciation, and pronunciation.

Similarly, they were concerning about the audience and audience's proficiency level which the interviewees assumed that the audience have higher language proficiency level than they do. Also, they feel stressed when they provide wrong answers and being unknowledgeable in the topic that they required to talk about. From their responses, it indicated that the importance for being well prepared before they speak. Debreli and Demirkan (2016) also mentioned that as if English language learners are insufficient in language proficiency level, in order to avoid making language errors in classroom, they most probably tend to think before they speak.

*"Maybe my proficiency level, language and maybe because of surroundings, the people and the ideas that I want to convey to share."*

Interviewee A

*"The audience that I don't know, giving wrong response or answers."*

Interviewee B

*"If I required to talk without preparation, it would depend on the topic if the topic is something I would know then I would feel not so anxious and if the topic is something I don't really know I would feel quite anxious and I would not know what to say and actually not say anything if I don't know anything about it."*

Interviewee C

*"I feel better to talk with friends, but feel stress to talk to the teacher/lecturer, afraid of her (listener) grammar and language proficiency. I feel nervous as well if talk to strangers, like giving the wrong answer, afraid of audience's thought sometimes."*

Interviewee D

Besides that, the interviewees use several methods to overcome their anxiety. They tend to think positively, talk to friends, make eye-contact with peers, improve self-proficiency level from time to time, ask for help from peers, avoid eye-contact with unfamiliar audience and to avoid giving the wrong response.

*"To overcome it, usually I try to encourage myself, try to talk to myself that nothing bad is going to happen and things will go smoothly or sometimes. I try to talk to my friends but not related to the content or whatever I'm trying to think (the topic)."*

Interviewee A

*"Improve my English, and avoid saying wrongly."*

Interviewee B & E

*"Overcome it by either through breathing or looking at the walls where there are no people, looking at my friends if they are there, if there are no people that I know then I would just look straight at the wall or the invigilators."*

Interviewee C

*"I ask for help from friends for grammar and pronunciation."*

Interviewee D

Additionally, there is a time where a speaker cannot retrieve an exact word, phrase or sentence structure to be used to convey his or her idea in speaking, same goes to ESL learners



including the interviewees of this study. The interviewees said that this situation happens frequently as in they need the specific words to fully express their thoughts and due to lacking of vocabulary. At that moment whereby they cannot recall a word, phrase, or sentence structure, they feel frustrated, angry and tired of keep trying to retrieve it. Thus, their solutions towards this matter are ask for favour from friends, define the word, keep thinking, look up dictionary, and use mother tongue and body language.

*"I feel frustrated, sometimes I keep thinking but the word does not come out and I just feel like giving up. If I can't really think of it maybe, I ask my friends or explain the meaning of word to them."*

Interviewee A

*"Try to find the words with thinking, don't worry too much."*

Interviewee B

*"Tired from thinking about it and if I can't think about it for a very long time then I would cope with it by asking my friends if they know the word by explaining to them or googling it or go to a dictionary to find a similar word."*

Interviewee C

*"I tend to use mother tongue, action, gesture, and body language."*

Interviewee D

*"I keep try to explain the word in English, I'll use mother tongue if I still failed to explain in English."*

Interviewee E

Also, in the situation whereby giving wrong answer to instructor's question, the interviewees mostly feel embarrassed and sad as they are studying in university; the situation does affects their listening for seconds or minutes as they are figuring the problem; they are afraid of the response from friends.

*"I would feel sad, a little bit anxious unless someone helps me with giving the correct answer so the instructor won't remember my answer. I would either unless the instructor purposely want to do something (look down on me and pick on me) to me I would feel like*

*I don't want to talk after that if it's just a coincidence then I would reply something like why I chose that answer."*

Interviewee

*C "Embarrassed, I feel shy. I'm afraid of the laughter from friends,"*

Interviewee D

*"Embarrassed, loss of face, quite sad, already in university level still can't understand."*

Interviewee E

Moreover, the interviewees' perceptions on the actions taken by their language teacher on them during schooling and the effectiveness of it are there is no actual action taken, but only give encouragement orally, group tasks, nomination to answer in class, immediate error-correction in class, and encourage them to speak or question using English language. From the action taken by the interviewees, the interviewees said that those actions were not really effective in reducing language speaking anxiety but worsen the anxiety.

*"They did not really take any real action but only just verbally just tell you not to worry about anything, just to cheer me up; good try but not that effective but still okay."*

Interviewee A

*"Sometimes they will give us to do in group like group work. So, the answer is from the group not only me. So, I won't feel my answer is wrong, so it is general."*

Interviewee B

*"Not really because my teacher would purposely choose me for the answers and pick me so I won't feel less anxious but I would feel more anxious after class."*

Interviewee C

*"Teacher encourage us verbally tell us to relax in terms of physically n mentally, not to be*

Interviewee D

*anxious; no action is taken; not really effective."*  
*"In English class, actually my teacher knows Mandarin, but if we want to ask something, she wants us to talk to her in English. Another one is during form 6, my teacher did with us a MUET class, he called us one by one to speak in class, and correct on the spot, in terms of grammar pronunciation. I feel less anxious because*



*of the correction made by them and if they praise us “more n better”, then I have more courage to speak in English, because everybody need to do the same thing.” Interviewee E*

Lastly, two of the interviewees mentioned that they are not afraid of error-correction and they are willing to accept any accurate error-correction from teachers and friends. However, they said also that the manner of teacher during error-correction would bring an impact on them.

*“I’m not afraid of error correction. I feel better if the teacher corrects me in a friendly manner rather than a fierce or angry tone or manner.” Interviewee D*

*“I’m not afraid of error-correction, it makes me better and it will be more memorable when someone corrects you.” Interviewee E*

*“If the teacher unfriendly/strict, I’m quite sad when he corrects me, if he/she is friendly, then I will be more willing to accept the correction. If many times, I feel demotivated to use English to speak to the lecturer.” Interviewee E*

In conclusion, the concern of the interviewees in speaking the target language are basically their language proficiency level, the audience, the response of audience, the topic of conversation, and eye-contact with the audience. Their ways to overcome the anxiety in language speaking are improve self-language, seek help from friends, self-encouragement, and reduce eye-contact.

### **Discussion and Conclusion**

The present study was undertaken to investigate language speaking anxiety level of Malaysian undergraduates of a private university in the English language and to figure out the causes and the solutions of language speaking anxiety.

The results from the questionnaire and interview revealed that the selected Malaysian undergraduates of a private university generally do not experience high level of anxiety in language speaking. They did not feel timid or much hesitated in speaking the target language with native speakers in public. This could be because English is used as their second language and they used it frequently in tertiary study as it is the medium of instruction in institution. Furthermore, they are generally having good command in English as most of them are basically under English courses which could be a reason of they are not struggling in high level of language speaking anxiety. In addition, they did not show vivid responses when errors happened in their language speaking in class.

The chosen Malaysian undergraduates did not suffer from anxiety mainly in connection with communication apprehension, test anxiety and fear of negative evaluation. In addition, they did not feel anxious or uneasy about speaking in English, or petrify in negative evaluation or English test. From this and the results, it shows that the fear of negative evaluation was remarkably negatively corresponded to anxiety. Shyness, self-language proficiency level, and topic of conversation are some of their anxiety in speaking. Moreover, their common coping strategies in language speaking anxiety are avoiding eye contact, be optimistic, seek help from friends, and improve own language skills.

The role of a teacher or lecturer of a class is important in filtering students’ negative affection in classroom. Both verbal and nonverbal strategies to help students in class are needed. According to the interviewees, the strategies taken by teachers during their schooling were not effective or bring much positive impacts on them. The teachers mainly gave encouragement verbally but no actual action was taken. Also, teachers’ manner in handling students’ errors in class is essentially important. A positive manner in teachers’ error correction



on students could make positive effect on students as well. Therefore, from here, it indicated that teachers' taken strategies were not helpful to the students.

The findings of this current study has also signified the causes of anxiety faced by Malaysian undergraduates of a private university and their solutions to overcome the language speaking anxiety.

To answer the first research question of the study, based on the findings of the study from the questionnaire and interview data revealed that the undergraduates generally have low level of ESL speaking anxiety. They are not struggling much in communication apprehension, test anxiety and fear of negative evaluation. From the questionnaire data, in terms of communication apprehension, the participants basically are self-conscious and confident about speaking in class, not anxious when speaking in class without preparation and speaking to native speakers.

In the findings of this study and the existing findings of Debreli and Demirkan (2016) in literature, relationship of anxiety and self-esteem appeared. Fear of being laughed at by their classmates and self-esteem in proficiency level and verbal linguistic intelligence are likely to provoke their anxiety levels in speaking. Also, regarding to the causes of language speaking anxiety, the qualitative data of this study as well as the qualitative data of Debreli and Demirkan

(2016) in literature were similar. The necessity to get prepared to speak, unable to interpret questions asked by the teacher, and answer teacher's immediate questions spontaneously found in this study were similar to existing finding studies. According to Debreli and Demirkan (2016), "the reason behind these new findings could be the qualitative method employed in the present study, whereas the majority of the existing studies explore the phenomenon with quantitative methods".

Regarding to the solutions of the Malaysian undergraduate, the interviewees' mentioned solutions were mostly about themselves. They think in the aspect of the anxiety comes from they themselves. Hence, the solutions provided were to improve and increase own language competency, self-encouragement and get aids from people around them. Also, they did not involve the aspect of government, current education system of the country, institution and any proper help from outside sources. They did not think in the direction of not having a good basic of language proficiency due to the outside forces. Hence, the data obtained from interviews answered the second part of the second research question of this study which is to investigate the possible solutions for language speaking anxiety among Malaysian undergraduates of a private university.

### **Recommendation**

Based on the discussion and conclusion of this study, several recommendations are suggested to reduce language speaking anxiety in the ESL classrooms.

First of all, a cheerful atmosphere is essential in the language classroom and language teachers should bear this in mind. Language teachers should endeavor to create a pleasant, sympathetic and supportive learning environment for learners to learn and enjoy lessons. According to Yahya (2013), "the mood dimension of trait anxiety (TA) is an influential factor on speaking anxiety". Thus, ESL learners are more likely to speak when they are in positive moods.

Secondly, language teacher need to be aware and sensitive to students' anxious and insecurities in language classes to observe learners' affections in their classes. Also, language teacher should aid learners to overcome their fears in language learning. Language teachers



are encouraged to use positive manner and tender or non-threatening techniques in correcting learners' error and give verbal encouragement at the same time. The use of humor, friendly relationship between teacher and learners, cooperative and collaborative classroom activities and friendly competition are positively effective in reducing learners' language anxiety and assist the language learning process.

Lastly, the current education system of the country should make changes as to practically improve the language competency of future ESL learners. Also, the selected private university has an English Language Clinic set up in the campus. However, it was only open for English-based courses which means that other ESL learners from other courses are not able to get help from it. Therefore, the English Language Clinic of the private university should open to all learners in the university and other institutions in the country should have set up such language clinic for the learners as well.

### **Limitation**

The study was conducted in only one single university in Malaysia and the participant size of questionnaire and interview were only 50 and 5 respectively. Therefore, to view a holistic picture of language speaking anxiety among Malaysian undergraduates and to increase the reliability of the study, the selections of tertiary level institution could involve 2 – 5 institutions. Furthermore, the number of participants should be increased to at least a hundreds of students from each institution and interview sessions should be involving at least 20 participants in order to raise the validity and reliability of the study. Moreover, observations on learners' behavior in classroom should be carried out to observe the learners' behavior and teachers' responses and actions in classroom. In addition, other sampling methods could be employed in the study as this study used only simple random sampling.

### **References**

- Ansari, M. S. (2015). Speaking anxiety in ESL/ EFL classroom: A holistic approach and practical study. *International Journal of Educational Investigations*, 2(4), 38-46. Retrieved from [http://www.ijeionline.com/attachments/article/41/IJEIonline\\_Vol.2\\_No.4\\_2015-4-04.pdf](http://www.ijeionline.com/attachments/article/41/IJEIonline_Vol.2_No.4_2015-4-04.pdf)
- Awan, R., Azher, M., Anwar, M. N., & Naz, A. (2010). An investigation of foreign language classroom anxiety and its relationship with students' achievement. *Journal of College Teaching and Learning*, 7(11), 33-40. Retrieved from <http://new.cluteinstitute.com/ojs/index.php/TLC/article/download/249/239>
- Basic, L. (2011). Speaking Anxiety: An obstacle to second language learning?
- Chang, S. L. (2008). Accuracy and fluency in spoken English among the ESL learners in tertiary institution.
- Chowdhury, S. (2014). Learners' foreign language speaking anxiety: A tertiary level scenario in EFL class. Retrieved from <http://dspace.bracu.ac.bd/xmlui/bitstream/handle/10361/3977/11303012.pdf?sequence=1&isAllowed=y>
- Darmi, R., & Albion, P. (2013). Malaysian graduates: What and why. *3<sup>rd</sup> Malaysian Postgraduate Conference (MPC2013)*.
- Debreli, E., & Demirkan, S. (2016). Sources and levels of foreign language speaking anxiety of English as a foreign language university student with regard to language proficiency and gender. *International Journal of English Language Education*, 4(1), 49-62.



- Diao, Z., & Paramasivam, S. (2013). Anxiety of speaking English in class among international students in a Malaysia university. *International Journal of Education and Research*, 1(11), 1-16. Retrieved from <http://www.ijern.com/journal/November-2013/17.pdf>
- Guo, M., & Wang, Y. (2013). Affective factors in oral English teaching and learning. *Higher Education of Social Science*, 5(3), 57-61. Retrieved from doi: 10.3968/j.hess.1927024020130503.2956
- Hizwari, S., Ahmad, I., Hifzurrahman, A., & NorHaizar, W. (2008). Second language anxiety among diploma students in technical university (Universiti Malaysia Perlis). Paper presented at the International Conference on the Roles of the Humanities and Social Sciences in Engineering 2008 (ICOHSE08).
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132. Retrieved from <http://www.jstor.org/stable/327317>
- Huang, S., Eslami, Z., Hu, R. S. (2010). The relationship between teacher and peer support and English-language learners' anxiety. *English Language Teaching*, 3(1).
- Khoo, M. Y., & Abidin, M. J. Z. (2014). The use of public speaking in motivating ESL learners to overcome speech anxiety. *International Journal on Studies in English Language and Literature (IJSELL)*, 2(11), 127-135.
- Nazir, M., Bashir, S., & Raja, Z. B. (2014). A study of second language speaking anxiety among ESL intermediate Pakistani learners. *International Journal of English and Education*, 3(3).
- Siew, P. H. (2014). The impact of gender on speaking anxiety among Malaysian tertiary ESL learners. *The International Conference on Language, Literature, Culture, and Education 2014*.
- Suleimenova, Z. (2013). Speaking anxiety in a foreign language classroom in Kazakhstan. *Procedia - Social and Behavioral Sciences*, 93, 1860–1868. Retrieved from <http://www.sciencedirect.com/science/article/pii/S1877042813035763>
- Spawa, C. M. C. & Hassan, F. (2013). "I doesn't know English": Beliefs and practices in the teaching of speaking in ESL Classroom. *Pertanika Journal of Social Sciences & Humanities*, 21(2), 449-460.
- Yahya, M. (2013). Measuring speaking anxiety among speech communication course students at the Arab American University of Jenin (AAUJ). *European Social Sciences Research Journal*, 1(3), 229-248.
- Zia, Z. & Sulan, N. (2015). EFL learners' levels of classroom performance anxieties and their causes in classroom speaking activities in Afghanistan. *International Journal of English and Education*, 4(1).



## **MUSHROOM TEA PRODUCTION TRAINING PACKAGE IN CAPACITY BUILDING PROGRAM TO INCREASE SMALL MEDIUM INDUSTRY (SME) ENTREPRENEURS IN RURAL AREA**

**Seri Chempaka Mohd. Yusof<sup>1</sup>**  
**Azhar Mohamad<sup>2</sup>**  
**Normazlin Ismail<sup>3</sup>**  
**Mohd. Fauzi Haris<sup>4</sup>**  
**Ruzaimi Haron<sup>5</sup>**  
**Rasif Mohd. Zain<sup>6</sup>**  
**Mohd. Hafiz Abdul Nasir<sup>7</sup>**

<sup>1,2,3,4,6,7</sup> Malaysian Nuclear Agency, Malaysia (E-mail: seri@nuclearmalaysia.gov.my)

<sup>5</sup> Malaysian Innovation Foundation (Yayasan Inovasi Malaysia), Malaysia

---

**Abstract:** *Volvariella tea is an innovative beverage of Malaysian Nuclear Agency that produced using Volvariella volvacea mushrooms. This tea is a value-added product that has a unique taste and aroma and has certain properties for health. This tea can be taken by everyone regardless of age and can be added in other beverages as a source of nutrients, vitamins and others to improve health. In recent years, there have been efforts to grow and produce mushrooms including Volvariella volvacea mushrooms based on the demand for diversity in dishes and awareness of the nutrients by taking mushrooms in daily meals. These mushrooms have short shelf life after harvesting time and need to be sold in fresh state and cannot stored in chiller for a longer time. Due to the vast volume of mushrooms obtained after harvest time, new product such as Volvariella tea is needed to be produced from these mushrooms to avoid any loss because of rotten mushrooms. Malaysian Nuclear Agency has collaborated with Malaysian Innovation Foundation (Yayasan Inovasi Malaysia) and PUSPANITA Nuclear Malaysia (The Association of Wives and Women Civil Servants Malaysia – Malaysian Nuclear Agency) to carry out the project of Capacity Building Program using MOSTI Social Innovation Fund (MSI) as to increase sources of income of the community and as an encouragement to become SME (Small and Medium Industry) entrepreneurs. This project was implemented by transferring the production technology of Volvariella Tea to the community in the village of Rembang Panas, Juasseh, Kuala Pilah, Negeri Sembilan. A total of 25 participants consisted of farmers and rubber tappers were attended series of training on Volvariella volvacea mushrooms cultivation using selected strain seedling produced by Malaysian Nuclear Agency, intensive practical training on production of Volvariella tea and online marketing. This Volvariella tea is processed using a set of drying technique, packed in individual sachet and irradiated for decontamination process. With these efforts, the product introduced can be used by community to generate income by mass producing and selling through online marketing.*

**Keywords:** *Mushroom, Tea, Innovative beverage, Volvariella volvacea, Training, Online marketing, Entrepreneur*

---

### **Introduction**



There is an increased effort in planting and producing mushrooms including *Volvariella volvacea* (Paddy Straw Mushroom) due to the demands for variety dishes and awareness of the people about the benefits in consuming mushrooms. *Volvariella volvacea* mushrooms or Tropical Button Mushroom is suitable for growing in Malaysia and this mushroom cultivation industry has great potential because of the high demand and short growth process. This mushroom is also capable in generating lucrative income to farmers on a continuous basis with low initial costs. It is found that the mushroom cultivation industry has succeeded in generating farmer income in the District of Besut, Terengganu between RM1800-2400 a month with an average production of 150 kilograms per day. The fresh mushrooms is marketed directly or used as a ready-made product. Mushroom production throughout the year allows it to have good prospects in producing downstream products.

Due to the short shelf life after harvesting time, these mushrooms need to be sold in fresh state and cannot stored in a chiller for a longer time. Due to the vast volume of mushrooms obtained after harvest time, new product is needed to be produced from these mushrooms to avoid any losses because of rotten mushrooms. *Volvariella* tea is an innovative beverage of Malaysian Nuclear Agency that produced using *Volvariella volvacea* mushrooms. The innovation in utilizing the mushroom for drinking beverage is enable growers to make clearance on dumping of fresh mushroom in market. The tea has a good aromatic smell and special taste which is unique and privilege as low temperature process was applied in controlling the quality. This tea can be consumed by everybody and suitable for every age not only as addition of variety in drinks but also as a source for gaining nutrients, vitamins and others for the wellness of health.

*Volvariella volvacea* has its own properties of good sources of vitamin B including riboflavin, niacin and pantothenic acid. These properties are important for nervous system, blood cells, healthy skin and also are important in breaking proteins, fats and carbohydrate (Rop et al., 2009). Studies carried out showed some benefits of *Volvariella volvacea* are related to:

- a) Weight loss and diet management – maintain blood sugar level, soluble fibers for increasing digestion, reducing body heat, promotes body fluid (Poonam et al. 2014)
- b) Boost uptake of the nutrient content in the body (Poonam et al. 2014)
- c) Healing function of hypertension, lowering blood pressure and cholesterol levels in our body (Roy et al. 2014)
- d) Potent anti-inflammatory characteristics that may be helpful for those suffering from asthma, rheumatoid arthritis, renal failure and stroke damage (Roy et al. 2014)
- e) Source of vitamins and mineral – high solubility diet quality and improved nutrition (Rop et al. 2009)
- f) Antioxidant properties - effective in removing free radicals from our body and improved the immunity (Ramkumar et al. 2012)
- g) Skin care moisture for cosmeceutical values related to stimulating skin collagen (Ruksiriwanich et al. 2014).

Malaysian Nuclear Agency has collaborated with Malaysian Innovation Foundation (Yayasan Inovasi Malaysia) and PUSPANITA Nuclear Malaysia (The Association of Wives and Women Civil Servants Malaysia – Malaysian Nuclear Agency) to carry out the project of Capacity Building Program using MOSTI Social Innovation Fund (MSI) as to increase sources of income of the community and as an encouragement to become SME (Small and Medium



Industry) entrepreneurs. This project was implemented by transferring the production technology of *Volvariella* Tea to the community in the village of Rembang Panas, Juasseh, Kuala Pilah, Negeri Sembilan. This was an effort to help communities to increase their income by producing it as a selling product that pertinent to production process that is easy and does not require a lot and expensive equipment and materials. The target community of this project was farmers and rubber tappers. The participants attended series of The objective of this project was to provide intensive training on *Volvariella volvacea* mushrooms cultivation using selected strain seedling produced by Malaysian Nuclear Agency, intensive practical training on production of *Volvariella* tea and online marketing to the community group in an effort to build-up an attempt to increase sources of income of the communities and as encouragement to become SME (Small and Medium Industry) entrepreneurs.

### Methodology

This project was carried out by the staffs of Malaysian Innovation Foundation (Yayasan Inovasi Malaysia) and PUSPANITA Nuclear Malaysia using MOSTI Social Innovation Fund as to increase sources of income of the community in the village of Rembang Panas, Juasseh, Kuala Pilah, Negeri Sembilan and as encouragement to become SME (Small and Medium Industry) entrepreneurs.

The tasks were executed as mentioned below:

- a) A group consisting of staffs of Malaysian Nuclear Agency and Malaysian Innovation Foundation (Yayasan Inovasi Malaysia) was formed to carry out specific tasks in the project. Meetings were held from time to time to monitor the progress of the activities in the project and to resolve problems arise in executing the tasks. The purchasing and preparation of facilities, equipment, raw materials, training kits and other related services were done before the trainings begun using the fund given.
- b) The staffs were divided into two groups, namely, a group conducting trainings on *Volvariella volvacea* mushrooms cultivation and *Volvariella* tea production and the second group conducting online business and marketing training.

The project activities were carried out in 6 months period during year 2018 as followed to the milestone involved (Table 1).

**Table 1:** Milestone of the project activities regarding the duration time for each activities.

Activities	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Determination of project team and participants						
Purchasing of equipment, raw materials and training kits						
Upgrading the facility – workshop house for <i>Volvariella</i> tea production						
Preparation of training kits and facilities						
Training on cultivation of <i>Volvariella volvacea</i> mushrooms						

Training on Volvariella tea production						
Training of online business and marketing of Volvariella tea						
Skill monitoring in handling communication networks with public using online medium such as Facebook, Tweet and Blog						
Preparation of project report						

The production of the Volvariella tea in this training was based on the formulation of Volvariella tea that contains dried *Volvariella volvacea* mushrooms. The dried *Volvariella volvacea* mushrooms were prepared using Standard Operating Procedure (SOP) of - Process of Drying Mushroom: *Volvariella volvacea* (Azhar and Seri Chempaka, 2018).

The training of *Volvariella volvacea* mushrooms cultivation was carried out in prepared area in Kampung Rembang Panas gradually for 3-4 months. The training of production of Volvariella tea was carried out in the upgraded workshop house facility in Kampung Rembang Panas for 2 days. For this training, each participants was given a note book and a manual book for processing mushroom tea (Seri et al. 2018). The training of online business and marketing was carried out in Malaysian Nuclear Agency. The hands on training was conducted using Manual Book of Producing Volvariella tea (Seri Chempaka et al, 2018). In training of *Volvariella volvacea* mushrooms cultivation, each participants was given planting kit and a book on mushroom cultivation (Azhar et al, 2018). For online business and marketing training, each participants was given a note book, handouts, a thumbdrive and online sale guide books. Training modules on production of Volvariella tea and on online business and marketing for Volvariella tea were developed using references (Bruhad, 2009; Newstrainers.wordpress.com, 2009). The trainings were carried out using training modules that briefly described in Table 2 and Table 3.

**Table 2:** Training modules on production of Volvariella tea

Time	Content/activity	Materials
10 min	Briefing on sanitation in working area, utensils, equipment, storage of raw materials, drying of mushrooms, processing of Volvariella tea and packaging of finished products	Briefing slides, LCD projector, LCD projector screen
30 min	Practices on handling related tools and equipment in drying of mushrooms, processing of Volvariella tea and packaging of finished products	Equipment and utensils
2 hours	Practices on the process of the drying of mushrooms in a clean, acceptable state and gets a good quality products and meets the standards.	Raw materials, equipment, utensils, manual book
2 hours	Exposed to various important steps in processing of Volvariellatea including proper and accurate weighing of the materials, the use of tools, utensils and equipment, proper handling and	Raw materials, equipment, utensils, manual book

	storage of raw materials and the finished products, the sanitary of the personnel, the processing spaces and storage areas.	
2 hours	Practices on the processing of <i>Volvariella</i> tea and packaging of finished products in a clean, acceptable state and gets a good quality products and meets the standards.	Raw materials, equipment, utensils, manual book
2 hours	Practices on preparing tea sachets, boxes, container handling and storage methods.	Packaging materials, tea sachets, plastic casings, boxes

**Table 3:** Training modules on online business and marketing for *Volvariella* tea

Time	Content/activity	Materials
15 min	Briefing on handling the computer, internet, creating marketing blog, Facebook, Instagram and Tweet	Briefing slides, LCD projector, LCD projector screen
2 hours	Practices on handling the computer, internet, creating marketing blog, Facebook, Instagram and Tweet. The participants were trained intensively on writing sentences, uploading pictures and handling communication networks with public using online medium such as Facebook, Tweet and blog.	Computer and handouts on how to start creating marketing blog, Facebook, Instagram, Tweet and handling the computer and internet.
1 hour	Practices on conducting online sales, accounting and product deliveries. This training introduced steps on handling online sales including advertising, communication with buyers, handling orders and emphasized on deliveries, payments and receipts.	Computer, note book, pendrive, online sale guide book (Miliza, 2016)
30 min	Briefing on professional way of doing online business especially in entrepreneurial aspects, marketing management and business plan preparation	Briefing slides, LCD projector, LCD projector screen, online business guide book (Umar, 2016)

### Results and Discussion

A total of 25 participants from village of Rembang Panas, Juasseh, Kuala Pilah, Negeri Sembilan (farmers and rubber tappers) were attended series of training on *Volvariella volvacea* mushrooms cultivation using selected strain seedling produced by Malaysian Nuclear Agency, intensive practical training on production of *Volvariella* tea and online marketing (Figure 1,2 and 3)

Results from this project showed a few outcomes can be gained and became impacts of the project not only to the communities but also to the agency. One of the important outcomes was new entrepreneurs among farmers and rubber tappers and low income groups were established. With the training, this community had the opportunity to venture into business with minimal capital, easier way in marketing products through online without the need for rental shops. Another outcome was training modules for *Volvariella volvacea*



mushrooms cultivation using selected strain seedling produced by Malaysian Nuclear Agency, intensive practical training on production of *Volvariella* tea and online marketing. These training modules can be used continuously by the agency to train other communities to develop entrepreneurs and commercialized the products. Commercialization of the product not only leads to cooperation with big companies but with online marketing and sales by these new entrepreneurs can also reached to local and foreign markets.

Through this project, comprehensive training provided based on the training modules gave an opportunity for knowledge enhancement for the community and they will be able to increase their household income and a few benefits achieved were recognized such as:

- a) The increase of entrepreneurs among farmers and low income groups lead to increment of income that range RM50/day from selling products through online.
- b) Increasing numbers of trainers for entrepreneurship training and online business and marketing.
- c) Created new sub industries – supplies of fresh mushrooms and mushroom tea and other mushroom based products.

### Conclusion

Knowledge and skills gained enabled the community to move forward to increase the income of the community by cultivation of the mushrooms, producing the products and using technologies available. This project was an example showing the ability of a research institution in increasing the income of the community using the products and technologies available. Commercialization of the products to local community can improve the economy of the country by raising the socio-economic of the people.

### References

- Azhar, M. and Seri Chempaka, M. Y. (2018). Standard Operating Procedure (SOP) - Process of Drying Mushroom: *Volvariella volvacea*. NUKLEARMALAYSIA/M/2018/31(S)
- Azhar, M., Mohamad, Y. A. and Nur Hafizah, S. (2018) Teknologi Penanaman Cendawan *Volvariella*. Agensi Nuklear Malaysia. ISBN 978-967-9970-54-58.
- Bruhad, B. (2009). How to prepare a basic training module. <https://www.slideshare.net/bruhad/how-to-prepare-a-basic-training-module>.
- Miliza, G. (2016). Buat Duit Dengan Facebook Dan Instagram. PTS Publishing House. Malaysia. ISBN-13:978-967-411-821-1.
- Newstrainers.wordpress.com (2009). How to build a training module, Part 3. <https://newstrainers.wordpress.com/2009/11/17/how-to-build-a-training-module-part-3>
- Poonam, B., Ranjana, P. and Tejo Prakash, N. (2014). Enhanced antioxidant properties as a function of selenium uptake by edible mushrooms cultivated on selenium-accumulated waste post-harvest wheat and paddy residues. *Int J Recycl Org Waste Agricult.*3:127–132
- Ramkumar, L., Ramanathan, T. and Johnprabakaran, J. (2012). Evaluation of nutrients, trace metals and antioxidant activity in *Volvariella volvacea* (Bull. Ex. Fr.) Sing. Emir. J. Food Agric. 24 (2): 113-119
- Rop O., Mlcek J. and Jurikova T. (2009). Beta Glucan in higher fungi and their health effects. *Nutrition Reviews.* 67:624-631
- Roy et al., (2014). Review Article. *Volavriela volvaceae*: A Macrofungus having nutritional and health potential. *Asian J. Pham Tech.* 4(2)110-113

Ruksiriwanich W. et al. (2014). Potent *In Vitro* Collagen Biosynthesis Stimulating and Antioxidant Activities of Edible Mushroom *Volvariella Volvacea* Aqueous Extract. Int J Pharm Pharm Sci, 6(2) 2, 406-412.

Seri Chempaka, M. Y., Azhar, M. and Normazlin, I. (2018). Manual Book of Processing Mushroom Tea.

Umar, T. (2016). Buat Duit Dengan Mudah.my. PTS Publising House. Malaysia. ISBN-13:978-967-411-852-5.

## Bibliography



**Figure 1:** Training on cultivation of *Volvariella volvacea* mushrooms



**Figure 2:** Training on drying the *Volvariella volvacea* mushrooms and Volvariella tea production



**Figure 3:** Training on online business and marketing of Volvariella tea



## AN ANALYSES REVIEW OF FORMATIVE ASSESMENT TOOLS

Tasaratha Rajan Anamalai<sup>1</sup>  
Maizatul Hayati bt Mohamad Yatim<sup>2</sup>

<sup>1</sup> Fakulti Seni, Komputeran dan Industri Kreatif, Universiti Pendidikan Sultan Idris (UPSI), Malaysia, (E-mail: tasara83@gmail.com)

<sup>2</sup> Fakulti Seni, Komputeran dan Industri Kreatif, Universiti Pendidikan Sultan Idris (UPSI), Malaysia, (Email: maizatul@fskik.upsi.edu.my)

---

**Abstract:** *The intention of formative assessment tools usage is mainly to assess learning outcomes easily and quickly in a classroom environment. However, the tools need to be accurate and informative for teachers and students. At the end of any learning process, students certainly need to know their level of understanding in the learning process and what are the next steps for them to encounter. However, with increasing numbers of students in a classroom and increasing teaching workload among teachers, the teachers can gain benefits from these tools in assessing the outcomes quickly and more effectively. This article will discuss the usage of formative assessment tools in education. It describes and reviews several literatures related to alternative ways to assess students using technology transform assessment in the teaching process. The reviews use a comparison technique using twelve-criteria of technology transform assessment using three formative assessment tools available in the market. It is believed that technology transform assessment can bring an enjoyable and engaging assessment environment in the classroom.*

**Keywords:** *Formative assessment, technology transform assessment, assessment tools, enjoyable, engagement.*

---

### Introduction

Knowledge retention is a challenge that is faced by educators and pupils in education (Hopkins, Lyle, Hieb, & Ralston, 2016). Excellency in these subjects depends on remembrance of knowledge of content (Messina & Tabone, 2012). Furthermore, students who demonstrate proficiency in fundamental knowledge of these subject areas often struggle in the application, or transfer their knowledge to new contexts (Hamel, Chaplin-Kramer, Sim, & Mueller, 2015). Retrieval practice is an easily implemented learning strategy that is important in supporting and enhancing long-term retention and promoting the transfer of learning (Hunter Ball, Klein, & Brewer, 2014).

Learning process been defined as a change in long-term memory (Kirschner et al., 2006). Many studies have had been conducted regarding effective methods to enhance learning and long-term memory. According to Roediger, & McDaniel, 2014; Roediger & Butler, 2011), retrieval.

Practice is a learning strategy that is deeply based in cognitive science principles to enhance long-term retention of information (Butler, Marsh, Slavinsky, & Baraniuk, 2014). Retrieval practice is the act of recalling facts or concepts from memory and, by doing so, memory for that information is strengthened (Agrawal et al., 2018). Being able to recall information is essential to transfer of learning where existing knowledge is used in new and different contexts (Pan & Agrawal, 2018). Expertise in a knowledge area is heavily reliant on



effective transfer of learning since experts utilize their extensive experiences stored in long-term memory to quickly select and apply the best methodology for solving a problem (Kirschner et al., 2006). Furthermore, “without knowledge you don’t have the foundation for the higher-level skills of analysis, synthesis, and creative problem solving” (Brown et al., 2014, p. 18). Thus, strengthening that foundational knowledge using learning strategies such as retrieval practice is a key step in developing those higher-order thinking skills.

Formative assessment is part of reflection of students learning and teaching process (Heck, Cuypers, van de Vrie, Tempelaar, & van der Kooij, 2013). Therefore, the educators normally apply different methods to achieve the objective of particular lesson (Rao & Meo, 2016). Technology able to enhance the leaning process and assists assessment activities, during the teaching and learning section and outside of the classroom.

Through formative assessment, teachers able to review students’ understanding level, get valuable information on students’ learning, and then use that information to modify their teaching methodology. When teachers know what students know (or do not know), they can adjust to meet students right at their level. The best formative assessment tools also help students self-reflect and assess, figuring out where they are and where they need to go as learners. Browse the tools below to find one that meets your needs. There are formative assessment apps for everything from discussion to quizzes, polls, and student responses to interactive lessons and videos.

Effective usage of learning tools, and not an assessment tool, then retrieval practice able to make effective learning (Littrell-Baez, Friend, Caccamise, & Okochi, 2015). According to (Moreillon, 2015) Several digital tools created for the classroom education bring those exciting experiences to students with learning as the focus. Therefore, mobile applications such Kahoot!, Quizizz, Socrative and mobile range applications use to support learning activities. Normally teachers or lecturers do the assessment to check the understanding level of students in schools (Stone, 2014). Teachers also have responsibility to guide students to involve in studies in active manner. Assessment tools practices have potential to involve being present and students will aware what is happening by using simple tools (Ismail & Mohammad, 2017).

### **Purpose**

According to Maizatul & Ummu (2018), students who experience formative assessment strategies, particularly low achievers, demonstrate significant learning gains. Through the usage of improved questioning techniques, feedback focusing on how to improve rather than grading, involvement of students in peer assessment and self-assessment, and the use of summative assessments in a formative way, teachers found that the motivation and attitudes of their students improved, and the students achieved higher scores on tests than their peers in the same schools (Deye et. al., 2016). Teaching and learning of educators and pupils challenged by 21<sup>st</sup> century mobile technology. Therefore, the assessment tools such Kahoot!, Quizizz, and Socrative are being reviewed in this article as the current leading mobile range applications technology that able to support student’s inquiry with educational purpose. Formative applications also let students to recognize the differences between productive and non-productive questions. Many educators familiar with these mobile tools and felt easy using them to meet teaching and learning objectives.

### **Research Background**

Educational instructional is most important in this 21st century educational field. This is because technology has become the knowledge transformation matter to all human beings



(Pusparini, Riandi, & Sriyati, 2017). Nowadays, a majority of people from all age groups know how to use at least a basic form of technology. Technology tools and equipment have become the main medium of connectivity all over the world and we have the urge and tendency to be connected online (O'Brien, Rogers, & Fisk, 2012). Development in wireless and mobile technologies introduces a new learning environment called as M-Learning. It offers a different way to deliver learning matters into our daily life (Al-Hunaiyyan, Al-Sharhan, & Alhajri, 2017).

Many retrieval practice studies been conducted on learning strategies. More efforts required when learning deeper and longer lasting; retrieval practice feels more challenging and less productive but it results might more tough (Brown et al., 2014). Many affordances to retrieval practice been identified in the literature. First, complex thinking and application skills as well as able to improve the students' organization of knowledge (Agrawal et al., 2018). Human memories can be re-consolidate and strengthen through visual and prior knowledge. Learners able to improve their weaknesses by identifying the strengths and weaknesses when they try to focus on particular thing. (Brown et al., 2014). Lastly, retrieval practice can improve pupils' learning process, where deductive inferences and new contexts made based on knowledge (Eglinton & Kang, 2018). Implementation of some retrieval practices be a key factor in classroom. Spacing required after Several times of learning process. Relaxation after practice over time be much better for long-term information retention (Butler et al., 2014).

Another key factor is the type of practice itself. Continuous practice can be more effective than massed practice (Brown et al., 2014). Different types of problem-solving questions on different topics make the learning process better long term, challenging and effortful. (Agrawal et al., 2018). Furthermore, short answer questions and multiple-choice questions make more effective and improve learning process (Smith & Karpicke, 2014).

### **Methodology**

A comparative analysis used qualitatively to analyse the perceived benefits of using Kahoot! over other formative assessment tools. According to (Maher & Maher, 2018), qualitative research methodology normally focuses on the words and certain attributes of the case being discussed. The comparative analysis formative assessment tools were focusing on three dominants formative assessment tools which are the Kahoot!, Quizizz and Socrative.

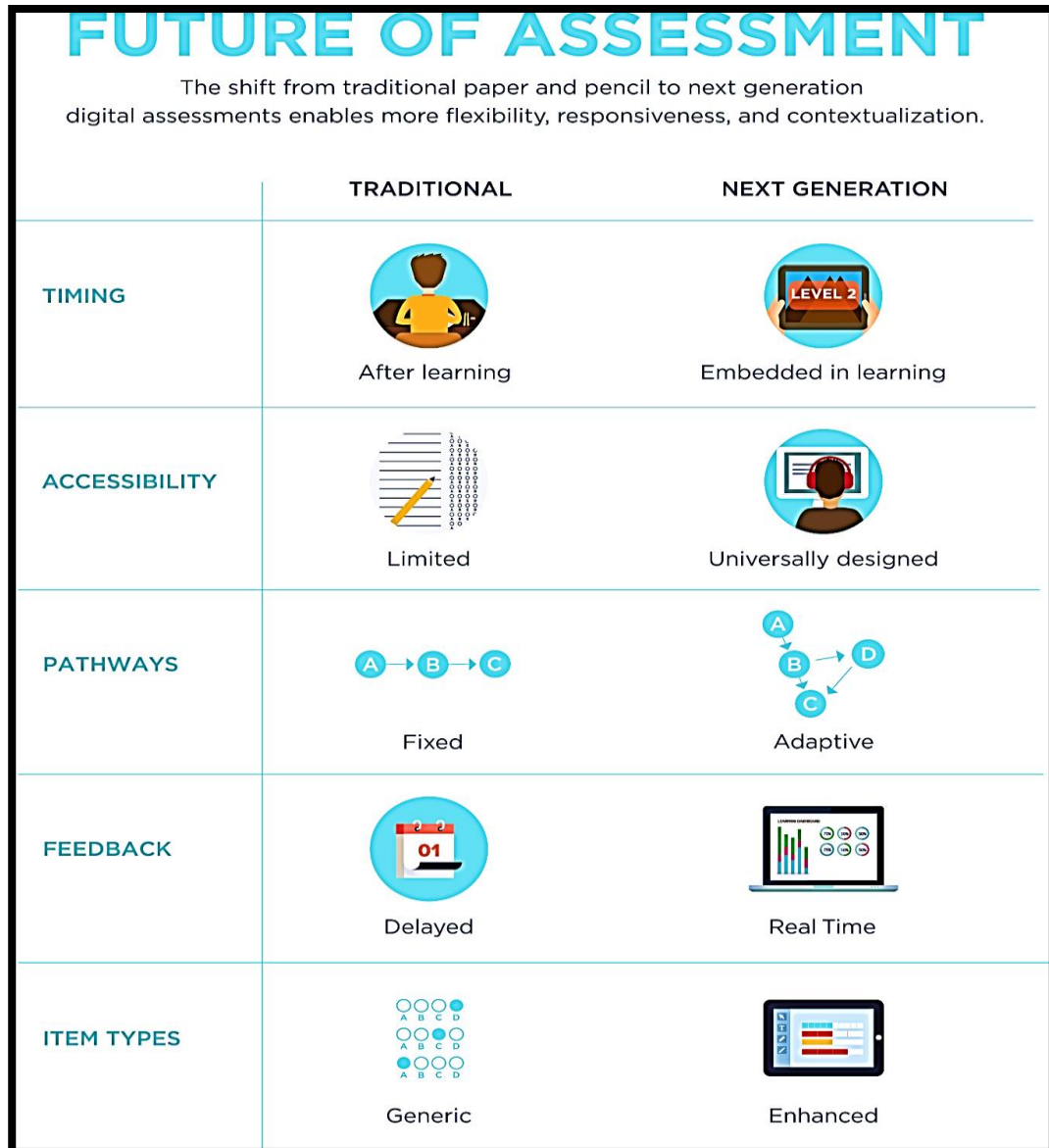
### **Applications**

Formative assessment tools such as Kahoot!, Quizizz, and Socrative, are all technological tools that can be described as beneficial to support in the classroom (Bolden, Hurt, & Richardson, 2017). Kahoot!, Quizizz, and Socrative are free games-based quizzing applications. These classroom assessment tools provide assistance to support retrieval practice in the classroom with consideration of planning, quizzes designed with a variety of questions with different strategies for problem solving (Countryman, 2017).

### **Technology Transform Assessment**

Technology can help us imagine and redefine assessment in a variety of ways. These tools can provide unobtrusive measurements for learners who are designing and building products, conducting experiments using mobile devices, and manipulating parameters in simulations. Problems can be situated in real-world environments, where students perform tasks, or include multi-stage scenarios that simulate authentic, progressive engagement with the subject matter. Teachers can access information on student's progress and learning throughout the school day,

which allows them to adapt instruction to personalize learning or intervene to address particular learning shortfalls.



**Figure 1** Future of Assessment

Source: <https://tech.ed.gov/netp/assessment/>

## Findings and Results

### Kahoot!



Kahoot! is a free application. Students able to response from almost all platforms. It allows teachers to run games like those multiple-choice answer quizzes (Iwamoto, Hargis, Taitano, & Vuong, 2017). Teachers can also create their own quizzes or find more quizzes from public channel. Questions with choices of answers, projected in front of a classroom screen while students will submit their responses by using an internet-connected device such phones, tablets or computers. According to Bicen & Kocakoyun (2018) there are questions and polls contain images and video guidance as well. Team mode and Classic mode can take place in within real time, but Challenge mode enables students to take quizzes within period. The-games-like atmosphere comes from the use of bright multiple colours, suspenseful music, and points given for accuracy of answer and quickness (Plump & LaRosa, 2017). The Team mode mixes things up and allows groups of students to cooperate with each other and compete against other teams. Kahoot! Does not involve of any accounts , only using pin number displayed from the main screen with given name (Ismail & Ahmad, 2016).

### Quizizz



Quizizz is a similar free tool as Kahoot!. It can be used on any devices, web browsers, in different platforms (Bolden et al., 2017). There are thousands of ready-made available Quizizz.

Teachers can also create their own. Quizizz can have questions that require reading of a passage or questions that require longer time. Pre-test also available to test-out for learned materials. Students can easily make selection of the choices and choose answers using a browser on a laptop or any mobile devices. According to Mei, Ju, & Adam (2018), students ranking can be found from leader board during section of the quiz which helpful to have a collaborative environment where competition is not the goal, instead working together this tool can be used to obtain a snapshot of each student's content understanding. Individual student's reports can be printed out for the use of teachers or parents' as references (Zhao, 2019). Students can use nickname or numbers for identification. Students can also sign in by using their Google Account by single click. Students will be notified when they have completed their assignments. Data might updated in classroom dashboard. Teachers also have options to make their quiz or for private usage. A created Quizizz can use randomized or non-randomized questions (Amornchewin, 2018).

### Socrative



Socrative is an interactive web based student's response system. Socrative is available through all platforms such iOS and Android that can assist teachers to spark conversation and learning process through created polls and quizzes (Guarascio, Nemecek, & Zimmerman, 2017). Students able to access the questions via a channel Code, and answers will recorded immediately on the teacher's computer as the students submit their assignments from all devices. When everyone finishes their responses, teachers can display the results by using "How did we do?" button. Teachers able to create quick questions, quizzes and exit slips that allow for multiple-choice, true/false, and one-sentence-response questions that can produce a grade with feedback for every student (Lim, 2017). Furthermore, basic assessment strategies, students can team up to play Space Race, a collaborative activity where allows student to give quick answers. Teachers also monitor student's progress and download results in an excel format (Balta & Tzafilkou, 2019).

Criteria and Rationale	Kahoot!	Quizizz	Socrative
Need an account of administrator quiz / game	Yes	No	Yes
Need an account to create and save	Yes	Yes	Yes

Display or popup of question and answer (Q&A) on one screen.	No	Yes	Yes
Ability to include images	Yes	Yes	Yes
Options for self-paced or timed	Yes	Yes	Yes
Gamified for fun competitive in class	Yes	Yes	Yes
Can ask an instant question during a lesson	No	No	Yes
Has a ready-made exit ticket that can be use	Not Really	Not Really	Yes
Ability to search for games made by others that may act as extra resources if needed	Yes	Yes	Not Really
Help and support is available	Yes	Yes	Yes
Has a Free Account	Yes	Yes	Yes
Can scramble questions and answers	Yes	Yes	Yes

**Table 1:** Comparison of Kahoot!, Quizizz and Socrative criteria

Qualitative
<b>Interesting Kahoot! contents, including audio-visual components, that helped students repeatedly read content and the associated engagement factors led to repeated interaction with such contents.</b>
<b>Socializing options within video games can enhance motivation.</b>

**Table 2:** Qualitative Findings Synthesis

### Discussions

Qualitative results strongly indicated that participants engaged by the usage of Kahoot! in the teaching and learning process able to enrich the quality of students' learning in the classroom compare to Quizizz and Socrative. Evidences in the literature support students' finding of digital game related activities gaining entertainment and motivation as a factor that may assist learning (Barab, Thomas, Dodge, Carteaux, & Tuzun, 2005; Bogost, 2007; Griffiths, 2002; Hainey, Connolly, Stansfield & Boyle, 2011; Paraskeva, Mysirlaki & Papagianni, 2010; Zarraonandia, Diaz, Aedo & Ruiz, 2014). Unexpected result was that regardless of the game-



show aspect of Kahoot! and gaining of concentration, participants did not identify the game as a competitive experience. This is different than what is talked about in some studies and conceptual literature that highlights. Competition between participants' interest and motivation is the key value of games (Annetta, Minogue, Holmes, & Cheng, 2009; Burguillo, 2010; Jayakanthan, 2002; Ladd, & Fiske, 2003; Papastergiou, 2009; Vorderer, Hartmann & Klimmt, 2003). Despite the lack of competition, students clearly were engaged, and not only by the gaming experience, but also their perception of the value of the game for learning. Since Kahoot!, Quizizz and Socrative are merely similar in terms of functionality, main features that Kahoot has compare to Quizizz or Socrative are the popularity and the user-friendliness (Maizatul & Ummu, 2018).

### Conclusions

As a free resource for games-based quizzing applications, Kahoot! makes it an appealing technology transform application for all levels of education. The game-like interface, user-friendliness and upbeat music helps to engage and motivate students during the assessment session. By using the popular games-based quizzing applications available freely, which are Kahoot!, Quizizz and Socrative, teachers can learn how to gamified for a fun competitive assessment activities to be used by current generations of educators for present generation of learners.

### References

- Al-Hunaiyyan, A., Al-Sharhan, S., & Alhajri, R. (2017). A New Mobile Learning Model in the Context of the Smart Classrooms Environment: A Holistic Approach. *International Journal of Interactive Mobile Technologies (IJIM)*. <https://doi.org/10.3991/ijim.v11i3.6186>
- Amornchewin, R. (2018). The Development of SQL Language Skills in Data Definition and Data Manipulation Languages Using Exercises with Quizizz for Students' Learning Engagement. *IJIE (Indonesian Journal of Informatics Education)*. <https://doi.org/10.20961/ijie.v2i2.24430>
- Balta, N., & Tzafilkou, K. (2019). Using Socrative software for instant formative feedback in physics courses. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-018-9773-8>
- Bicen, H., & Kocakoyun, S. (2018). Perceptions of students for gamification approach: Kahoot as a case study. *International Journal of Emerging Technologies in Learning*. <https://doi.org/10.3991/ijet.v13i02.7467>
- Bolden, D. C., Hurt, J. W., & Richardson, M. K. (2017). Implementing Digital Tools to Support Student Questioning Abilities: A Collaborative Action Research Report. *I.e.: Inquiry in Education*.
- Countryman, A. M. (2017). Adopting teaching strategies to accommodate different learning styles. *NACTA Journal*.
- Guarascio, A. J., Nemecek, B. D., & Zimmerman, D. E. (2017). Evaluation of students' perceptions of the Socrative application versus a traditional student response system and its impact on classroom engagement. *Currents in Pharmacy Teaching and Learning*. <https://doi.org/10.1016/j.cptl.2017.05.011>
- Hamel, P., Chaplin-Kramer, R., Sim, S., & Mueller, C. (2015). A new approach to modeling the sediment retention service (InVEST 3.0): Case study of the Cape Fear catchment, North Carolina, USA. *Science of the Total Environment*.



- <https://doi.org/10.1016/j.scitotenv.2015.04.027>
- Heck, A., Cuypers, H., van de Vrie, E., Tempelaar, D. T., & van der Kooij, H. (2013). Formative assessment and learning analytics. <https://doi.org/10.1145/2460296.2460337>
- Hopkins, R. F., Lyle, K. B., Hieb, J. L., & Ralston, P. A. S. (2016). Spaced Retrieval Practice Increases College Students' Short- and Long-Term Retention of Mathematics Knowledge. *Educational Psychology Review*. <https://doi.org/10.1007/s10648-015-9349-8>
- Hunter Ball, B., Klein, K. N., & Brewer, G. A. (2014). Processing fluency mediates the influence of perceptual information on monitoring learning of educationally relevant materials. *Journal of Experimental Psychology: Applied*. <https://doi.org/10.1037/xap0000023>
- Ismail, M. A.-A., & Mohammad, J. A.-M. (2017). Kahoot: A Promising Tool for Formative Assessment in Medical Education. *Education in Medicine Journal*. <https://doi.org/10.21315/eimj2017.9.2.2>
- Ismail, N. A., & Ahmad, Z. (2016). Keberkesanan Penggunaan Quizlet dan Kahoot IT dalam Memperkasakan Pengajaran Guru dan Memperkaya Pembelajaran Murid. *Seminar Bahasa Melayu*.
- Iwamoto, D. H., Hargis, J., Taitano, E. J., & Vuong, K. (2017). Analyzing the efficacy of the testing effect using Kahoot??? on student performance. *Turkish Online Journal of Distance Education*. <https://doi.org/10.17718/tojde.306561>
- Lim, W. N. (2017). Improving student engagement in higher education through mobile-based interactive teaching model using socrative. In *IEEE Global Engineering Education Conference, EDUCON*. <https://doi.org/10.1109/EDUCON.2017.7942879>
- Littrell-Baez, M. K., Friend, A., Caccamise, D., & Okochi, C. (2015). Using retrieval practice and metacognitive skills to improve content learning. *Journal of Adolescent and Adult Literacy*. <https://doi.org/10.1002/jaal.420>
- Maher, M. J., & Maher, M. J. (2018). Qualitative methodology. In *Racism and Cultural Diversity*. <https://doi.org/10.4324/9780429479380-42>
- Maizatul, H.M.Y & Ummu, H.A. (2018). Pembelajaran Teradun: Trend, Isu dan Amalan. Tanjong Malim: Pejabat Karang Mengarang.
- Mei, S. Y., Ju, S. Y., & Adam, Z. (2018). Implementing Quizizz as Game Based Learning in the Arabic Classroom. *European Journal of Social Sciences Education and Research*. <https://doi.org/10.26417/ejser.v12i1.p208-212>
- Messina, L., & Tabone, S. (2012). Integrating Technology into Instructional Practices Focusing on Teacher Knowledge. *Procedia - Social and Behavioral Sciences*. <https://doi.org/10.1016/j.sbspro.2012.05.241>
- Moreillon, J. (2015). Increasing Interactivity in the Online Learning Environment: Using Digital Tools to Support Students in Socially Constructed Meaning-Making. *TechTrends*. <https://doi.org/10.1007/s11528-015-0851-0>
- Plump, C. M., & LaRosa, J. (2017). Using Kahoot! in the Classroom to Create Engagement and Active Learning: A Game-Based Technology Solution for eLearning Novices. *Management Teaching Review*. <https://doi.org/10.1177/2379298116689783>
- Pusparini, F., Riandi, R., & Sriyati, S. (2017). Developing Technological Pedagogical Content Knowledge (TPACK) in Animal Physiology. In *Journal of Physics: Conference Series*. <https://doi.org/10.1088/1742-6596/895/1/012059>
- Rao, K., & Meo, G. (2016). Using Universal Design for Learning to Design Standards-Based Lessons. *SAGE Open*. <https://doi.org/10.1177/2158244016680688>



*3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)*  
*eISBN: 978-967-2245-13-1*  
*Copthorne Hotel, Cameron Highland, Malaysia*  
*29<sup>th</sup>-30<sup>th</sup> June 2019*

- Stone, E. M. (2014). Guiding students to develop an understanding of scientific inquiry: A science skills approach to instruction and assessment. *CBE Life Sciences Education*.
- Zhao, F. (2019). Using Quizizz to Integrate Fun Multiplayer Activity in the Accounting Classroom. *International Journal of Higher Education*.  
<https://doi.org/10.5430/ijhe.v8n1p37>



## **PRODUCT ATTRIBUTES AFFECTED MANUFACTURING KPI TO HAVE BETTER CONTROL OF QUALITY: A FURTHER CASE STUDY OF A 500- WORKER SHEET METAL MANUFACTURER IN CHINA**

**Pit-yan Li<sup>1</sup>**

<sup>1</sup> Quality Director, Best Ideal Limited, Hong Kong. (Email: hpyli@yahoo.com.hk)

---

**Abstract:** *Key Performance Indicators (KPIs) is identified to monitor the organization's performance and strategic alignment. The choice of what should be the proper KPIs has quickly become major field of study in recent years. All of these are either technically too complicated for most of staffs to be able to become aware of while they carry out their usual daily duties or are too administratively delayed in the sense that data (or the KPIs) have to be separately collected, slowly gathered, and collectively analyzed before they would turn into information that is meaningful to the top management. This paper is a study of manufacturing standard KPIs and product attributes to see if there is any correlation between them. Research data had been collected from a medium-size, traditional 500-workers sheet metal manufacturer<sup>2</sup> located in China in a period of over 9 months (including 98 shipments, each shipment had around 250,000 pieces of products). Using various analyses tools such as t-tests and k-means clustering<sup>3</sup>, factor analysis, linear regression and logistic regression were to do data analysis to see how are the affection of different combination of product attributes (size, complexity - no. of production steps involved no. of manpower and no. of stamping machines, model types – New vs. Old models) to standard KPIs, like defect rate, yield loss, productivity, worker efficiency and etc. The analysis results showed only standard KPIs itself was just a performance measurement without helping manufacturing business to make profit. However as using product attributes together with KPIs, these could forecast the defect rate and yield loss. This helped Sales and Marketing to strategically target types of orders from customers, finally enhancing the organization profit.*

**Keywords:** *Key Performance Indicator, Product Attributes*

---

<sup>2</sup> Best Ideal Limited, a Hong Kong based private partnership limited, established in 1993, is an ISO9001:2008, ISO14001:2004, and ISO 13485:2003 certified metal works factory, employed 500 workers with factory floor area of over 400,000 square feet, located in Dongguan City in southern province of Guangdong, China. The company has received various international awards from customers. For details, see <http://www.bestideal.com/>

<sup>3</sup> k-means clustering analysis and further analysis already indicated in the paper "HOW PRODUCT ATTRIBUTES AFFECT KPI: A CASE STUDY OF A 500-WORKER METAL STAMPING FACTORY IN CHINA" (Cheng, Li, 2016)

## Introduction

Whenever it comes to managing manufacturing quality, most of companies may choose to implement their quality management systems through KPIs. In fact, KPIs can be identified from within both financial and non-financial factors to be used, procedurally or quantitatively (Jalote, et al., 2000), to help manage quality within the various areas of sales and marketing, procurement, production, and even in human resources (Service Now, 2016). According to the Manufacturing Enterprise Solutions Association (MESA) (Davidson, 2013), the most common 28 manufacturing KPIs used to help manage quality of a manufacturing business fall within 8 core areas of factors, namely, in (a) improving customer responsiveness; (b) improving quality; (c) improving efficiency; (d) reducing inventory; (e) ensuring compliance; (f) reducing maintenance; (g) increasing innovation; and (h) reducing costs. Yet, in the case of the relatively low profit-margin, low-quantity e.g. order with few hundred pieces of products, urgent delivery schedule, with labour shortage for sheet metal manufacturing businesses, using KPIs quantitatively for quality control can be inaccurate, because with small product batches, it would be mathematically impossible to arrive at anything statistically meaningful when sampling sizes are too small to justify statistical significance. This might explain why out of the latest 189 peer-reviewed SCI/ESCI/SCOPUS journal papers found related to the implementation of KPIs, only about 35 (or some 18.5%) of them dealt with the manufacturing industries and the rest are about the service industries (EBSCO Industries [EBSCO], Inc, 2016). And while these less than 20% of the study is about manufacturing, studies that are described are either businesses big enough to have their own customized KPI systems to help monitor or measure their manufacturing processes (as in statistical process control, i.e. SPC). And no matter what kind of KPIs collected in these studies, the characteristics of the product i.e. the product attributes are rarely considered as factors because of the need for generalization with generic models. This research attempts to look at product attributes to see if they could help provide insights or constitute some kind of a “look-ahead mechanism” that might help foresee defect rates in the metal stamping production business. Besides looking at the product attributes, other traditional KPIs, including purchasing period, inventory level, yield loss, productivity and manpower allocation, will be studied to see if these could provide such insights or not. So there are research questions as follows:

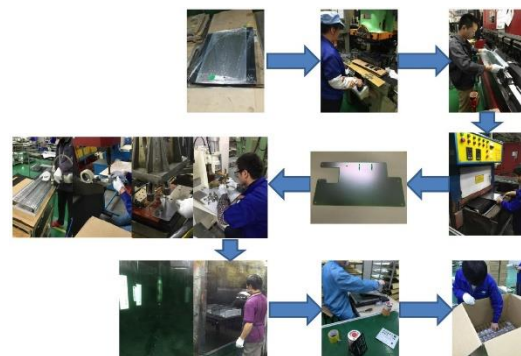
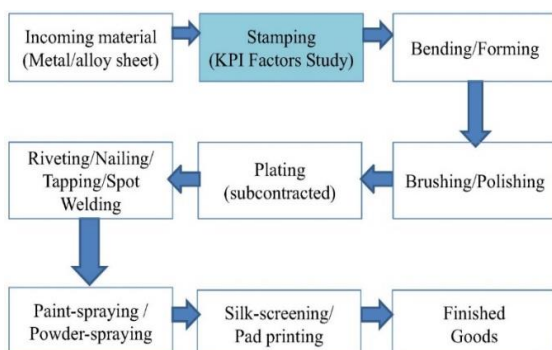
**Research Question 1: Could traditional KPI explain defect rate and yield loss?**

**Research Question 2 : Could the product attributes explain and forecast the defect rate and further yield loss?**

## Literature Review

Typical metal manufacturing processes are shown in Figures 1 & 2 below.

Figure 1: Metal Manufacturing Processes      Figure 2: Metal Manufacturing Processes Photos



A Key Performance Indicator (KPI) is a performance measurement of an activity that is critical to the success of an organization (Construction Excellence Limited, 2015). Most of organizations compete against each other to control operation cost, to increase profitability and to meet stakeholder expectations. The business success is commonly achieved by a measurement of both financial and non-financial gains to the organization. Many organizations use KPI as a performance measurement tool to evaluate the effectiveness and efficiency of the organization in certain key fields. Those areas of measurement vary from one organization to another. A product-based organization will have KPIs related to product quality, price and production cost while a service-based organization will emphasize on customer satisfaction KPI.

### Methodology

The research study involved 98 shipments of approximately 250,000 pieces of finished metal work products, mainly in the metal stamping process. The defect rate, productivity, overall equipment effectiveness (OEE), worker efficiency, and yield loss in these product batches were computed and recorded. These were then compared, using the t-test, factor analysis, k-means clustering<sup>3</sup> and further analysis<sup>3</sup>, linear regression and logistic regression were analyzed to see how different combination of product attributes could affect the resulting KPIs.

### Findings and Discussions

It had the following linear regression analysis to compare the defect rate, productivity, OEE and yield loss with manufacturing KPIs (Jan, & Shieh, 2019; Su, & Yan, 2009). The results were shown as follows tables 1-4 :

Table 1 : Linear Regression - Defect Rate

Model Summary (defect_rate)				
R	R Square	Adjusted R Square	Std. Error of the Estimate	
.56	.32	.27	3.51	

ANOVA (defect_rate)					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	521.84	6	86.97	7.04	.000
Residual	1124.13	91	12.35		
Total	1645.97	97			

Coefficients (defect_rate)					
	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	-1.48	6.67	.00	-.22	.825
order_qty	.00	.00	-.14	-1.59	.116
purchasing_period	.11	.02	.51	4.66	.000
worker_efficiency	.05	.08	.06	.70	.487
finished_goods_inventory	.00	.00	.14	.97	.336
incoming_material_inventory	.00	.00	-.30	-1.97	.052
no_of_workers_needed	-.50	.22	-.22	-2.29	.024

Table 2: Linear Regression - Productivity

Model Summary (productivity)				
R	R Square	Adjusted R Square	Std. Error of the Estimate	
.13	.02	-.05	5.87	

ANOVA (productivity)					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	50.10	6	8.35	.24	.961
Residual	3135.11	91	34.45		
Total	3185.21	97			

Coefficients (productivity)					
	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	96.42	11.14	.00	8.65	.000
order_qty	.00	.00	.04	.37	.712
purchasing_period	.02	.04	.08	.62	.540
worker_efficiency	-.05	.13	-.05	-.42	.673
finished_goods_inventory	.00	.00	-.02	-.12	.901
incoming_material_inventory	.00	.00	-.04	-.23	.820
no_of_workers_needed	-.26	.37	-.08	-.70	.488

Table 3: Linear Regression - OEE

Model Summary (oee)				
R	R Square	Adjusted R Square	Std. Error of the Estimate	
.36	.13	.07	9.97	

ANOVA (oee)					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	1328.51	6	221.42	2.23	.047
Residual	9049.37	91	99.44		
Total	10377.88	97			

Coefficients (oee)					
	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	63.92	18.93	.00	3.38	.001
order_qty	.00	.00	.11	1.06	.290
purchasing_period	-.07	.07	-.12	-1.01	.315
worker_efficiency	.30	.22	.15	1.41	.161
finished_goods_inventory	.00	.00	.14	.90	.372
incoming_material_inventory	.00	.00	-.27	-1.54	.127
no_of_workers_needed	.82	.62	.14	1.32	.190

Table 4 : Linear Regression - Yield Loss

Model Summary (yield_loss)				
R	R Square	Adjusted R Square	Std. Error of the Estimate	
.36	.13	.07	15.55	

ANOVA (yield_loss)					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	3252.89	6	542.15	2.24	.046
Residual	22002.10	91	241.78		
Total	25254.99	97			

Coefficients (yield_loss)					
	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	24.32	29.52	.00	.82	.412
order_qty	.00	.00	-.01	-.09	.932
purchasing_period	-.34	.10	-.40	3.25	.002
worker_efficiency	-.13	.34	-.04	-.37	.709
finished_goods_inventory	.00	.00	-.10	-.64	.522
incoming_material_inventory	.00	.00	-.10	-.55	.585
no_of_workers_needed	-.53	.97	-.06	-.54	.589

The above results indicated that as the table 1 defect rate was the dependent variable with a regression coefficient of R=0.56 (p< 0.000), statistically significant, the factors

purchasing period ( $p < 0.000$ ) and the number of workers needed ( $p < 0.024$ ) were significant. Also, as the table 4 yield loss was the dependent variable with a regression coefficient of  $R = 0.36$  ( $p < 0.046$ ), statistically significant, the factor, purchasing period ( $p < 0.002$ ), was significant.

As the table 2 productivity and table 3 OEE were the dependent variables, there were no any factors statistically significant.

**On Research Question 1: Could traditional KPI explain defect rate and yield loss?**

From above results see tables 1-4, traditional, standard KPIs used by the manufacturing industries, like productivity, worker efficiency, or inventory, etc., could not explain and forecast, with statistical significance, the defect rate and yield loss.

While regression did not yield any significant relationships between the various KPIs and defect rates or yield losses, a series of t-tests and other analyses reviewed something different.

**Further On Research Question 2: Could the product attributes explain and forecast the defect rate and further yield loss?**

As KPI data was analyzed again through t-test, set alpha  $\alpha$  level as 0.05 and the results for types of items<sup>4</sup> were as shown in the following tables 5-7 below:

Table 5: T-Test–Type I Items Table 6: T-Test–Type II Items Table 7: T-Test–Type III Items

Independent Samples Test	Levene's Test for Equality of Variances										t-test for Equality of Means											
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		Lower	Upper	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		Lower	Upper
								Lower	Upper										Lower	Upper		
Purchasing_Period	Equal variances assumed	15.34	.00	-0.54	98.00	.03	-9.80	3.05	-15.75	-3.75	-2.25	Equal variances not assumed	15.34	.00	-0.54	98.00	.03	-9.80	3.05	-15.75	-3.75	-2.25
	Equal variances not assumed																					
Defect_Rate	Equal variances assumed	10.90	.00	2.41	50.00	.02	1.06	.85	3.65	-.27	1.79	Equal variances not assumed	10.90	.00	2.41	50.00	.02	1.06	.85	3.65	-.27	1.79
	Equal variances not assumed																					
Productivity	Equal variances assumed	.04	.83	.40	50.00	.69	.53	1.17	2.85	-1.78	1.78	Equal variances not assumed	.04	.83	.40	50.00	.69	.53	1.17	2.85	-1.78	1.78
	Equal variances not assumed																					
OEE	Equal variances assumed	2.91	.11	1.45	98.00	.15	3.02	2.12	-1.54	7.53	7.53	Equal variances not assumed	2.91	.11	1.45	98.00	.15	3.02	2.12	-1.54	7.53	
	Equal variances not assumed																					
Yield_Loss	Equal variances assumed	5.45	.02	2.40	50.00	.02	7.54	3.32	-4.23	1.05	1.05	Equal variances not assumed	5.45	.02	2.40	50.00	.02	7.54	3.32	-4.23	1.05	
	Equal variances not assumed																					
Finished_Goods_Inventory	Equal variances assumed	3.32	.07	-1.28	98.00	.19	-193.03	9722.81	-13223.28	12433.51	12433.51	Equal variances not assumed	3.32	.07	-1.28	98.00	.19	-193.03	9722.81	-13223.28	12433.51	
	Equal variances not assumed																					
Incoming_Material_Inventory	Equal variances assumed	.86	.36	2.38	98.00	.03	-2548.09	1444.04	-4839.00	-212.08	-212.08	Equal variances not assumed	.86	.36	2.38	98.00	.03	-2548.09	1444.04	-4839.00	-212.08	
	Equal variances not assumed																					
No_Of_Workers_Needed	Equal variances assumed	25.08	.00	13.41	98.00	.00	2.32	.71	2.40	3.13	3.13	Equal variances not assumed	25.08	.00	13.41	98.00	.00	2.32	.71	2.40	3.13	
	Equal variances not assumed																					
Order_Qty	Equal variances assumed	.04	.84	-2.54	50.00	.45	320.48	272.22	-741.54	888.58	888.58	Equal variances not assumed	.04	.84	-2.54	50.00	.45	320.48	272.22	-741.54	888.58	
	Equal variances not assumed																					

Table 8 : A Summary For Three Types Of Items and Their Significant Different KPI Factors Relationship

Type of Items	KPI Factors									
	Purchasing Period	Defect Rate	Productivity	OEE	Worker Efficiency	Yield Loss	FG Inventory	Incom Mat'l Inventory	No Of Workers Needed	Order Qty
I - More Prd Step & Less Prd Step	S	S				S				
II - Large Size & Small Size	S						S	S		
III - New Model & Old Model	S	S				S	S			

Remarks: S = Significantly Different

<sup>4</sup> Type I (complexity) = More/Less-Production-Step, Type II (size) = Large/Small-Size, Type III (model) = New/Old-Model



It was found that each type of items had significant difference existed for KPI factors or order quantities, namely as follows:

Type I<sup>4</sup> (complexity) Item, had significant difference in the KPI factors of raw material purchasing period, defect rate and yield loss.

Type II<sup>4</sup> (size) Item, had significant difference in the KPI factor of purchasing period, finished goods inventory and incoming material inventory.

Type III<sup>4</sup> (model) Item, had significant difference in the KPI factors of purchasing period, defect rate, yield loss and finished goods inventory.

To improve the interpretability of factors through axis rotation, it was to carry out the orthogonal rotation by varimax in PSP, see tables 9-14

Table 9 : Total Variance

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.35	25.76	25.76	3.35	25.76	25.76	2.14	16.43	16.43
2	2.24	17.27	43.03	2.24	17.27	43.03	2.63	20.24	36.66
3	1.27	9.80	52.83	1.27	9.80	52.83	.17	1.28	37.94
4	1.21	9.30	62.13	1.21	9.30	62.13	.16	1.21	39.15
5	1.03	7.93	70.05	1.03	7.93	70.05	.22	1.69	40.84
6	1.01	7.76	77.82	1.01	7.76	77.82	1.09	8.41	49.25
7	.88	6.73	84.55						
8	.74	5.68	90.23						
9	.46	3.55	93.77						
10	.33	2.57	96.34						
11	.19	1.49	97.83						
12	.15	1.15	98.98						
13	.13	1.02	100.00						

Table 9 indicated the Eigenvalues in terms of the percentage of variance explained were components 1-6 got through the extraction sums of squared loadings and rotation sums of squared loadings.

Before & After Rotation, tables 10 -11 below were shown

Table 10 : Component Matrix

Component Matrix	Component					
	1	2	3	4	5	6
Item_Prd_Step	-.62	.46	-.19	-.17	.07	.02
Item_Size	.50	.51	-.10	-.02	-.21	-.14
Item_Model	.59	-.41	-.14	.05	-.14	.15
PUR_PRD_Period1	.76	.16	.02	-.02	-.09	.26
Defect_Rate1	.55	-.35	-.01	.04	-.01	-.40
Productivity	.07	-.18	.03	.01	.01	-.12
OEE	-.31	.11	.00	.00	.05	-.07
Worker_Efficiency	.24	.34	.01	-.04	.02	.01
Yield_Loss	.38	-.27	.00	-.04	.07	.18
Finished_Goods_Inventory	.60	.63	.19	-.16	.01	-.05
Incoming_Mat_Inventory	.71	.58	-.11	.17	.27	-.01
No_Of_Workers_Needed	-.58	.62	.08	.24	-.14	.06
Order_Qty1	-.06	.32	-.10	-.05	-.12	-.09

Table 11 : Rotated Component Matrix

Rotated Component Matrix	Component					
	1	2	3	4	5	6
R_Item_Prd_Step	-.61	-.05	-.21	.04	.17	-.47
R_Item_Size	.07	.69	.07	.00	.31	.06
R_Item_Model	.71	.02	.03	.07	.08	.26
R_PUR_PRD_Period1	.59	.57	.06	-.03	.01	-.01
R_Defect_Rate1	.32	.13	.00	.05	.03	.67
R_Productivity	.06	-.07	.00	-.01	-.02	.21
R_OEE	-.30	-.10	-.02	.01	.00	-.10
R_Worker_Efficiency	.00	.41	-.01	.00	.03	-.07
R_Yield_Loss	.47	.03	-.07	.01	-.12	.11
R_Finished_Goods_Inven	.07	.88	-.01	-.18	-.01	-.01
R_Incoming_Mat_Inven	.17	.90	.00	.34	-.09	.02
R_No_Of_Workers_Needed	-.64	.07	.33	.02	.11	-.51
R_Order_Qty1	-.21	.20	.00	-.01	.22	-.11

Removing all components with loading magnitudes < 0.4, tables 12-13 below were shown

Table 12 : Component Matrix

Table 13 : Rotated Component Matrix

Component Matrix							Rotated Component Matrix							
	Component							Component						
	1	2	3	4	5	6		1	2	3	4	5	6	
<i>Item_Prd_Step</i>	-.62	.46					<i>R_Item_Prd_Step</i>	-.61						-.47
<i>Item_Size</i>	.50	.51					<i>R_Item_Size</i>		.69					
<i>Item_Model</i>	.59	-.41					<i>R_Item_Model</i>	.71						
<i>PUR_PRD_Period1</i>	.76						<i>R_PUR_PRD_Period1</i>	.59	.57					
<i>Defect_Rate1</i>	.55						<i>R_Defect_Rate1</i>							.67
<i>Productivity</i>						-.40	<i>R_Productivity</i>							
<i>OEE</i>							<i>R_OEE</i>							
<i>Worker_Efficiency</i>							<i>R_Worker_Efficiency</i>		.41					
<i>Yield_Loss</i>							<i>R_Yield_Loss</i>	.47						
<i>Finished_Goods_Inventory</i>	.60	.63					<i>R_Finished_Goods_Inven</i>			.88				
<i>Incoming_Mat_Inventory</i>	.71	.58					<i>R_Incoming_Mat_Inven</i>			.90				
<i>No_Of_Workers_Needed</i>	-.58	.62					<i>R_No_Of_Workers_Needed</i>	-.64						-.51
<i>Order_Qty1</i>							<i>R_Order_Qty1</i>							

Through the factor analysis, the following table 14 was to summarise the correlation among the product attributes, KPIs and order quantities, with components 1-6 re-labelling.

Table 14 : A Correlation Among Three Types of Items, KPI Factors & Order Qty

Factor Analysis for 98 items, rotated														
KPI Factors	More Prd Step & Less Prd Step	Large Size & Small Size	New Model & Old Model	Purchasing Period	Defect Rate	Productivity	OEE	Worker Efficiency	Yield Loss	FG Inventory	Incom Mat Inventory	No Of Workers Needed	Order Qty	Type Of Item Related
1	V		V	V					V				V	I - More Prd Step & Less Prd Step III - New Model & Old Model
2		V		V				V		V	V			II - Large Size & Small Size
3														I - More Prd Step & Less Prd Step II - Large Size & Small Size III - New Model & Old Model
4														I - More Prd Step & Less Prd Step II - Large Size & Small Size III - New Model & Old Model
5														I - More Prd Step & Less Prd Step II - Large Size & Small Size III - New Model & Old Model
6	V				V								V	I - More Prd Step & Less Prd Step

Remark: V = Variance

Complex, New products requiring time to learn

Big-sized products affecting finance (inventory) and man hours

Complex products requiring time to learn

As referred to the table 14 above, component 1 had major variable loading in More/ Less-Production-Steps (complexity), New/ Old-Models, Purchasing Period and No. of Workers Needed and had minor variable loading in Yield Loss. Therefore, component 1 belonged to Type I item (complexity) and Type III item (model), i.e. complex and new products needed workers to take time to learn.

Component 2 had major variable loading in Size, Purchasing Period, Finished Goods Inventory and Incoming Material Inventory and had minor variable loading in Worker Efficiency. Therefore, component 2 belonged to Type II item (size), i.e. big size products affected inventory level and workers' production efficiency.

Components 3-5 with no factors included, had no major or minor variable loading in any factors. Components 3-5 were considered as Type I item (complexity), or Type II item (size), or Type III item (model).

Component 6 had minor variable loading in More/ Less-Production-Steps (complexity) and was considered to be Type I item (complexity) and Type III item (model), i.e. complex products needed workers to take time to learn.

Through t-test, factor analysis, further analyses<sup>3</sup> and k-means clustering<sup>3</sup>, the results indicated the product attributes had relationship with traditional KPIs to affect the defect rate and yield loss.



### ***Aligning Research Results with Real-life Situation***

For the current manufacturing industries in Guangdong of China, they are different from last decade and are in a difficult situation because of few critical problems being tackled by them. These critical problems are two types: one type is the internal problem happened in China whereas the other type is the external problems affected by the global economy.

For the internal problem, manufacturing industries are facing labour shortage with reasons as follows:

-as the local Chinese government implemented the land & pro-rural state policies in the 21<sup>st</sup> century, to attract people to stay at the villages to help rural development and to improve economy in the hinterland provinces<sup>5</sup> (Zhan, & Huang, 2013), this causes many workers unwilling to work at the manufacturing industries in Guangdong provinces.

-the Chinese government implemented the One-Child Policy in 1979/1980 to cause national social problems e.g. a demographic imbalance ratio of population between old age and young age i.e. the number of young people is less than the number of old people, an imbalance ratio of gender between male and female that parents i.e. the number of boys born are more than the number of girls because of preferred boys. Also, the current population is aging and the society has higher percentage of old people than the percentage of young people (Zhan, 2009). As manufacturing industries preferred to employ the young female labours instead of the old male labours (Dai, & Jiang, 2018; Robert, 2004), above reasons cause serious shortage of young female labours for manufacturing industries.

-the Chinese government with hukou system controlled the flow of rural migrants to cities, contributes a part of reasons for labour shortage in Guangdong provinces (Zhan, & Huang, 2013).

For the external problems, the global world economy is getting worse in recent years, especially the Brexit in 2016 that the United Kingdom (UK) announced a withdrawal from the European Union (EU) and a Trade War happened in 2018 between US and China, As a result, the global economy as well as the customers' orders for manufacturing factories are affected and dropped.

Under internal problem (labour shortage) and external problems (economic downturn and low customer orders with low profit margin), some manufacturing industries have been shut down or moving to the other East South Asia countries such as Thailand, Malaysia, Vietnam, and etc. The rest like the metal manufacturing factory for this research study, strive to find opportunities to keep running their businesses. Therefore, some factories start to install robot arms or other automation machines to set up an automation production system so as to save labour force, reduce defects and yield loss, streamline their production processes to increase productivity, mainly to make profit for running their businesses (Karabegovic, Karabegovic, & Hadzalic, 2012).

So, the research metal manufacturing factory has installed sets of industrial robots (articulated robots) alongside stamping machines to implement automation stamping processes, involving limited labour (Karabegović, Karabegović, & Husak, 2012; World Robotics, 2018). Figure 3 shows the articulated robots installed along with stamping machines.

---

<sup>5</sup> "hinterland provinces" refers to the central and western regions in the mainland China.

Figure 3 : Articulated Robots Installation Along With Stamping Machines Line



### Conclusions of the Study

As the manufacturing industries are mostly influenced by above internal and external problems, this research study has practical and factual results which can help the manufacturing industries in China to make profit and keep running their businesses.

Practically speaking, as the sales and marketing can forecast customer orders with certain amount of profit margin i.e. the product attributes (complexity, size and models) with KPIs, the production team can consider as new KPIs to have better control of the quality of products/ items to reduce the defect rate, yield loss of the overall production. While PMC can use these forecasting, customer orders to predict the purchasing materials, better control of both incoming material and finished goods inventory, i.e. it is a better business financial control to make profit at the end.

### Implications of the Study

After above a series of test and analyses, the product attributes and manufacturing KPIs have been proved for their correlation/ significance in the research framework. There is a next process to prove the research framework is applicable and workable for the real-life situation. Therefore, it is carrying out a logistic regression to show how the research framework works (Cox & Snell, 1989) in the following table 15.

Table 15 : Logistic Regression of “Acceptable Defects” (as a Flag) with Item Size / Model / Prod\_Steps

Dependent Variable Encoding	
Original Value	Internal Value
.00	0
1.00	1

Case Processing Summary		
Unweighted Cases	N	Percent
Included in Analysis	98	100.00
Missing Cases	0	.00
Total	98	100.00

Model Summary			
Step	-2 Log Likelihood	Cox & Snell R Square	Nagelkerke R Square
Step 1	94.79	.28	.38

Classification Table			
Observed	defect_flag	Predicted	
		defect_flag	Percentage Correct
Step 1	.00	19	47.00
	1.00	9	85.94
Overall Percentage			72.45

Variables in the Equation						
Step	Item	B	S.E.	Wald	Sig.	Exp(B)
Step 1	Item_size	1.47	.55	7.20	.007	4.34
	Item_model	2.27	.76	18.63	.000	26.35
	Item_prod_step	1.60	.72	4.95	.026	4.96
	Constant	-2.60	.83	9.80	.002	.07

After a logistic regression analysis is used to test the tendency how the product attributes cause the defect rate and the customers possibly accept the defect rate, the results in table 15 show that there is a significant effect between a tendency of the product attributes (complexity, size and model) causing the defect rate and the customers possibly accept the defect rate. This means that the customers do not tend to reject the shipment lots with defect items. As a result, this will then increase the sheet metal manufacturing companies, factories and businesses' profit.

As further testing the variables in the equation in the table 15 by inserting the different combination of product attributes, there is a testing result in the table 16 as shown below:

Table 16 : Different Combination of Product Attributes with Different Results by Using the Variables in the Equation.

Defect Flag = (Item_Size*1.47) + (Item_Model*3.37) - (Item_Prod_Step*1.68) - 2.68					
Items Combination					
Item_Size	Item_Model	Item_Prod_Step	=	Result	Significant?
0	0	0	=	-2.6	No
0	0	1	=	-1	No
0	1	0	=	0.67	Yes
0	1	1	=	2.27	No
1	0	0	=	-1.13	No
1	0	1	=	0.47	Yes
1	1	0	=	2.14	No
1	1	1	=	3.74	No

The above testing on the variables in the equation is to prove and to have further applied the research framework to the real situation (Menard, 2002).

The testing result by using the variables in the equation shows that there are significant differences : 0.67 in the combination of product attribute “model” and 0.47 in the combination of product attributes “size and complexity”.

Therefore, it has further statistical study in table 17 to find out how is the probability that the different combinations of product attributes to cause the different levels of defect rate in order to find out which levels of defect rate the customers can tolerate to accept the shipment lots without any rejection.

Table 17 : The Different Level of Defect Rate Against the Different Combinations of the Product Attributes

Defining low defects?	Cox & Snell R <sup>2</sup>	Nag R <sup>2</sup>	What's significant? (p<.05)		
			Item Size?	Model?	Step?
0-0.5	.19	.28	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-0.6	.21	.30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-0.625	.25	.35	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-0.65	.25	.35	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-0.675	.28	.38	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-0.68	.28	.38	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-0.7	.28	.38	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-0.725	.26	.35	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-0.75	.26	.35	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-0.8	.19	.25	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-0.9	.20	.27	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-1	.21	.28	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-1.1	.21	.28	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-1.2	.21	.29	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-1.3	.25	.33	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-1.4	.26	.34	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0-1.5	.24	.31	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

From the table 17, it shows that there are different varieties of combination of product attributes, Cox & Snell R-Square & Nag R-Square values, and the defect rate level that customers can tolerate to accept the corresponding shipment lots. As the Cox & Snell R-Square 0.28 and the Nag R-Square 0.38 are the highest values of percentages among others, the corresponding combinations of product attributes are the best combination of complexity, size and model, and the corresponding range of defect rate level is from 0-0.675 to 0-0.7 which prove customers can tolerate to accept the corresponding shipment lots with these range of defect rate. The research framework is workable and functional in the real situation.

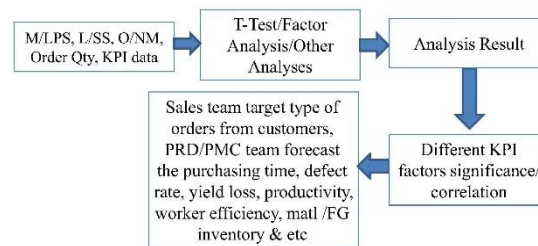
Based on above research study results, similar sheet metal manufacturing factories with ISO certified system can adopt this research framework with product attributes & KPIs concept in their production & operation to target the orders with controlling low defect rate and then yield loss, to make high productivity, to control low finished goods inventory or incoming material inventory, to reduce shipment delay and finally to get their business in a competitive, always making profit organizations in China.

Namely, sales and marketing team based on above analyses i.e. the product attributes, other traditional KPIs, including purchasing period (delivery time), level of inventory, yield loss, productivity and manpower allocation and so on, can forecast and target which orders

from customers, are best for factory to make more profit and easy production, easy material purchasing, less defect rate and yield loss, better to have inventory control for both incoming material and finished goods.

Production Team can estimate and minimize defect rate, yield loss for customer orders provided from Sales team so as to complete the production on time with low cost. PMC can carefully manipulate those significant KPI factors such as lead time for the incoming material purchasing from suppliers, incoming material inventory supported for production and finished goods inventory controlled to meet on-time-delivery, without causing any dead stock. To summarize implications, it comes to analysis result processes in Figure 4.

Figure 4 : Analysis Result Processes



Conceptually, this means defects are no longer something controlled by the production line people but rather, the sales and marketing people are the ones who truly control defects and then yield loss.

## References

- Cheng, R. & Li, P.Y., (2016), How Product Attributes Affect KPI: A Case Study Of A 500-Worker Metal Stamping Factory In China. *International Journal of Business, Economic and Law*, 11(2), 16-25.
- Construction Excellence Limited (2015). *KPI and Benchmarking*. Retrieved Mar, 2015, from <http://constructingexcellence.org.uk/kpis-and-benchmarking/>
- Cox, D.R. & Snell, E.J. (1989), *Analysis of Binary Data* ( 2nd Edition). London, New York: Chapman & Hall.
- Dai, Z.H., & Jiang, W.W. (2018), A Qualitative Content Analysis of the Two-Child Policy on Chinese News Media. *China Media Research*, 14(3), 73-81.
- Davidson, M. (2013). *Twenty-eight manufacturing metrics that actually matter*. Cambridge, MA: LNS Research.
- EBSCO Industries, Inc, (2016). EBSCOhost. Retrieved from <http://ezproxy.aeu.edu.my:2082/ehost/results?sid=ef55dda0-29f2-495a-b41b-09a2e3758c72%40sessionmgr106&vid=1&hid=113&bquery=%28key+AND+performance+AND+indicator%29&bdata=JmRiPWE5aCZ0eXB1PTAmc210ZT1laG9zdC1saXZl>
- Jalote, P., Dinesh, K., Raghavan, S., Bhashyam, M.R., & Ramakrishnan, M. (2000). *Quantitative quality management through defect prediction and statistical process control*. In *CMM in Practice: Processes for Executing Software Projects at Infosys*. India: Addison Wesley Longman.
- Jan, S.L., & Shieh, G. (2019) Sample Size Calculations For Model Validation In Linear Regression Analysis. *BMC Medical Research Methodology*, 19(1), 1-9.
- Karabegovic, E., Karabegovic, I., & Hadzalic, E. (2012). Industrial Robot Application Trend in World's Metal Industry. *Engineering Economics*, 23(4), 368-378.
- Karabegovič, I., Karabegovič, E., & Husak, E. (2012). Application Analysis of Industrial Robots Depending on Mechanical Robot Structure. *Mechanika*, 18(2), 118-122.



3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Cophorne Hotel, Cameron Highland, Malaysia  
29<sup>th</sup>-30<sup>th</sup> June 2019

- Menard, S.W. (2002). *Applied Logistic Regression* (2nd ed.). Thousand Oaks, Calif. : SAGE Publications
- Roberts, D. (2004), Is China Running Out of Workers? *Business Week*, (3905), 60.
- ServiceNow (2016). *KPI Library*. Retrieved from <http://kpilibrary.com/>
- Su, X.Q., & Yan, X. (2009). *Linear Regression Analysis: Theory And Computing*. Singapore: World Scientific Publishing Co. Pte. Ltd.
- World Robotics, (2018). *Sources and Methods WR Industrial Robots 2018. IFR – International Federation of Robotics*. Retrieved from <file:///E:/PhD%20Working/2018%20Oral%20Defense/Supporting%20papers/Sources%20and%20Methods%20WR%20Industrial%20Robots%202018.pdf>
- Zhan, H.J. (2009), Elder Care In China. In J.L. Powell & S.Y. Chen, *Aging in Perspective and the Case of China : Issues and Approaches* (pp. 161-173). Hauppauge, N.Y. : Nova Science Publishers, Inc.
- Zhan, S.H., & Huang, L.L. (2013), Rural Roots of Current Migrant Labor Shortage in China: Development and Labor Empowerment in a Situation of Incomplete Proletarianization. *Studies in Comparative International Development*, 48(1), 81-111.



## WORK ETHICS IN ISLAMIC PERSPECTIVES: ANALYSING THE ATTRIBUTES

Nur`Ain Achim<sup>1</sup>  
Hairunnisa Ma`amor<sup>2</sup>

<sup>1</sup>Faculty Business and Management, Universiti Teknologi MARA (UiTM), Malaysia, (E-mail: ainachim@uitm.edu.my)

<sup>2</sup>Faculty Business and Management, Universiti Teknologi MARA (UiTM), Malaysia, (Email: hairun2952@uitm.edu.my)

---

**Abstract:** *Islamic work ethics (IWE) perform the right and wrong practices of an individual, group or organization which guided by the rules and regulation state in Islam. Most of the people at every level of the organization must obey, follow and practice the guidance properly. People are expected to bring out all responsibilities with competent and sensibly of Islam. However, the practices of Islamic work ethics less existence and awareness to practice due to several reasons of the routine, lack to change and even lack reinforcement by the management. As a result, people tend to do wrong practice as bribe, untrusted or untruthfulness of their responsibilities. Therefore, this study aimed to investigate the practices of Islamic work ethics among employees from selected private finance companies. The finding ranked and described 17 of Islamic work ethics practices. In conclusion, the finding ultimately implies to employees and management practices to result in the harmonization of a work environment and sustain high-performance work practices as aligned to the path direction of Islam.*

**Keywords:** *Islamic Work Ethics, Organizational Behaviour, Islamic Management Practices*

---

### Introduction

The institutionalization of Islam began in the 1980s with the introduction of The Application of Pure Values as a policy guideline for the incorporation of Islamic ethics in governance. It was developed based and relies upon to Holy Quran, the religious text of Islam. The Quran direct Muslims in Islam, in which an individual must continually struggle to work towards attaining God's satisfaction and this belief guides individual behaviour form as a concept of Islamic work ethic (IWE). Islamic work ethic refers to the best form of worship, ethical, rightful fundamental obey to the regulation and obligation, must be the spirit of work and work maintains confidence and self-reliance (Ali, 2005). The ethics regulate and influence an individual and organization behaviour to perform their work according to the Islamic principles and teaching. Definitely, the logical implications of the work ethic might reveal an individual's attitudes and behaviour towards his or her work for organizational successes.

### Literature Review

#### Islamic Work Ethics

The study of Islamic work ethic has received attention in the literature particularly in the organizational setting and various industries (Ali & Al Qwaihan, 2008; Yousef, 2001; Furnham and Rajamanickam, 1992). However, not much is known about Islamic work ethics dimensions and practice in the organization. The organization could have the idea and understanding of IWE, but for the implementation, there are still lacking and difficult to practices. To date, there are numerous researchers further discuss and identify several and

various dimensions of IWE. For example, Ali (1992) examined 17 Islamic Work Ethic and among 117 managers in Saudi Arabia. The result found that the managers were highly committed to the Islamic Work Ethic and practices. Recent to date, Chanzanagh & Akbarnejad, 2011 was studied Islamic Work Ethic with Islamic teachings for investigating an Islamic Work Ethic Construction in Iran. This construct is examined with a sample group consisting of 262 individuals indicated that the IWE items apply with six dimensions instead of the seven, and the six factors explain 59% of the variances inobservant. There consists of work intentions, trusteeship, work type, work results for Islamic ummah, justice and fairness, cooperation and collaboration and work as the only source of ownership (Chanzanagh & Akbarnejad, 2011).

On the other hand, Ibrahim and Nor Kamri studied eight of the IWE dimensions to employees in Islamic banking sector. It consists of religiousness, effort, competition, work obligation, quality improvement, equality, collectively, an advantage. However, the result argued the problem with the existing literature is too much influence of Arab culture with practices of Protestant Work Ethics (PWE). In essence, Protestant ethic has several elements of the development of capitalism in the Western world. To date, Alhyasat (2012) identify the effect of Islamic work ethics on the organizational citizenship behaviour in Jordanian press organizations and single out the most significant element of Islamic work ethics. The result highlights Islamic work ethics as kindness and forgiveness in dealing with employees and clients, obedience to the people in power and respecting job ethics in organizational citizenship behaviour among employees in these organizations and not applicable to a proficiency, giving advice to Muslims, sense of responsibility, justice and fairness, integrity and teamwork in setting of organizational citizenship behaviour. As shown in Table 1, there is a comparison of IWE dimensions tested by previous studies.

**Table 1:** Comparison of Islamic Work Ethics Dimension

Authors	Dimensions
Ali (1992)	<ul style="list-style-type: none"> <li>i. Laziness is a vice</li> <li>ii. Dedication to work is a virtue</li> <li>iii. Good work benefits both one's self and others</li> <li>iv. Justice and generosity in the workplace are necessary conditions for society's welfare</li> <li>v. Producing more than enough to meet one's needs contributes to the prosperity of society as a whole</li> <li>vi. One should carry work out to the best of one's ability</li> <li>vii. Work is not an end in itself but a means to foster personal growth and social relations</li> <li>viii. Life has no meaning without Work</li> <li>ix. More leisure time is good for society</li> <li>x. Human relations should be emphasized and encouraged</li> <li>xi. Work enables man to control nature</li> <li>xii. Creative work is a source of happiness and accomplishment</li> <li>xiii. Any person who works is more likely to get ahead in life</li> <li>xiv. Work gives one the chance to be independent</li> </ul>

	<ul style="list-style-type: none"> <li>xv. A successful person is the one who meets deadlines at Work</li> <li>xvi. One should constantly work hard to meet responsibilities</li> <li>xvii. The value of work is delivered from the accompanying intention rather than its result</li> </ul>
Chanzanagh & Akbarnejad, (2011)	<ul style="list-style-type: none"> <li>i. Intentions,</li> <li>ii. Trusteeship,</li> <li>iii. Work type,</li> <li>iv. Work results for Islamic Ummah,</li> <li>v. Justice and fairness,</li> <li>vi. Cooperation and collaboration</li> <li>vii. Work as the only source of ownership</li> </ul>
Alhyasat (2012)	<ul style="list-style-type: none"> <li>i. Proficiency,</li> <li>ii. Kindness and forgiveness in dealing with employees</li> <li>iii. Advice to Muslims and creativity in services</li> <li>iv. Sense of responsibility</li> <li>v. Fairness and justice</li> <li>vi. Integrity</li> <li>vii. Teamwork</li> <li>viii. Obedience</li> <li>ix. Observing dignity</li> <li>x. An honor of the profession</li> </ul>
Ibrahim (2013); Kamri (2014)	<ul style="list-style-type: none"> <li>i. Religiousness</li> <li>ii. Effort</li> <li>iii. Competition</li> <li>iv. Work obligation</li> <li>v. Quality improvement</li> <li>vi. Equality</li> <li>vii. Collectivity</li> <li>viii. Advantage</li> </ul>

### Methodology

A quantitative research methodology has been used in this study to gain information about the ideal of Islamic work ethics practices in several private financial companies in Malaysia. The population were selected because they applied sharia compliance principles in daily business activities (Achim, Ma'amor, & Mohd Rashid, 2015). The selected private financial firms were based in Kuala Lumpur, Malaysia. In addition to that, the total number of sample is 90 employees from administrative department only and the survey were distributed to all to gain the ultimate representative from the entire population, however only 84 questionnaires were returned back.

A set of structured questionnaire adapted from Yousef et. al. (2001) was used to gather and to analyse the perspective of Islamic work ethics. For a quantitative research, this study used the questionnaire with close-ended questions. The items were assessed by five Likert scales which 1 = Strongly Disagree to 5 = Strongly Agree. The data then were analysed using SPSS analysis statistics methods.

## Result and Discussion

### Respondents Analysis

There were 84 of employees were participated in this studied. Most of the respondents were dominantly by the female which total of 50 (59.5%) and the male was total 34 (40.5%). Additional, the result showed that majority of the respondents were aged between 20 to 30 years old with a total of 47 (56.0%). A total of 15 of them was aged of 30 to 40 years old (16.7%), 14 of employees were aged of 40 to 50 years old (17.9%) and only 8 of them were 50 years old and above (9.5%). Finally, the result found that most of the respondents had working experience is less than 5 years with a total of 39 (46.4%), followed by 23 of employees who had experience between 5 to 10 years (27.4%). However, there were only 7 employees who participate experienced between 10 to 15 years (8.3%). From this point of view, the result indicated that most of the employees still in new experience and learning process of the organization.

**Table 2:** Respondents Analysis

Demographic Items		Frequency	Percentage (%)
Gender	Female	50	59.5
	Male	34	40.5
Aged	20-30 years old	47	56.0
	30-40 years old	15	16.7
	40-50 years old	14	17.9
	50 years old and above	8	9.5
Working Experience	1- 5 years	39	46.4
	5 – 10 years	23	27.4
	10-15 years	7	8.30
	15 – 20 years	12	14.3
	20 years and above	13	3.60

### Descriptive analysis

A descriptive analysis was conducted to investigate the rank of several Islamic work ethics practices among the selected private companies. Table 3 showed the mean, standard deviation and rank of the items of Islamic work ethics. The first rank presented by "justice and generosity in the workplace are necessary conditions for society's welfare (M= 4.01, std=0.465). Most of the employees seek for a justice, and equality even there is workforce diversity in the organization. Next, ranked by the item of good benefits both oneself and others which indicate that people in the organization take care good each other benefits (M=4.20, Std=0.697). They concern to themselves and other needs. While statements of More leisure is not good for society (M= 2.79, std=0.913), followed by statement life has no meaning without work (M= 2.69, Std= 0.3941) and laziness is a vice (M=2.64, std=0.887).

In similar studied, Chanzanagh & Akbarnejad, (2011) found justice and fairness were at the first rank (M=65.03, std= 23.42), followed by work results for Islamic Ummah, (M=69.36, std=19.81) and cooperation and collaboration (M=65.88, std=21.6). This can be explained the priority for Islamic work ethic is justice and fairness. In this study, most employees look for justice and fairness as to ensure their contribution is balanced to the outcome or any reward return to them. On the other hand, Rokhman (2010) claimed that justice perception of employees who perceive their organizations to be ethical are likely to perceive their organization as being fair to them.

Furthermore, Alhyasat (2012) found the conscience, friendliness, altruism, sportsmanship and civilized conduct as a part of good benefits to oneself and others which refers to people in the organization take care good each other's benefits. In this study, people are concern about own self and others so that they will work not only for benefits to themselves but also to others. They also prioritize on human relations as Chanzanagh & Akbarnejad, (2011) highlight on work results for Islamic Ummah. On top of the discussion, the overall findings of this studied consistently with several similar studied of Islamic Work Ethic. Therefore, the practices of IWE in most of the organization can be nurture and promote to be practiced.

**Table 3: Descriptive Analysis**

<b>o</b>	<b>Statements</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Rank</b>
.	Justice and generosity in the workplace are necessary conditions for society's welfare	4.37	0.802	<b>1</b>
.	Good work benefits both oneself and others	4.20	0.697	<b>2</b>
.	Dedication to work is a virtue	4.11	0.770	<b>3</b>
.	One should carry work out to the best of one's ability	3.96	0.815	<b>4</b>
.	Work is not an end in itself but a means to foster personal growth and social relations	3.95	0.815	<b>5</b>
.	Producing more than enough to meet one's personal needs contributes to the prosperity of society as a whole	3.86	0.817	<b>6</b>
.	Human relations in organizations should be emphasized and encouraged	3.95	0.678	<b>7</b>
.	Creative work is a source of happiness and accomplishment	3.86	0.817	<b>8</b>
.	Any man who works is more likely to get ahead in life	3.43	0.990	<b>9</b>
0.	A successful man is the one who meets deadlines at work	3.42	0.817	<b>10</b>
1.	One should constantly work hard to meet responsibilities	3.34	0.959	<b>11</b>
2.	The value of work is derived from the accompanying intention rather than its results	2.84	0.814	<b>12</b>
3	Work gives one the chance to be independent	2.84	0.886	<b>13</b>
4.	Work enables man to control nature	2.79	0.913	<b>14</b>
5.	More leisure is not good for society	2.79	0.913	<b>15</b>
6.	Life has no meaning without work	2.69	0.941	<b>16</b>



7.	Laziness is a vice	2.64	0.887	<b>17</b>
----	--------------------	------	-------	-----------

### Conclusion

In conclusion, this study aimed to identify the level of Islamic work practices ethics among employees in the selected private companies in Kuala Lumpur. The practices involved the development of an individual's values, norms, attitude, and behavior. The positive and good norms such as justice, dedicated, good work, tolerance, interpersonal relationship and creative are the highest rank practices in an organization. The finding also highlights that important practices in Islam are to maintain a good interpersonal relationship, a balance of to the Mighty and human relations. However, the values of self-interest, work in leisure, no setting of a goal and lazy should avoid practicing in Islam. As a Muslim, employees should obey the IWE practices and have to be guided by the rules and law of Islam. The strong belief on IWE drives an individual and organization to maintain harmonization in the workplace. IWE also able to minimize the conflicts and any harm to the organization. The understanding and fundamental of IWE should be educated and learn by all people in the organization so that they able to do the right ethic and avoid of wrong ethics. The implications of this studied guide an individual to train and promote the practices of Islamic work ethics to own life and workplace. Manager are requires to support and promote the practices of IWE as the main organizational culture so that people in organization maintain good attitude, behavior and human relations.

### References

- Abbas J. A. & Abdullah A. (2008), Islamic Work Ethic: A Critical Review, *Cross Cultural Management: An International Journal*, 15(1), 5-19.
- Abbas J. A. (2013), Rethinking Work Ethics, *International Journal and Management*, 2 (23), 180-188.
- Achim, N., Ma'amor, H., & Mohd Rashid, N. (2015). Evaluating Employees' Commitment in Islamic Work Ethics Perspective. *GJBSSR*, Vol. 3 (1), July - September 2015: 251-259
- Alhyasat, M.K.K (2012) "The role of Islamic work ethics in developing organizational citizenship behavior at the Jordanian Press Foundations", *Journal of Islamic Marketing*, Vol. 3 Issue: 2, pp.139-154, <https://doi.org/10.1108/17590831211232555>
- Ali, J.A. (1992) "Islamic Work Ethic in Arabia", *Journal of Psychology*, Vol. 126 No. 5, pp. 507-517.
- Ali, J.A. (2005). *Islamic Perspectives on Management and Organization*. Edward Elgar Publishing, UK.
- Ali, J.A. and Al-Owaihian, A. (2008) "Islamic work ethic: a critical review", *Cross-Cultural Management an International Journal*. Vol. 15 No. 1, pp. 5-19.
- Allen N. J., & Meyer J. P. (1996), The Measurement and Antecedents of Affective, Continuance and Normative Commitment to the Organization, *Journal of Occupational Psychology*, 63, 1-18.
- Chanzanagh, H.E., & Akbarnejad, M. (2011). The meaning and dimensions of Islamic work ethic: initial validation of a multidimensional IWE in Iranian society. *Procedia - Social and Behavioral Sciences* 30 (2011) 916 – 924
- Furham, A. and Rajamanickam, R. (1992). The Protestant work ethic and just world belief in Great Britain and India", *International Journal of Psychology*, Vol. 27 No. 6, pp. 401-416
- Kamri, Nor'azzah Binti (2013) *Measuring The Islamic Work Ethics: An Alternative Approach*. In: *Islamic Perspective on Management: Contemporary Issues*. Akademi Pengurusan



*3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Cophorne Hotel, Cameron Highland, Malaysia  
29<sup>th</sup>-30<sup>th</sup> June 2019*

- YaPEIM & Jab. Syariah dan Pengurusan APIUM, pp. 135-163. ISBN 978-967-12262-0-9  
<https://doi.org/10.1108/17590831211232555>
- Khaled M.K. Alhyasat, (2012) "The role of Islamic work ethics in developing organizational citizenship behavior at the Jordanian Press Foundations", *Journal of Islamic Marketing*, Vol. 3 Issue: 2, pp.139-154,
- Suib, F.H. & Said, M.F. (2017). A Review Of Islamic Work Ethics And Spirituality Concepts In The Service Industry. *Journal of Nusantara Studies*, 2(2), 282-294.
- Syukurriah I., Fauziah N., Yusrina Hayati N. M. N., Fazleena A., Azmahani O. @ Y. (2011), Islamic Work Ethics (IWE) Towards the Organizational Commitment, *IEEE Colloquium of Humanities, Science and Engineering Research*.
- Yousef D. A. (2001), Islamic Work Ethics A moderator between Organizational Commitment and Job Satisfaction in a Cross-Cultural Context, *Personnel Review*, 30 (2), 152-169.
- Yousef, D.A. (2001) "Islamic Work Ethic - A Moderator Between Organizational Commitment And Job Satisfaction In A Cross-Cultural Context", *Personnel Review*, Vol. 30 No.2, pp. 152-165.



## FACTOR AFFECTING THE ECONOMIC IMPACT OF CHINA ON SELECTED ASEAN COUNTRIES

Raja Nurul Aini Raja Aziz<sup>1</sup>  
Amalina Azmi<sup>2</sup>

<sup>1</sup>Faculty of Accountancy & Management, Universiti Tunku Abdul Rahman (UTAR), Malaysia, (E-mail: aini@utar.edu.my)

<sup>2</sup>Faculty of Accountancy & Management, Universiti Tunku Abdul Rahman (UTAR, Malaysia, (Email: amalina@utar.edu.my)

---

**Abstract:** *The result of ASEAN-China Free Trade Area (ACFTA) showed that China is playing an important role in ASEAN. China's big plan which is the Belt and Road initiative is crucial to ASEAN, which may be the key in the future to generate growth and development. The trend of increasingly Sinocentric Asia is significant. The importance of China's impact drew researchers' attention to study the factors that impact from China to ASEAN. 30 data observation from the first quarter of 2011 until second quarter of 2018 are used for this analysis. Multiple linear regression model is applied to investigate the relationship between explanatory variables such as total export, import, Foreign Direct Investment (FDI) and tourist arrivals and explained variable in selected countries which are Malaysia, Singapore and Vietnam. Empirical result shows the difference outcome in each country which based on VECM test result. In Malaysia, Gross Domestic Product (GDP) of China shows negative relationship with export to China and positive relationship with tourist arrivals from China. In Vietnam, GDP of China shows negative relationship with import and tourist arrivals from China. In Singapore, GDP of China shows negative relationship with import from China and FDI while positive relationship with tourist arrivals from China. Based on the result, it is suggested to invest in FDI where the benefits including better levels of productivity and managerial talent, improved performance and more technological improvements. In addition, the result helps policymakers to understanding the area of the economic collaboration and setting up suitable policy in order to improve relationship with China to generate benefits. It is recommended to contribute on exploring the possibility of the Belt and Road initiative can be moved further on.*

**Keywords:** *Economic Impact, China, Regression, Unit Root Test, Autocorrelation, Heteroscedasticity*

---

### Introduction

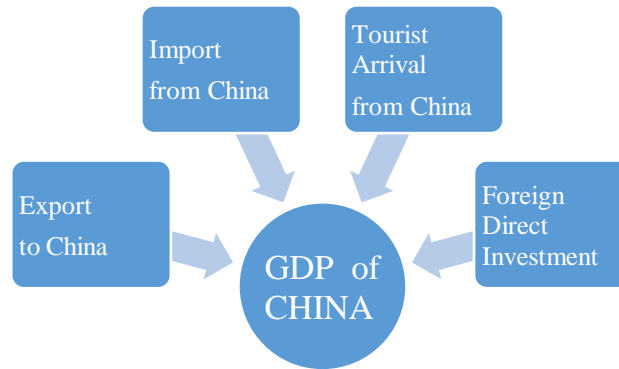
Economy in Asia has phenomenally developed. Using a coordinated exchange rate of exchange, China and India together match the economy of the United States or the European Union in size solely in year 2014 or earlier (Abdul & Klaas, 2014). Adding Japan, South Korea, Hong Kong-China, Taiwan-China, and Central Asia make Asia the largest continental economy since year 2005. Asia has been integrated internally. In year 2012, more than 51% of Asian exports are in other Asian countries. Only European trade - over 68% of them are other European countries, more intraregional. Asian intraregional trade rose almost 73% from 2007 to 2012, while European intraregional trade increased by less than 23%. Asian intra-trade, as part of total trade, and is expected to surpass Europe in 2016. The world's largest exporter from year 2008, China is rapidly overcoming the US for top importers' positions. It



shows China's trade has become very centred in Asia. About 49% of China's exports Although China relies heavily on what is happening elsewhere in Asia, most of Asia is heavily dependent on the prosperous Chinese market. This is true for both investment and trading. According to United Nations Conference on Trade and Development (UNCTAD), while China has long been a foreign direct investment destination, overseas direct investment has surged in recent years, matching foreign direct investment into 2014. Nearly half of China's FDI's come from elsewhere in Asia, and FDI's out of China across Asia are about the same as FDI abroad across Latin America. China's obviously rapid growth has a huge impact on Asia and the world (Randall & Bernard, 2016). In short, the world economy is growing; and Asia's economy is increasingly Sinocentric. However, most of the government-funded growth models of China and government are disrupted and require re-thinking. Since December 2012, the Chinese Communist Party has maintained a strong anti-corruption drive. The Third Plenum clearly mentions more market-driven resources; and President Xi Jinping recently confirmed the supply side reform. The key shift in China's economic policy, however important, raises concerns about instability, uncertainty, slow growth and deterioration elsewhere in Asia. However, the possibility of genuine reforms that reduce corruption and empower the free market to generate excitement, especially in the non-governmental sector. Everything can be a blessing.

A view of China's real GDP trend reveals (Deng, et al., 2015). China's economic climb began in the early 80's, but reached a turning point in around 2002 / 3.8 China's per capita GDP was at the sub-Saharan Africa level before the economic reforms in 1978. The very poor economy could grow rapidly simply by undermining policy- a policy that destroys them in poverty. China reverses the accumulation of excessive information, enabling private businesses, and reintroduces profit incentives in state-run firms to generate meaningful employment for unemployed workers. The market price system was determined in year 1994. From year 1998, small and medium-sized state-owned enterprises (SOEs) closed; and ownership of private homes, healthcare and land lease is permitted. The spike in foreign direct investment in the 1990s led to foreign production and management technologies. The private ownership of the business has been written into law in year 2000. The company can hired freely. Labor market mobility, in the form of foreign workers, supports growth in construction and manufacturing. All these reforms, and trade openness enacted by the WTO's participation in year 2001, have turned China into a major manufacturing hub and lifted its people from extreme poverty to a typical standard of living in emerging economies.

Many Chinese leaders are aware of the pressure and danger they take. China's current leader has developed a new "normal change" concept that signals wholesale change. The formation of the 2013 Third Plenum and the anti-corruption reform seems to be a commendable effort. Declared goals include rebalancing from growth driven by investment and towards consumption and service driven growth, managing SOE management professionals, providing more market rights, fiscal reforms and improving social security, healthcare and education. The central government liberalizes interest rates and gives the market more telling about the value of Yuan. It has also begun the renewal of migrant labor and introduced the policy of the two children's population. China may be significantly attracting emphasis on GDP growth and embarking on a renewal and restructuring program of its economic system.



**Figure 1:** Conceptual Framework For The Relationship between GDP and the factors  
Source: (Own)

This paper investigates the relationship between GDP of China and the factors such as total export, import, Foreign Direct Investment (FDI) and tourist arrivals. Through four variables, we would like to investigate which variable has a significance effect of GDP of China on selected ASEAN countries (Malaysia, Singapore and Vietnam).

### Literature Review

Gross Domestic Product (GDP), the measure of aggregate output is the word that economist use often to analyze the nation economy. It's an important number that gives the economic size of a country. There were four factors affecting the economic impact of China have been identified, namely total export, import, Foreign Direct Investment (FDI) and tourist arrivals. Duval (2014) provided quantitative evidence that changes in China's pattern of growth have a huge spill. They estimated that a 1 percentage point increase in Chia growth could boost GDP growth in the Asian median economy by about 0.3 percentage points after a year versus 0.1 percentage points for the non-Asian median economy. Among others, Arora and Vamvakidis (2010) presented some facts about China's role in the world economy, and then measured the impact of China's growth on worldwide growth in the short and long term. The short-term estimates based on Autoregression correction models and error correction suggest that the impact of overflow of China has increased in these decades. The long-term overflow effects, estimated through regression growth based on data panels, are also important and have evolved over the past decades outside of Asia. Strong estimates of global and regional shock effects, changes in specification models, and sample duration. Anuja and Nabar (2012) consider the impact of balancing China's growth from investment to consumption. The authors emphasize the fact that due to low intensive import imports in China, balancing from investment towards consumption on overflow effects paid on trading partners. Thus, the result showed that a 1 per cent drop in China's investments could potentially lead to a reduction in global growth below just 0.1 percentage points.

Barry et al. (2004) analyze the impact of China's growth on exports of other Asian countries. Their innovation is to differentiate the growing demand from China to import from increased export market penetration. Using gravity models, they separate between types of commodities and contribute to Chinese exports. The paper confirmed the tendency for China's exports to exhibit exports of other Asian countries. But this effect is felt especially in the market for consumer goods and therefore by less developed Asian economies, not on the market for capital goods or by more advanced Asian economies where equipment are largely



exports. At the same time, there is a strong tendency for China to grow rapidly to suck imports from its Asian neighbors. But this effect is mainly felt in the market for capital goods, where the slack of China's demand for import demand is highest, and therefore by the more advanced Asian economies. As a result, less developed Asian countries have had a very different effect on China's growth. In Tomoo et al.'s study (2014), they studied the adverse effects of the domestic product (GDP) on Asian economies using the Global Vector Autoregressive (GVAR) model, using the third quarter 2014 data for 33 countries. The analysis found that China's negative GDP shock affects commodity exporters, such as Indonesia, reflecting demand and trade shock terms. Countries that depend on exports in production of East Asia, such as Japan, Malaysia, Singapore and Thailand, are also seriously affected. The analysis also found that a negative shock to China's real GDP not only affects the price of crude oil, as some previous studies also show, but also on the price of metal and agricultural products. The study also investigates the impact of potential negative impacts on real US GDP in Asian countries and determines that while the US economy has greater influence on the Asian economy than China's economy, Asian countries are more vulnerable to China compared to the increased economic relationship.

A paper (Stefan et al., 2011) examines the impact on the growth of tourism-driven economic economies due to an increase in the growth rate of international tourism demand. This paper shows an official model and empirical evidence. Dynamic modeling materials are the people who optimally optimize AK agents and technologies representing production tours. This model suggests that an increase in tourism demand led to a shift in dynamics with gradual economic growth and increased trade terms. In our empirical applications, the econometrics is applied to Antigua and Barbuda's annual data from 1970 to 2008. This paper conducts analysis of cointegration to find long-term relationships between different economic growth, international tourism revenues and real exchange rates. This exercise confirmed the theoretical discovery.

A study by Uttama (2018) investigates the long-run relationship between China's direct investment flows to ASEAN economies and ASEAN's economic performance (measured by economic growth, trade, domestic investment, employment) using the Granger causality test. The result reveal that China's direct investment in ASEAN causes economic growth, international trade, and investment in ASEAN, while ASEAN's economic growth, investment, and employment cause growth in the China's FDI. There are several research papers that determine the influence of China FDI inflows on foreign direct investment. Most past research papers show that there is a significant relationship between Chinese FDI inflows and foreign direct investment either in positive or negative relationships (Salike et al., 2007).

## **Methodology**

Quarterly time series data from the first quarter of 2011 to the second quarter of 2018, comprising 30 observations. The dependent variable *gdp* is the China's GDP is used as a proxy for China's economy, The independent variable (*FDIMY*, *FDISG* and *FDIVT* for Malaysia, Singapore and Vietnam respectively) is used as a proxy for investment, the variable (*TRMY*, *TRSG* and *TRVT* for Malaysia, Singapore and Vietnam respectively) tourist arrivals used as proxies for tourism, the variable (*EXMY*, *EXSG* and *EXVT* for Malaysia, Singapore and Vietnam respectively) exports and variable (*IMMY*, *IMSG* and *IMVT* for Malaysia, Singapore and Vietnam respectively) imports used as proxies for trade.

Unit root test is also known as "Equivalent Test" and it is used to test the time series variables. Under this test, a series with constant mean, constant variance as well as continuous



autocovariance for each lag is stationary and has no unit root. Typically, there are two widely used approaches under the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) Test Root Unit Exam (Gujarati, 2009). The null hypothesis for this test is; variables are not stationary and have a unit root. Thus the data needs to be differenced to make it stationary.

Vector Autoregression (VAR) is an unrestricted vector autoregression (VAR) designed for use with stationary series that are known to be Co-integrated (Studenmund, 2014). This model will only be used if the underlying variables of the regression are stationary or Co-integrated. In VAR model, modeling the value of a variable is expressed as a linear function of the lagged values of that variable and all other variables included in the model. The main objective of this model is to develop a model primarily for forecasting and modeling purposes.

VECM is about an estimation technique used for model which having non-stationary variables and the variables are co-integrated. This paper will apply VECM when those variables are co-integrated. Co-integration carries the means in which there is long term equilibrium relationship among those variables.

Co-integration test will be carried out to determine the number of vectors of mutual integration between the variables in the long run. If a long-term balance relationship exists between a set of variables, the variable is said to be integrated. If the variables are combined together, false regression can be avoided although the variables depend on and at least one independent variable does not move (Studenmund, 2014). The null hypothesis for this test is; there is no long-run relationship between the variables. If the p-value is smaller than significant level ( $\alpha$ ), the null hypothesis will be rejected.

Normality in classical assumption VII which states that the error term is derived from a normal distribution (bell-shaped) (Studenmund, 2014). This means that the term error is normally distributed. It is a major application used in hypothesis testing. The null hypothesis for this test is; residuals are normally distributed. If the p-value is smaller than significant level ( $\alpha$ ), the null hypothesis will be rejected.

Pure serial correlation occurs when the Classic Assumption IV, which considers the observation of the error term not to be contrary to one another, is violated in the correct special equation (Studenmund, 2014). If the expected value of a simple correlation coefficient between any two observations for the error period is not equal to zero, then the term error is said to be correlated simultaneously. There are some implications of autocorrelation, which is a pure series correlation does not cause bias in the coefficient estimates. There are two features to detect serial correlation that uses Durbin-Watson or LM test. The null hypothesis for this test is; there is no serial correlation. If the p-value is smaller than significant level ( $\alpha$ ), the null hypothesis will be rejected.

## **Results And Discussion**

In order to ensure the significance of overall model and stationary between the variables, Unit Root Test needs to be applied to determine whether those variables are stationary. Stationary variable can be defined as variable with a constant mean, constant variance as well as constant autocovariance (Brooks, 2008). Stationary properties also means when there is a change in a variable during a particular time, the effect will continue for the following time which is t+1, t+2.

**Table 1: Unit Root Test For Selected ASEAN Countries**

<b>Augmented Dickey-Fuller (ADF) test</b>			
Variables	Level	1st difference	2nd difference
EXMY	-1.9200ns	-5.7713***	-8.4027***
EXSG	-3.1027**	-7.9628***	-12.0116***
EXVT	-0.9614ns	-5.5733***	-8.3828***
FDIMY	-5.5044***	-9.2036***	-10.9741***
FDISG	-4.9127***	-9.3915***	-11.4286***
FDIVT	-3.1253**	-9.5690***	-11.4494***
IMMY	-1.9641ns	-6.9008***	-9.4007***
IMSG	-2.2679ns	-9.5798***	-14.9368***
IMVT	-1.7691ns	-11.1040***	-14.5872***
TRMY	-2.0652ns	-15.4646***	-25.4245***
TRSG	-2.4051ns	-11.4760***	-21.3101***
TRVT	-1.7032ns	-8.9246***	-9.6861***
<b>Phillip-Perron (PP) test</b>			
Variables	Level	1st difference	2nd difference
EXMY	-1.8353ns	-6.2014***	-16.4371***
EXSG	-3.0480**	-12.5077***	-30.7837***
EXVT	-0.6675ns	-7.3318***	-13.0992***
FDIMY	-5.5044***	-14.2727***	-25.8352***
FDISG	-4.9140***	-16.2964***	-33.4685***
FDIVT	-3.0776**	-21.1548***	-29.6568***
IMMY	-1.8268ns	-11.9662***	-19.7699***
IMSG	-2.0759ns	-9.4759***	-39.6365***
IMVT	-1.4119ns	-28.8589***	-34.4901***
TRMY	-1.9180ns	-13.9440***	-68.3042***
TRSG	-2.2823ns	-10.7110***	-40.6311***
TRVT	-1.3266ns	-9.0203***	-16.0071***

**Note: \*\*\* denotes significant at 1% significant level and the rejection of null hypothesis.**

Source: (Own)

For Malaysia, The export (EXMY), import (IMMY), foreign direct investment (FDIMY) and tourist arrival (TRMY) are significant at first difference at  $\alpha = 0.01$  and stationary. Thus, the model can be concluded as no unit root by using Augmented Dickey Fuller (ADF) and Phillips-Peron's tests (PP). While for Singapore, The export (EXSG), import (IMSG), foreign direct investment (FDISG) and tourist arrival (TRSG) are significant at first difference at  $\alpha = 0.01$  and stationary. Thus, the model can be concluded as no unit root by using Augmented Dickey Fuller (ADF) and Phillips-Perron tests (PP). For Vietnam, The export (EXVT), import (IMVT), foreign direct investment (FDIVT) and tourist arrival (TRVT) are significant at first difference at  $\alpha = 0.01$  and stationary. Thus, the model can be concluded as no unit root by using Augmented Dickey Fuller (ADF) and Phillips-Perron tests (PP).

$$\Delta \text{gdpcn}_t = -0.7923 + 0.2276\Delta \text{gdpcn}_{t-1} - 1.1296 \Delta \text{exmy}_{t-1} - 0.4247\Delta \text{fdimy}_{t-1} - 0.2269\Delta \text{immy}_{t-1} + 0.0116\text{trmy}_{t-1} - 335.4094\varepsilon_t$$

t-statistic = [0.7142ns] [-1.5987\*] [-1.4725ns] [-0.2236ns] [2.2532\*]

$R^2 = 0.6986$  Adj. $R^2 = 0.6125$

**Figure 2: VECM For Malaysia**

Source: (Own)

In view of result (Figure 2), the independent variables accounted for about 69.86 percent of the variation in the GDP of China. Estimations reveal that the independent variables, namely export ( $\text{exmy}_{t-1}$ ) and tourist arrival ( $\text{trmy}_{t-1}$ ) in the previous period were the important independent variables that are statistically significant at the  $\alpha = 0.1$ . It also shows that export ( $\text{exmy}_{t-1}$ ) has a negative relationship effect on the China GDP ( $\text{gdpcn}_t$ ). Moreover, tourist arrival ( $\text{trmy}_{t-1}$ ) has a positive relationship effect on the China GDP ( $\text{gdpcn}_t$ ).

$$\Delta \text{gdpcn}_t = -0.4504 + 0.6520\Delta \text{gdpcn}_{t-1} - 0.6646\Delta \text{exsg}_{t-1} - 0.2558\Delta \text{fdisg}_{t-1} - 1.4835 \text{img}_{t-1} + 0.0062 \text{trsg}_{t-1} - 379.3594\varepsilon_t$$

t-statistic = [1.7074\*] [-0.9219ns] [-1.9638\*] [-1.7807\*] [1.7573\*]

$R^2 = 0.5899$  Adj. $R^2 = 0.4728$

**Figure 3: VECM For Singapore**

Source: (Own)

For Singapore, the results shows in Figure 3, the independent variable accounted for about 58.99 percent of the variation in the GDP of China. Estimations reveal that the independent variables, namely foreign direct investment ( $\text{fdisg}_{t-1}$ ), import ( $\text{img}_{t-1}$ ) and tourist arrival ( $\text{trsg}_{t-1}$ ) in the previous period were the important independent variables that are statistically significance at the  $\alpha = 0.1$ . It shows that foreign direct investment ( $\text{fdisg}_{t-1}$ ) and import ( $\text{img}_{t-1}$ ) has a negative relationship effect on the China GDP ( $\text{gdpcn}_t$ ). Besides that, tourist arrival ( $\text{trsg}_{t-1}$ ) has a positive relationship effect on the China GDP ( $\text{gdpcn}_t$ ).

$$\Delta \text{gdpcn}_t = -1.7757 + 1.2295\Delta \text{gdpcn}_{t-1} - 0.5557\Delta \text{exvt}_{t-1} + 0.2658\Delta \text{fdivt}_{t-1} - 2.1531 \text{imvt}_{t-1} - 0.0070 \text{trvt}_{t-1} - 712.7624\varepsilon_t$$

t-statistic = [2.9751\*\*] [-0.9089ns] [0.3423ns] [-3.9075\*\*] [-1.9388\*]

$R^2 = 0.6050$  Adj. $R^2 = 0.4921$

**Figure 4: VECM For Vietnam**

Source: (Own)

For Vietnam as shown in Figure 4, the independent variable accounted for about 60.50 percent of the variation in the GDP of China. Estimations reveal that the independent variable,

namely import ( $imvt_{t-1}$ ) and tourist arrival ( $trvy_{t-1}$ ) in the previous period were the important independent variables that are statistically significant at the  $\alpha = 0.1$ . Therefore, import ( $imvt_{t-1}$ ) and tourist arrival ( $trvt_{t-1}$ ) has a negative relationship effect on the China GDP ( $gdpcn_t$ ).

$$-0.7923gdpcn_t - 0.1460exmy_{t-1} + 0.3470fdimy_{t-1} - 0.0317immy_{t-1} + 20.2484trmy_{t-1} = 0$$

t-statistic = [-3.5563\*\*] [-1.6074\*] [2.1401\*] [-0.5268ns] [3.4189\*\*]

**Figure 5:** Co-integration For Malaysia  
Source: (Own)

As shown in Figure 5, for the GDP of China ( $gdpcn_t$ ) cointegration equation, the variables of export ( $exmy_{t-1}$ ), foreign direct investment ( $fdimy_{t-1}$ ) and tourist arrival ( $trmy_{t-1}$ ) are cointegrated and long-term relationship is statistically significant at  $\alpha = 0.1$  (export and FDI) and 0.01 significant level for tourist arrival. However, import ( $immy_{t-1}$ ) is not significant factor at  $\alpha = 0.05$ .

$$-0.4504gdpcn_{t-1} - 0.1652exsg_{t-1} + 1.1034fdisg_{t-1} - 0.1005img_{t-1} + 22.9776trsg_{t-1} = 0$$

t-statistic = [-2.1838\*] [-1.5788\*] [3.4475\*\*] [-1.6597\*]  
[1.7442\*]

**Figure 6:** Co-integration For Singapore  
Source: (Own)

For the GDP of China ( $gdpcn_t$ ) cointegration equation, the variables of export ( $exsg_{t-1}$ ), foreign direct investment ( $fdisg_{t-1}$ ), import ( $img_{t-1}$ ) and tourist arrival ( $trsg_{t-1}$ ) are cointegrated and long-term relationship is statistically significant at  $\alpha = 0.1$  (export, import and tourist arrival) and 0.01 level for FDI as shown in Figure 6.

$$-1.775\Delta gdpcn_{t-1} - 0.4771\Delta exvt_{t-1} - 0.1530\Delta fdivt_{t-1} - 0.4591imvt_{t-1} - 22.2200trvt_{t-1} = 0$$

t-stat = [-3.4790\*\*] [-2.3564\*] [-1.0066ns] [1.288ns] [-0.6747ns]

**Figure 7:** Co-integration For Vietnam  
Source: (Own)

Figure 7 shows that for the GDP of China ( $gdpcn_t$ ) cointegration equation, export ( $exvt_{t-1}$ ) is cointegrated and long-term relationship is statistically significant at  $\alpha = 0.1$ . However, foreign direct investment ( $fdivt_{t-1}$ ), import ( $imvt_{t-1}$ ) and tourist arrival ( $trvt_{t-1}$ ) are not significant factor at  $\alpha = 0.05$ .

**Table 2:** Normality Test For Selected ASEAN Countries

Diagnostic Tests	Results	Decision
Normality Test (Jarque- Bera)	Vietnam JB= 5.97	P-value > $\alpha$



	P-value= 0.051 $\alpha = 0.05$	Residuals are normally distributed
	Malaysia JB= 0.44 P-value= 0.8 $\alpha = 0.05$	P-value > $\alpha$ Residuals are normally distributed
	Singapore JB= 0.69 P-value= 0.71 $\alpha = 0.05$	P-value > $\alpha$ Residuals are normally distributed

Source: (Own)

From Table 2 it shows that residuals are normally distributed for all selected ASEAN countries. In a nutshell, it can be concluded that in Malaysia, Gross Domestic Product (GDP) of China shows negative relationship with export to China and positive relationship with tourist arrivals from China. In Vietnam, GDP of China shows negative relationship with import and tourist arrivals from China. In Singapore, GDP of China shows negative relationship with import from China and FDI while positive relationship with tourist arrivals from China.

### Conclusion

This paper has presented an analysis to understand the economic impact of China. The economic relationship between China and ASEAN is important as China is having huge impact to the world especially to its neighbours. China's obviously rapid growth has a huge impact on Asia and the world (Randall & Bernard, 2016). In short, the world economy is growing; and Asia's economy is increasingly Sinocentric. Based on the result it is supported that there is a relationship between GDP of China and tourist arrival from China in Malaysia, Vietnam and Singapore. It is significant shown that tourist arrival from China has the impact to the country economy growth. Furthermore, the result also shows that there is a relationship between GDP of China and Import from China in Singapore while Malaysia and Vietnam is not supported. The reason behind this is due to the Purchasing Power Parity (PPP) of Singapore is big and have a direct effect to the importation of Singapore. Besides that, the result also supported that there is a relationship between GDP of China and Export to China in Malaysia and Vietnam while the result of Singapore is not supported. The result is supported with the study (Marisa, 2014) that in the short run export growth does have an impact on GDP growth and vice versa. Moreover, it is suggested to invest in FDI where the benefits including better levels of productivity and managerial talent, improved performance and more technological improvements. In addition, the result helps policymakers to understanding the area of the economic collaboration and setting up suitable policy in order to improve relationship with China to generate benefits. It is recommended to contribute on exploring the possibility of the Belt and Road initiative can be moved further on.

### References

- Abdul, E. E., & Klaas, D., V. (2014) Projecting Global Economic Growth The Conference Board Global Economic Outlook 2015. *The Conference Board working paper*, 14-03.
- Ambrogio, C., M. Hashem, Pesaran., Alessandro, R. & Teng, T. X. (2012). China's Emergence in the World Economy and Business Cycles in Latin America. *Economia*, 12(2), 1-75.



- Arora, V. & Vamvakidis, A. (2010). China's Economic Growth : International Spillovers. *IMF Working Papers*, 15(221), 1. Retrieved from <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Chinas-Economic-Growth-International-Spillovers-24048>
- Ashvin, A., Malhar, S. N. (2012). Investment-Led Growth in China: Global Spillovers. *IMF Working Paper*, 12/267.
- Brooks, C. (2008). *Introductory econometrics for finance*. (2nd edition). Cambridge: Cambridge University Press.
- Duval, R., Cheng K., Oh K.H., Saraf R. and Seneviratne D. (2014). Trade Integration and Business Cycle Synchronization: A Reappraisal with Focus on Asia. *IMF Working Paper*, 14/52.
- Eichengreen, B. & Tong, H. (2007). Is China's FDI coming at the expense of other countries? *Journal of the Japanese and International Economies*, 21(2), 153-172.
- Eichengreen, B., Rhee, Y., & Tong, H. (2004). The Impact of China on the Exports of Other Asian Countries. *NBER Working Paper No. w10768*. Retrieved from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=592147](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=592147)
- Marisa, O., Sarah, P., & Neil, Whitman. (2014). Empirical Analysis of the Relationship between Exports and GDP. *Econometric Analysis Undergraduate Research Papers*.
- Randall, M. & Bernard, Y. (2016). China in Asia. *China Economic Review*, 40 (2016). 297–308.
- Salike, N. (2010). Investigating of the “China effect” on crowding out Japanese FDI: An industry-level analysis. *China Economic Review*, 21(4), 582-597.
- Schubert, S. F., Brida, J. G., & Risso, W. A. (2011). The impacts of international tourism demand on economic growth of small economies dependent on tourism. *Tourism Management*, 32 (2), 377–385.
- Studenmund, A.H. (2014), *Using Econometrics: A Practical Guide*, 6th Edition, Pearson, Prentice Hall. ISBN-10: 1292021276.
- Tomoo, I., Demet, K. & Hitoshi, O. (2015) The Impact of China's Slowdown on the Asia Pacific Region: An Application of the GVAR Model. *Policy Research working paper*, no. WPS 7442.
- Uttama, N.P. (2018) Spatial Estimation of the Nexus between the People's Republic of China's Foreign Direct Investment and ASEAN's Growth. *Asian Development Bank Institute*.



## EXPERIENTIAL LEARNING IN EVENT MANAGEMENT: A CASE STUDY OF EDVENTURE OF BEAUTY & THE BEAST

Siti Hafizah Binti Daud<sup>1</sup>  
Mashita Binti M.Zin<sup>2</sup>  
Myzatul Zeiha Binti Yusof<sup>3</sup>

<sup>1</sup>Centre of Liberal Arts and Languages, INTI International University (INTI), Malaysia, (E-mail: hafizah.daud@newinti.edu.my)

<sup>2</sup>Centre of Liberal Arts and Languages, INTI International University (INTI), Malaysia, (E-mail: Mashita.mzin@newinti.edu.my)

<sup>3</sup>Centre of Liberal Arts and Languages, INTI International University (INTI), Malaysia, (E-mail: myzatulzeiha.yusof@newinti.edu.my)

---

**Abstract:** *Event management education has emerged as an alternative to the related disciplines of business, tourism and hospitality. Numerous courses offered in the area of event management has raised questions on employability of graduates in requiring the students to be employed in the industry. This article explores a study offering a multifaceted perspective on the requisite skills and abilities students perceive to be associated with event management employment. By employing students' experiences and perspectives over the individual leadership and soft skills. This study employed 64 structured questionnaires and students' individual reflections. Based on the findings, the respondents agreed that positive feedback on teamwork and communication skills, project management, ability to perform and personal attitudes are significant in organizing an event. For soft skills, the study found that communication, teamwork, creative thinking, time management, event management and management are the skills needed to be improved in the future.*

**Keywords:** *collaboration learning; problem solving; event management; soft skills; team skills; leadership skills*

---

### Introduction

The focus of the employability of graduates will be on whether students will be able to execute and exercise skills they learnt in the classroom to the real world. One of the requirements of current job employability is where graduates need to be skillful in the workplace where it emphasized on the necessary soft skills. According to Yasmin and Najib (2012), the development of soft skills based on formal and informal activities at tertiary education levels is essential in college students' life. One of the challenges is to create positive and opportunities for students to develop their soft skills and preparing them with a clear understanding of the future demands.

One of the elements that the employers seek for is strong leadership skills – It is an essential element in positioning executives to make attentive decisions concerning organization's missions and goals. It focuses on the ability to delegate, inspire and communicate effectively. The objective of the research is to gain an insight into the abilities and skills that students anticipated to be associated in organizing a successful event.

This study concentrates on teamwork and soft skills required to manage an event – Edventure 4.0: The EDventure of Beauty & the Beast. The EDventure 4.0 is an event where it is a requirement for MPU2432 – Co-curriculum students need to plan and execute in order to



complete the course. The objective of the event is to invite 210 underprivileged primary school students from 22 schools in Negeri Sembilan to trigger their interest in English and Science. From this event, students are expected to demonstrate individual leadership and learn the soft skills needed to get the job done.

Students had to cooperate with each other and worked in small groups to develop segments that later will be combined to execute the event. It will be able to inspire learners and engage them as teammates to ensure that the event to be a successful event.

### **Literature Review – Using BlackBoard to assist Teaching and Learning Process**

BlackBoard is an e-learning platform where it encourages collaborative work environment that could be characterized by several terms. Online learning and teaching process is clearly connected to the environment of distance or independent learning (Daud & Rusly, 2018). Distance learning implies a distant and reciprocal interaction between student and teacher (Daud & Rusly; 2018, Kearsley & Moore, 2012). On top of that, terms used to describe distance learning are online learning and e-learning – both terms signify a two-sided relationship concerning student and teacher. The online learning environment provides freedom and independence to the users however, it requires self-discipline and self-directed learning in making sure that it is a successful process, which definitely inspire the success or failure of learners (Daud & Rusly, 2018). Both – learners and instructors must embrace the use of BlackBoard as an e-learning platform. According to Tapscott (2009), to fulfill the requirements of this technologically dynamic population, instruction ought to be catered to assist student experiential learning with interactive components, participating varied learning designs, facilitating critical thinking, and inspiring cooperative and collaborative learning experiences. Nevertheless, of the formal role of the teacher, online learning creates a chance for flexibility and revision of content that was not provided by older forms of mediated teaching and learning.

Online learning is affecting communication behavior in the education environment in general. It is moving towards the development of fresh concepts and advanced teaching techniques in teaching – learning process. It introduces new ways for teachers to teach and learners to learn. The combination of content and technology offers the teacher with a more effective and practical way to transfer knowledge and information to the students and, at the same it time enables students to learn productively and communicate with fellow course mates effectively.

### **Cooperative Learning and Teamwork-The Pedagogical Perspective**

Cooperative learning can be defined as an educational approach with the purposes to organize classroom activities into academic and social learning experiences. It has been described as “structuring positive interdependence” method where given instruction which students grouped in small learning teams - working together to solve problems or to perform tasks presented (Daud & Rusly, 2018). Referring to Felder & Brent (2018), cooperative learning is an approach to group work that minimizes the occurrence of those unpleasant situations and maximizes the learning and satisfaction that result from working on a high-performance team (Daud & Rusly, 2018). In cooperative learning, student is the prime focus and they need to work with each other, discuss, negotiate, praise, contribute and criticize each contribution made by other members in order to achieve goals and receive group performance score (Daud & Rusly, 2018).

The backgrounds of the cooperative learning model can be drawn back to the works of Dewey (1916). According to Dewey (1916) in his book *Democracy and Education* it conceived



the idea that classroom should mirror the larger society, and function as a laboratory for real life learning, whereby students can participate in small groups and learn democratic principles and behavior through daily interactions with each other (Dewey, 1916, as cited in Neo, 2004). The work on cooperative learning method also being supported by Thelan (1954,1963) with regards to the idea that cooperative learning not only can develop and improve academic learning but it is also can support the development of cooperative behavior and processes.

Through cooperative learning, students will be able to expand their understanding on the concept of teamwork in order to communicate effectively in achieving their goals. Furthermore, discussing problem tasks with others helps students to clarify their understandings, negotiate meaning and co-construct new knowledge with discussions to have the potential to transform students' thinking (Wittrock, 1990). Cooperative Learning can develop a sense of belonging on each student, where students are aware that their contribution is significant and each student or team member is equally important. Gaining soft skills from cooperative learning through teamwork would be essential for the students to develop confidence and assertiveness in completing their tasks. In addition, the foremost argument is that cooperative learning increases cognitive achievement, nurture social, and team building skills. According to Johnson & Johnson (2006), cooperative learning approaches lead to (a) higher academic achievement than competitive or individual approaches, (b) better interpersonal relationships among students, and (c) more positive attitudes towards the subject being studied and the overall classroom experience.

### **Event management-Gaining Soft Skills.**

Various courses are available and offered at tertiary educational institution on the knowledge of event management where the students can gain skills required to plan and manage an event. Twenty-nine courses associated with event management have been created in Malaysia particularly in 16 higher education institutions. Similar growth has also occurred in the United Kingdom, United States, New Zealand, and Europe and, increasingly in the last 5 years, in China and Korea (Hassanien & Dewhurst, 2005). Through event management courses, students are given opportunities to be involved in hands-on tasks; to learn and gain experience in managing event(s).

As a result, students gained useful soft skills from the hands-on tasks and learning through experiences is essential for students to prepare them for high standard of students' qualifications and skills needed to embrace new job employment requirements. Thus, greater collaboration between academics and event practitioners is seen as necessary in order to produce graduates who have the necessary training and skills to work in industry (Daud & Rusly in Junek et al., 2009).

### **The Task- Course Design**

Students are required to plan and manage an event - The EDventure 4.0: The EDventure of Beauty & the Beast. Through the event, the students need to learn how to work together to make sure that the event is successful. The requirements for the task include:

**Table 1:** The Course Structure of Co-Curriculum Subject (MPU 2432)

<p><b>Portfolio: Project Proposal - 10 marks</b></p> <p>Students are to work with group members (10 members per group) to write a project proposal using <u>MPU Project Proposal Template in the Blackboard 'About the Course' folder</u>.</p>
<p><b>Project Proposal Presentation - 10 marks</b></p> <p>Each group is to pitch their project idea for their lecturer's approval. Students are encouraged to do <i>visual presentation</i> of data using point forms, <i>tables, diagrams, charts</i> or images.</p>
<p><b>Portfolio: Group Wiki - 40 marks</b></p> <p>Each group is to update their Group Wiki weekly. Students are encouraged to present informative data in visual forms (e.g. tables, diagrams, charts, graphics or images).</p>
<p><b>Portfolio: Post-Mortem Report – 15 marks</b></p> <p>Each group is to submit their project post-mortem report after the completion of their project event by using the <u>MPU post-mortem report template in the Blackboard 'About the Course' folder</u>.</p>
<p><b>Event Presentation - 10 marks</b></p> <p>Each group is to present about the event day. The presentation should be about 10 minutes with PowerPoint slides (no more than 8 slides), followed by Question &amp; Answer session by the lecturer(s).</p>
<p><b>Individual Reflection – 15 marks</b></p> <p>Each student is to write a reflective paragraph in 200 words. They are to reflect on the following:</p> <ol style="list-style-type: none"> <li>1. What are your feelings upon completion of the project?</li> <li>2. What were the challenges you encountered while doing the project?</li> <li>3. What are the areas you could improve on yourself?</li> </ol>

### Method and Data Collection

In this research, it is a combination of mixed method analysis where it combined both quantitative and qualitative data collection. The focus in this research is experiential in nature where students have to work together in a small team scale on the real event. In this research, it will focus more on quantitative study. The unit of sample for this research is mainly Diploma students who are taking subject Co- Curriculum in INTI International University. The students were given a survey to assess their attitude towards working in cooperative learning environment. The aim of the study is to explore students' experiences and insights from the commencement of this group project, the soft and leadership skills gained; the challenges faced.

This will be done through various techniques include questionnaires, group interviews, observations and document analyses.

In this research, the four-point Likert scale design with 14 items will assess students' attitude and commitment towards the project, which was adapted from Diamond (1998). The Project Attitude Survey was administered at the end of January 2019 session where it was

measured through the following cooperative constructs in the survey; 1) Teamwork & communication skills, 2) Project Management, 3) Capability to perform, 4) Personal attitudes. 64 students from various departments; Diploma in Business, Diploma in Quantity Survey, Diploma in Information Technology, Diploma in Mass Communication, Diploma in Accounting and Diploma in Engineering. The profile of respondents is given in Table 2.

### Result Findings

In this study, there are 24 male students (37.5%) and 40 female students (62.5%) took part in the survey. The highest number of students are from Diploma in Business (34.4%) and Diploma in Mass Communication (34.4%) followed by Diploma in Information Technology (12.5%) and Diploma in Quantity Survey (4.7%) and Diploma in Engineering (4.7%). The details of the demographic of the respondents as mentioned below:

**Table 4.1:** Demographic Information of the respondents

<b>Gender</b>		
	Frequency	Percentage
<b>Male</b>	24	37.5
<b>Female</b>	40	62.5
<b>Total</b>	64	100
<b>Program</b>		
	Frequency	Percentage
<b>Diploma in Business</b>	22	34.4
<b>Diploma in Quantity Survey</b>	3	4.7
<b>Diploma in IT</b>	8	12.5
<b>Diploma in Mass Communication</b>	22	34.4
<b>Diploma in Accounting</b>	6	9.4
<b>Diploma in Engineering</b>	3	5.3
<b>Total</b>	64	100

**Table 4.2:** The questionnaire items, means and standard deviation.

Item	N	Minimum	Maximum	Mean	Std. Deviation
<b>We were able to achieve our goals</b>	64	1.00	4.00	3.3750	.67847
<b>Our group leader was effective</b>	64	1.00	4.00	3.1563	.82074
<b>I was able to contribute well to the project</b>	64	3.00	4.00	3.4375	.50000
<b>My group members contributed well to the project</b>	64	1.00	4.00	3.2656	.67241
<b>My group was able to work together effectively</b>	64	2.00	4.00	3.2813	.65390
<b>We were able to solve our challenges as a group</b>	64	1.00	4.00	3.3594	.69846
<b>My group members communicated well between each other.</b>	64	1.00	4.00	3.1875	.83333
<b>I enjoyed collaborating with my team members.</b>	64	1.00	4.00	3.2813	.70076
<b>My collaboration was a challenge, but I enjoyed it.</b>	64	2.00	4.00	3.3750	.51946
<b>I found the collaboration motivating</b>	64	2.00	4.00	3.3281	.50567
<b>This collaboration enhanced my personal development.</b>	64	2.00	4.00	3.3438	.51080
<b>I learnt more from collaboration with my team than on my own.</b>	64	1.00	4.00	3.1719	.72495
<b>My group members taught me something I would not have learnt on my own</b>	64	1.00	4.00	3.1250	.74536
<b>Overall, I'm enjoyed working with my friends' commitment in finishing our assignment together</b>	64	1.00	4.00	3.2656	.71807

Valid N (listwise)	64				
--------------------	----	--	--	--	--

In addition to the survey on students' perspectives towards cooperative learning environment, students are also required to share feedback upon the event and answer to a series of closed ended questions on soft skills required to complete the event (Table 4.1). This paper has strengthened with data collected from students' feedback and the questionnaires answered by the students. The questionnaires are to identify set of soft skill variables that affect the students' perceptions in completing their task in organizing an event.

## Questionnaire Result

**Table 4.3:** Percentage responses on cooperative survey items for this cooperative learning environment (N=64).

	<i>DESCRIPTIVE</i>	<i>STRONGLY DISAGREE</i>	%	<i>DISAGREE</i>	%	<i>AGREE</i>	%	<i>STRONGLY AGREE</i>	%
1	We were able to achieve our goals	2	3.1	1	1.6	32	50	29	45.3
2	Our group leader was very effective.	4	6.3	5	7.8	32	50	23	35.9
3	I was able to contribute well to the project.					36	56.3	28	43.8
4	My group members contributed well to the project.	1	1.6	5	7.8	34	53.1	24	37.5
5	My group was able to work together effectively.			7	10.9	32	50	25	39.1
6	We were able to solve our challenges as a group.	2	3.1	2	3.1	31	48.4	29	45.3
7	My group members communicated well between each other.	4	6.3	5	7.8	30	46.9	25	39.1
8	I enjoyed collaborating with my team members.	1	1.6	6	9.4	31	48.4	26	40.6
9	My collaboration was a challenge, but I enjoyed it.			1	1.6	38	59.4	25	39.1
10	I found the collaboration motivating			1	1.6	41	64.1	22	34.4
11	This collaboration enhanced my personal development			1	1.6	40	62.5	23	35.9
12	I learn more from collaboration than on my own	2	3.1	6	9.4	35	54.7	21	32.8
13	My group taught me some things I would not have learnt on my own	2	3.1	8	12.5	34	53.1	20	31.3
14	Overall, I am enjoyed working with my friends' commitment in finishing our assignment together.	3	4.7	1	1.6	36	56.3	24	37.5

As shown in table 4, the majority of the students shared positive attitudes and perceptions in the questionnaire. Therefore, this cooperative constructs (and skills) can be analyzed.

## Teamwork and Communication Skills



Items 3,4,5,6 and 7 in the survey were used to measure students' teamwork, leadership and communication skills (refer to Table 4). These items reflect on how students responded on working together as a group, and solved their group problems. The study reported high means on these items. 89.1% of students responded positively that they individually contributed well to the project (item 3:  $m=3.43$ ). The students admitted that 90.6% their group members equally contributed well in their project (item 4:  $m=3.26$ ). When it comes to working together well and effectively, the result shows 89.1% of the students responded optimistically with overall teamwork shown by their group members (Item 5:  $m=3.28$ ). The result shown strong indication that group members have the ability to solve their challenges as a group (Item 6, 93.7%,  $m=3.35$ ). Meanwhile, item 7 shows 86% respondents said that the students can communicate with their group members ( $m=3.18$ ).

### **Project Management**

Moreover, in this study, the researchers intended to measure project management skills by measuring item one and two in the enquiry (refer to Table 1.3). The students were asked about their capability in completing their group tasks and respondents' perceptions on their leaders. The data shared the level of confidence that they can complete their tasks in timely manner 95.3% (Item 1:  $m=3.37$ ) while item 2 reflects that the group members were convinced with the effectiveness of their group leaders (85.9%,  $m=3.15$ ).

### **Ability to Perform**

Finally yet importantly, item 11, 12 and 13 inquire to measure students' ability to perform within the cooperative setting (see table 4). These items examined how much students comprehended from the project and do they gained skills in the group environment rather than on their own. Individually, the respondents answered 98.4% felt that the collaboration was positive and they had enhanced their learning of the project (Item 5,  $m=3.34$ ). Meanwhile, 87.5% of the respondents reported that they did learn more from the group than if they were to do the task on their own (Item 12,  $m=3.17$ ). For item 13 the respondents certainly agreed that their group as overall did teach them something which they would not have learnt on their own 84.4 % ( $m=3.12$ ).

### **Personal Attitudes**

Finally, the questionnaire tried to engage with students' personal attitudes towards the group project especially on the personal enjoyment and motivation. Items 8, 9 and 10 are meant to measure this paradigm. Students reported positive reaction that they enjoyed cooperating with their team members for Item 8, (mean= $3.28$ , 89%). Meanwhile, 98.5% agreed that the journey in organizing an event is challenging, but they enjoyed doing it ( $m=3.37$ ). Finally, 98.5% of the respondents found that the project to be motivating by referring to Item 10 ( $m=3.32$ ).

### **Soft Skill Variable**

The students were asked to select five out of ten soft skills that they have developed from the project event (Junek, Lockstone & Mairs, 2009) which are; communication (84.8%), Teamwork (83.3%) Time Management (69.7%) Event Management (65.2%), Analytical Skill and Problem Solving (65.2%), Creative Thinking (63.6%), commitment (50%), Stress management & Behavior Management (42.4%), Leadership (40.9%) and Organizational Skill (1.5%).

### **Soft skill variable**



The students were asked to select five out of ten soft skills that you learnt and improve from the project event (Junek, Lockstone & Mairs, 2009) which are; communication (84.8%), Teamwork (83.3%) Time Management (69.7%) Event Management (65.2%), Analytical Skill and Problem Solving (65.2%), Creative Thinking (63.6%), commitment (50%), Stress management & Behavior Management (42.4%), Leadership (40.9%) and Organizational Skill (1.5%).

**Table 4.4: Soft Skill**

<b>Soft Skill</b>	<b>Number</b>	<b>%</b>
<b>Communication</b>	56	84.8
<b>Analytical Skill &amp; Problem Solving</b>	43	65.2
<b>Stress Management</b>	48	42.4
<b>Creative Thinking</b>	42	63.6
<b>Teamwork</b>	55	83.3
<b>Leadership</b>	27	40.9
<b>Commitment</b>	33	50
<b>Behavior Management</b>	28	42.4
<b>Time Management</b>	46	69.7
<b>Event Management</b>	43	65.2
<b>Organizational Skill</b>	1	1.5

This data is supported with the students’ feedback in answering the question below:

**1) What are the areas that you could improve on yourself in event management?**

Analysis of the written comments revealed that the students, there are five soft skill variables that is needed in event management: communication (55 comments), time management (31 comments), creative thinking (17 comments), Management (15 comments) and teamwork (13 comments).

**Personal Development: Communication and Teamwork**

Personal development is seen as the major benefit from the EDventure 4.0 event. This event engaged and even educated students, in helping them to organize an event that more enjoyable and meaningful. It is interesting to know that to most students, the journey of organizing an event was as important as the event itself. Many reported the excitement of talking with their classmates and instructor in class and spending time to discuss the event’s journey. The EDventure 4.0 was seen as the development of relationships on an evolutionary basis. It is because many of the respondents stated about the importance of this event in forming solidarity from common experiences in organizing the event. Interestingly, students treated the journey in organizing an event as positive experience that gave everyone the chance to “connect” with the group members and classmates in general. One student wrote in the journal “I can improve myself such as trusting teammates, trust is crucial to teamwork, and it starts with people knowing each other”. The EDventure 4.0 is an event that offered the sort of enriching interpersonal experience. Experiential learning took place as it recognized as the central focus in educational endeavors due to they are experiences, lived social events that become way of knowing. One student wrote:

“I could improve my communication skills. From the group project, I learn how to improve my communication skills. It also important for group bonding. Group bonding is very



important to finish the project successfully. Hence, I got to improve on communication skills, which is one of the reasons of the successful ending of the event...”

The personal experiences included relationships between students and students and instructors. For example, students tended to disagree during the first five weeks of class where the students need to develop games and decorations for the children based on the theme given. Some of them refused to work in the groups due to different courses and unexplained reasons. By organizing the event together, the students tried to overcome personal conflicts and move towards common goals. One of the students wrote:

“I learned how to improve on how to communicate more with my team members and children and understand team communication can complete projects in a quicker and more efficient amount of time than others.”

“I could improve my communication skills. I should express all my thoughts and ideas to my teammates to achieve consensus. I developed strong communication skills that would increase the chance for successful relationships.”

### **Personal Development: Behavior Management**

Furthermore, while organizing the EDventure 4.0, the Diploma students experienced face-to-face interaction with the primary school students and learn how to communicate with them. Their initial perception of the primary school students were naive at the same time active. During the event, the Diploma students were surprised on how they handle the primary school students psychologically as mentioned by one of the students:

“..If I could improve on myself, it would the way on how I communicate with the primary school students. This is because this is the first time I organized an event with primary school students, so I was lacking with the experience on how to communicate with the students. Maybe I was not polite enough when I talk with the students”

Besides the communication and teamwork, the students learned over creative thinking and problem solving. While organizing the EDventure 4.0, the students are encouraged to think creatively in game formulation and designing their game room decoration based on the theme given. The students mentioned that it was challenging them to think outside their comfort zone but somehow the students managed to come up with the game and the decoration desired. One student wrote that creativity is one of the elements that in job employability these days.

“I want to improve my innovation. Innovation is significant in this era. If you are not creative enough, you will be eliminated by this era. I should be more creative in designing our t-shirt and photo booth”.

### **Personal Development: Time Management**

In addition to the personal development, time management was one of the areas, which the MPU 2432 students learned while organizing the EDventure 4.0. Majority of the students agreed that time management is important for them. The EDventure 4.0 was held in January Session 2019 where most students are taking more than five different subjects. Therefore, to agree on a suitable time for the students to have meetings and discussions are difficult. Moreover, the students mentioned that they have to do other various assignments that needed to be submitted within the stipulated date. It was a challenging task and it required flexibility and commitment, as they need to fulfil the expectations of each subject. The students wrote:

“The area that I need to improve is I need to practice good time management skills, so that I can use my time effectively as well as to complete all the work that I should do and pass up on time.”



“For time management, I hope that I can manage my schedule better so that I can finish the tasks ahead of the deadline and have extra time to make adjustments.”

### **Discussions**

In the discussion of group-based cooperative learning, students learned by cooperating and interacting with their peers. This kind of interactive new learning environment is different from traditional teacher-centered approach, where the teachers instruct and students to learn individually and compete with each other in learning. In experiential learning, the paradigm shifted where students in cooperative learning are required to cooperate and collaborate among students in order to complete the group learning goals. In supporting the group learning objectives, it has to be supported with cooperative activities in the students' learning process where a set of soft skills such as communication, teamwork, creative thinking, time management, event management, analytical skills, problem solving, stress handling, leadership, commitment and management are essential in the learning process. This learning environment also was placed in an authentic learning situation where students had to brainstorm on suitable and appropriate games with the decorations for the event. The students had to complete Need Analysis Program (NAP), set a budget for their group tasks as part of the learning process. This authentic setting promotes high engagement levels among students and facilitates their experiential-cooperative learning activities.

From the survey and the students' feedback, cooperative learning enhanced their teamwork and communication skills, project management and improved their personal attitudes in learning, these skills enable the students to enjoy doing the project and it increases their motivational level to execute the event. The project - The EDventure 4.0: The Adventure of Beauty & the Beast has helped the students to increase their team spirit and to learn the complete process in order to enhance their understanding of the subject matter.

In addition, in this experiential- cooperative learning, online interactive tool - Blackboard was used by the students to share their ideas about the event, to construct their plan for the project, and then execute The EDventure of Beauty & the Beast. This process of learning is inclined towards experiential learning perspective where students learn by experiencing the knowledge and participate actively in their learning process (Neo, 2006; Jonassen, Peck & Wilson, 1999). Therefore, the learning process become the focus point, not the content (Neo, 2006). In addition, the use of multimedia video presentation enables the students to be more engaged and motivated to complete their tasks (Neo, 2006). As a result, such activities provide students with a good platform to be involved in learner-centered activities where the students become the focus in their learning experience, while the teacher becomes a facilitator of learning, acting as a consultant and guide to the students through their learning experience. Meanwhile, the use of technology makes the learning process possible and a practicable process. The requirement to create multimedia video presentation and online assignment such as Group Wiki and Blogs are where the students need to complete and upload them onto the Blackboard. Course management system resulted in the students taking advantage of several web-based technologies, not only for completing the task given, but also for cultivating cooperative and collaborative activities such as conducting a meeting, discussion on the online platform such as the use of Group Wiki among the students, which also can be accessed by the lecturer.

Feedback from the students found that the students have a positive impression on the cooperative activities where it brings benefits to their experiential learning process, as well as group in general. Many studies reported that the project allowed them to learn much more from



working in a group than working alone. In addition, it is more effective to have a small group of students compared to larger group number of students to enable students to consider the objectives of the class as a whole. Hence, engaging the students to work together cohesively towards the same objectives is the essence of experiential-cooperative learning. As a result, The EDventure of Beauty & the Beast project and the usage of the Blackboard as a tool in online learning was able to have a positive impact towards students' learning environment. It can be seen on the completion of the event and online tasks, which are the students' reflection, Group Wiki, and the submission of the multimedia video presentation.

### Conclusions

In conclusion, the study of experiential learning, group based project, online learning in managing an event has revealed that its effect on student learning is extensive. It reflects on the fact that working with individuals in a group with same objectives is more reliable compared to work as a separate individual. It stresses on the importance of cooperation and collaboration rather than competing with each other, has brought significant impact on the individual experiential learning. This study also has shown that it is also effective to have an online platform to communicate and share ideas with the group members. It has shown that group-based online cooperative learning method has assisted students to work effectively in groups. It helps students learn to manage their time and to plan an event, develop their communication and soft skills related to event management, apply proper leadership roles to manage group members, and increase students' motivation to learn new things. Some of the setbacks are related to internal issues within groups' members, it is closely related to group management problems such as difficulty to meet up and disagreement upon certain decisions made. Certain remote situations, like certain members of the groups are passive and lack of cooperative skills. Despite all of these issues - through clear communications and online-mediated learning, the student has successfully managed the event.

### References:

- Felder, M.R. & Brent, R. (2018). *Cooperative Learning*. N.C. State University: Education Designs.
- Hassanien, A. & Dewhurst, P. (2005). *A critical analysis of the design and implementation of an event and venue management programme: a case study of the University of Wolverhampton*. Sydney, Australia.
- Johnson, D.W. & Johnson, R.T. (2006). *Joining together: Group theory and group skills* (9th ed). Boston: Allyn & Bacon.
- Junek, O., Lockstone, L. & Mair, J. (2009). *Two perspectives on Event Management Employment: Student and Employer Insights Into the Skills Required to Get the Job Done*. Journal of Hospitality and Tourism Management. Australia.
- Kearsley, G. & Moore, M. (2012). *Distance education: A systems view of online learning*. Wadsworth Publishing Co., Belmont, Ca.
- Neo, M. (2004). *Cooperative learning on the web: A group based, student centered learning experience in the Malaysian classroom*. Australasian Journal of Educational Technology. [Retrieved from <http://www.ifets.info>]
- Tapscott, D. (2009). *Grown Up Digital: How the Net Generation is Changing Your World*. NewYork: McGraw Hill.



*3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)*  
*eISBN: 978-967-2245-13-1*  
*Copthorne Hotel, Cameron Highland, Malaysia*  
*29<sup>th</sup>-30<sup>th</sup> June 2019*

- Wittrock, M. (1990). *Generative processes of comprehension*. Educational Psychologist. 24, 345-376. [Retrieved from [https://www.tandfonline.com/doi/abs/10.1207/s15326985ep2404\\_2](https://www.tandfonline.com/doi/abs/10.1207/s15326985ep2404_2)]
- Daud & Rusly (2018) Cooperative learning through Blackboard: Students' Perceptions on Teamwork and Soft Skills Required to Manage an Event - A Case Study of The EDventure of Aladdin. INTI journal 2018



## ENTREPRENEURIAL ORIENTATION AND ORGANIZATIONAL PERFORMANCE OF E-BUSINESS IN MALAYSIA: THE MODERATING ROLE OF EXTERNAL ENVIRONMENT

Sabrina Adam<sup>1</sup>  
Mohd Khairuddin Ramliy<sup>2</sup>  
Thoo Ai Chin<sup>3</sup>  
Adaviah Mas'od<sup>4</sup>  
Farrah Merlinda Muharam<sup>5</sup>

<sup>1</sup>Azman Hashim International Business School, Universiti Teknologi Malaysia (UTM), Malaysia, (E-mail: sabrinah@utm.my)

<sup>2</sup>Azman Hashim International Business School, Universiti Teknologi Malaysia (UTM), Malaysia, (E-mail: mohdkhairuddin@utm.my)

<sup>3</sup>Azman Hashim International Business School, Universiti Teknologi Malaysia (UTM), Malaysia, (E-mail: acthoo@utm.my)

<sup>4</sup>Azman Hashim International Business School, Universiti Teknologi Malaysia (UTM), Malaysia, (E-mail: adaviah@utm.my)

<sup>5</sup>Azman Hashim International Business School, Universiti Teknologi Malaysia (UTM), Malaysia, (E-mail: merlinda@utm.my)

---

**Abstract:** *There has been relatively little research that examines the relationship between external environment and their consequences on organizational performance of e-business in developing countries. This research represents an attempt to do so from the Malaysian e-business perspectives. This research examines the relationships between entrepreneurial orientation and organizational performance and on the role of external environment as a moderator between the relationships. The consideration of putting moderator factors in this research allows more precise descriptions on the relationship between the two variables mentioned and the outcome of the research. This study was grounded by Resource-Based View theory as the underlying basis. This study adopted quantitative approach where 400 questionnaires were distributed to the target population and 381 were returned. Structural Equation Modelling was performed on the quantitative data using SMART PLS 3.0. The quantitative findings indicated that entrepreneurial orientation variables of innovativeness, proactiveness, risk-taking, competitive aggressiveness and autonomy have significant effects on financial and non-financial organizational performance. However, the moderating effect of external environment on the relationship was found not significant. This study concluded that entrepreneurial orientation and external environment are vital to promote organizational performance of e-business in Malaysia. These findings able to serve as a guideline for e-business owners or founders to improve their organizational performance thus compete in the digital sphere.*

**Keywords** *Entrepreneurial orientation, External environment, Organizational performance, E-business*

---

### Introduction



Entrepreneurs have the crucial role of managing the decision making process in their firm to ensure it is effective. Entrepreneurial orientation (EO) plays an important part in this process. EO, which is a key concept of entrepreneurship and has received keen scholarly attention, is an organizational level entrepreneurial activity (Covin & Slevin, 1991; Rauch et al., 2009; Covin & Lumpkin, 2011). Furthermore, EO refers to the strategy making process that provides organizations with the basis for entrepreneurial decisions and actions (Lumpkin & Dess, 1996). EO is a key ingredient for organizational success (Lumpkin & Dess, 1996) and has been found to lead firms towards achieving higher performance (Zahra & Covin, 1995; Wiklund & Shepherd, 2003). Dess, Lumpkin and Covin (1997) suggested that organizations with an EO are more likely to perform better than those that lack such an orientation. This shows the importance of EO in a business, including e-business.

E-business is perceived as a strategy that directs business processes across organizational boundaries successfully (Khamis, Sulaiman, & Mohezar, 2014). As indicated by Basu and Muyllé (2007), e-business has significantly changed the way business processes are planned, executed and upgraded, adjusting industry structures and shifting the balance of power between corporations and their suppliers and customers (Chang and Dasgupta, 2015). Since the independence achievement in 1957, Malaysia has experienced rapid economic and social development, especially in the previous three decades. From then on, the Malaysian government has made a great strides in digital development and inclusion in its journey to accomplish developed nation status by 2020.

Despite strong economic growth in recent times, the external environment remains a key challenge to Malaysia to keep up a positive development in near-term. Understanding the environment within which the business has to operate is very important for running a business unit successfully at in any place. Likewise, as indicated by Ahmad, Rani, and Kassim (2010), the current business environment in Malaysia is getting more competitive. In order for firms to stay competitive in the marketplace domestically and internationally, organizations have dependably strived to enhance themselves by making better approaches to address their customers' needs.

A sound environment for business can give that organization an edge over and above other organizations and help it to achieve a competitive advantage. However, a careful scanning of business environment can provide a particular firm with the knowledge of how to deal with the issues involved in the area in which it operates (Aliyu & Mahmood, 2015). In making a decision on whether or not to invest in e-business and the issue of whether decision making influenced business performance have always been asked. EO was proven to be a useful construct that able to maintain their performance trajectories while other firms are not (Covin and Lumpkin, 2011). In today's competitive environment, companies are forced to behave in an entrepreneurial way in order to try to survive in the market. These pressures force companies to look for best practices and new ways to stay ahead or to keep up with competition in the future.

Previous studies have investigated the relationship between EO and business performance moderated by external environment in a variety of contexts, including small and medium enterprises (SMEs) (Jabeen & Mahmood, 2014; Jabeen, Aliyu, & Mahmood, 2016), manufacturing firms (Murgor Paul Kimutai, 2014; Alkali & Isa, 2012; Wang & Huynh, 2013), and small and medium enterprises (SMEs) (Madhoushi, Sadati, & Delavari, 2011; Aliyu, Rogo, & Mahmood, 2015). However, few attempts to date have been made to investigate how EE effect EO and organizational performance in the context of the e-business in Malaysia.



Therefore, the current study attempts to fill this void by examining the relationship between the EO, EE and organizational performance of e-business.

Given the gaps in the literature on the subject matter, the present study serves as groundwork to investigate the role of EE as a moderator in the relationship between EO and organizational performance using the theory of RBV of e-business in Malaysia. EE is incorporated into the research model to assess its moderating effect on the relationships under this study. The following section will discuss the links between EO and organizational performance and the role of EE as a moderator in the EO and organizational performance relationship are hypothesized in the following section. Next section, followed by a brief discussion of the research methods and data analysis. This paper concludes with a discussion of the findings of the present study.

## **Literature Review and Hypotheses Development**

### ***Entrepreneurial Orientation and Organizational Performance***

EO is an important competency in becoming an entrepreneur and managing a firm's performance. The role of the EO is crucial due to its positive influence on a firm's business performance (Covin & Slevin, 1989; Lumpkin & Dess, 1996). Firms with high levels of EO tend to constantly scan and monitor the activities of entrepreneurship in order to find new opportunities and strengthen their competitive positions (Covin & Miles, 1999).

A study by Deepababu & Manalel (2016) stated that the importance of EO and its influence on organizational performance have been highlighted in both conceptual and empirical viewpoints (Covin & Slevin, 1991; Lumpkin & Dess, 1996) and there are many empirical researches (Lumpkin & Dess, 2001; Wiklund & Shepherd, 2003; Wiklund & Shepherd, 2005) which are concerned with the positive implications that EO has on organizational performance (Lumpkin & Dess, 1996; Wiklund, 1999). At the empirical level, past studies have shown a positive relationship between EO and firm performance (Lee & Pennings, 2001; Wiklund, 1999; Wiklund & Shepherd, 2005). Several studies have revealed a positive impact of EO on performance (Alegre & Chiva, 2013; Hakala, 2013). Thus, it may be beneficial to adopt an EO, because entrepreneurial strategies are regarded as being related to better firm performance and because of that the relationship between EO and firm performance has been at the forefront of entrepreneurship literature for many years (Deepababu & Manalel, 2016). Based on the above discussion, the following hypotheses are formulated:

*H<sub>1</sub>. Entrepreneurial orientation (EO) is positively related to organizational performance.*

### ***The Role of External Environment in the Entrepreneurial Orientation and Organizational Performance relationship***

The external environment has been described as those factors and situations that are capable of dictating and influencing the performance of firms (Mohd, 2005). In this study, EE denoted forces outside the organization that exert uncontrollable influences on business activities and performance. The forces included price competition, technology or innovation, competitive strength, action of competitor, demand and consumer taste, outdated product, marketing practices, and safety. Besides, the study by Mohd (2005) stated that the external environmental factors are capable of determining the failure and success of the firms (Jabeen, Aliyu, & Mahmood, 2016).



The relationship between EO and organizational performance has been widely studied by a number of researchers. However, some researchers, reported positive relationship, while others reported a negative relationship. Nonetheless, there are also scholars who found mixed results in the EO and organizational performance relationship. The studies which reported a positive and significant relationship between the two constructs include Wiklund and Shepherd (2003); Fairoz, Hirabuni and Tanaka (2010); Idar and Mahmood (2011); Al-Swidi and Mahmood (2012). However, some extents studies by Arbaugh, Cox & Camp (2009) and Anderson (2010) reported a negative association between entrepreneurial orientation and business performance; whereas the study of Runyan, Droge and Swinney (2008) and Ambad and Abdul Wahab (2013) found mixed outcomes in the EO and organizational performance relationships. Hence, EO to performance relationship studies is inconclusive. However, Herath and Mahmood (2013) suggested the inclusion of moderator in strategic orientation to the business performance relationship.

Environmental effects on EO and the relationship between EO and performance have long been considered. Still, researchers continue to conduct studies designed to explore linkages between the environment and EO, or between EO and performance as affected by the environment (Covin & Lumpkin, 2011). According to Jabeen & Mahmood (2014) and Jaben, Aliyu and Mahmood (2016), it was contended that EO and firm performance relationship is dependent upon the EE. According to Martins and Rialp (2013) EE is always highlighted as a key contextual factor in the EO and organizational performance relationship. The main reason EE has been chosen as a variable in this study is because the significance of EE to e-business can be seen from the fact that no business operates in a vacuum, it must have an environment to operate in, for survival and to remain relevant. However, a careful scanning of business environment can provide a particular firm with the knowledge of how to deal with the issues involved in the area in which it operates (Aliyu & Mahmood, 2015). Based on the above discussions, the following hypothesis is proposed:

*H2. The relationship between entrepreneurial orientation (EO) and organizational performance is moderated by the external environment (EE).*

### ***Extension of RBV using External Environment***

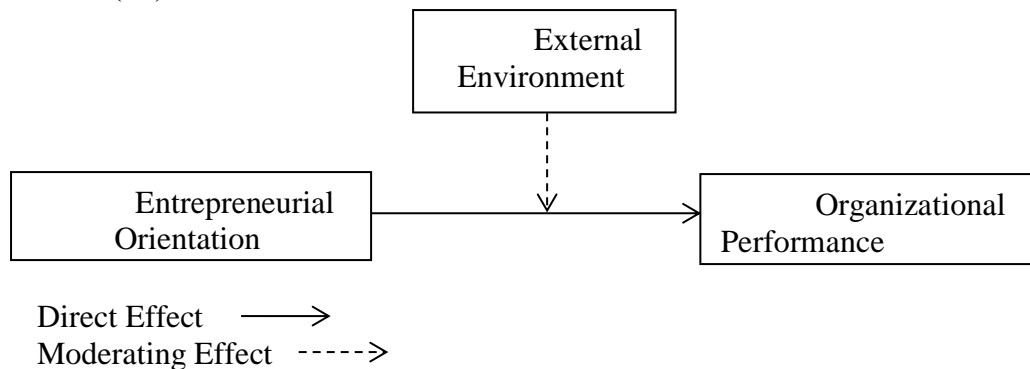
The Resource Based View (RBV) theory has become one of the most important theories in strategic management literature since 1990s (Chen, 2012). Essentially, the RBV is based on the assumptions that firms have heterogeneous resources and the resources remain imperfectly mobile over time (Thoo Ai Chin, 2014). RBV theory is very useful in enhancing the organization's competitive advantage through EO because they represent the aspects of the internal capability as an internal strength of the organization.

In addition, this study focuses on on EE as a moderator is to enhance the EO and organizational performance relationship and also to contribute to the theory of resource based view (RBV) that suggests the existence of external environment along the EO and organizational performance relationship (Barney, 1991). Given the previously held belief that EE plays an important role where the changes and unpredictability in the EE in which firms operate determines how they fit and their ensuing performance..

With this, the researcher proposed the potential moderator role of EE to enhance the EO and organizational performance relationship and also contributes to the extended theory of resource based view (RBV) whereby the theory posits that RBV theory provides a powerful impact to an organization about how they can perform better than other organizations in the

same market. The extended KBV in this study, require the e-business to be proactive and nurture an enabling business performance that facilitates EO and EE among employees in order to be relevant and sustainable in today's competitive market.

Figure 1 demonstrates the research model based on the proceeding discussion. Since past literature shows inconclusive results on EO and organizational performance, EE is adopted to assess its moderating effect on the postulated EO and organizational performance relationships in the present study. According to this model, entrepreneurial orientation is positively related to organizational performance ( $H_1$ ) and it is conceptualized that external environment moderate the relationship between entrepreneurial orientation and organizational performance ( $H_2$ ).



**Figure 1: Research model**

## Methodology

The population of this study consists of all active e-business registered in Malaysia. The researcher drew the sample in Malaysia from the Companies Commission of Malaysia (CCM). Employing Krejcie and Morgan (1970) sampling table to determine minimum sample size to ensure adequate statistical capacity to investigate and explain the variables under investigation. A total of 381 active e-business in Malaysia are suggested based on the sampling table and appropriate to assess the accessible population of the study.

A quantitative approach using self-administered questionnaire was adopted. All statements pertaining to entrepreneurial orientation, external environment and organizational performance were adopted and adapted from past literature (Bolton and Lane, 2012; Lumpkin and Dess, 2001; Lumpkin, Cogliser and Schneider, 2009; Naman & Slevin, 1993; Lo, Wang, Wah & Ramayah, 2016; Arshad, 2016). All key variables were measured by multiple statements, as this would afford greater degrees of freedom when partitioning the data into groups. It would also allow for adjustment of measurement error, thus increasing their reliability and predictive validity (Hair et al., 2014). Statements were also organized in sections without randomization based on the common objectives and contexts of the statements (Burns and Bush, 2005). A post hoc Harman single-factor analysis was also performed after data collection to ensure the variance in the data was not explained by one single factor, thus addressing the common method bias (Chang et al., 2010; Podsakoff et al., 2003). Except for demographic information, a five-point Likert scale where 1 indicating strongly disagree to 5 indicating strongly agree was adopted to measure the statements. Expert validation and pre-test was administered to secure face validity of the questionnaire in this study. Besides, pilot test was also conducted using the target respondents to finalize the usability of the questionnaire (Bryman & Bell, 2011).

Stratified sampling technique was adopted to distribute questionnaire to the e-business in Malaysia. As such, three criteria were set to ensure the respondents, first must be the owner/founder of the e-business in Malaysia, second, must register under the Companies Commission of Malaysia (CCM), and third, the years of the establishment must be more than 1 year. In all, 400 copies were distributed, and 381 completed and usable copies were collected in a months time in November 2017, indicating that non-response bias was not a major issue. The data were then keyed in into SPSS and imported to SmartPLS to perform latent variable analysis (Ringle et al., 2015). The latter software utilizes structural equation modelling of partial least squares (PLS-SEM) approach to enhance predictive relevance by maximizing the variance of key target variables by different explanatory variables (Hair et al., 2014; Henseler et al., 2009).

## Findings

### *Respondent demographics*

Table 1 shows the demographic information of 381 owner/founder of e-business for this study. Most of the respondents have Bachelor Degree and the year of their e-business establishment are between 1-10 years.

**Table 1:** Respondent profile

Demographic Characteristics		Frequency ( <i>f</i> )	Percentage (%)
<b>Gender</b>	Male	139	39.7
	Female	211	60.3
<b>Ethnic</b>	Malay	329	94.0
	Chinese	4	1.1
	Indian	14	4.0
	Bumiputera	3	0.9
<b>Academic Qualification</b>	SPM	5	1.4
	Diploma	90	25.7
	Bachelor Degree	240	68.6
	Master Degree	15	4.3
<b>Number of Employee</b>	1-49	313	89.4
	50-59	37	10.6
<b>Years of Establishment</b>	1-10 years	328	93.7
	10 years above	22	6.3

### *Assessment of Measurement Model*

The PLS-SEM method and statistical software SmartPLS 3 (Ringle, Wende, and Becker, 2015) was used to estimate the hypothesized model. In this study, PLS-SEM was used for several reasons. First, the exploratory nature of the research (Richter et al., 2016) as the study was to investigate the relationship between entrepreneurial orientation, external environment and organizational performance. Second, the PLS-SEM can handle complex frameworks (Ramayah et al., 2018; Hair et al., 2017; Richter et al., 2016), and is recommended for the moderating model. Given the present research EE as a moderator, the PLS-SEM approach was suitable for the study.

In terms of analysis, Andersen and Gerbing (1988) stated that PLS-SEM is a two-step process involving assessment of the measurement and structural model (Memon, Salleh and

Baharom, 2017). First, the measurement model was assessed by examining the internal consistency reliability, convergent validity (CV), and discriminant validity (DV) (Hair et al., 2017). Internal consistency reliability measures the degree to which the items measure the latent construct (Hair et al., 2006); it was assessed through composite reliability (CR) scores.

Table 2 depicts the assessment of factor loadings, composite reliability (CR) and average variance extracted (AVE) of this study. The composite reliability (CR) values of 0.934 (entrepreneurial orientation), 0.877 (organizational performance) and 0.874 (external environment) exceeded the recommended criterion of 0.7 (Avkiran, 2017; Nunnally, 1978), demonstrating high internal consistency or the appropriateness of the scales used in this study. Similarly, the variables in this study demonstrate good convergent validity. All the constructs achieve a minimum threshold value of 0.5 for average variance extracted (AVE) which is an indication that the items explain more than 50 per cent of the construct's variances (Hair et al., 2014).

**Table 2:** Factor loadings, CR and AVE

Construct	Item	Loading	CR	AVE
<b>Entrepreneurial Orientation</b>	EO1	0.763	0.934	0.703
	EO2	0.730		
	EO3	0.714		
	EO4	0.800		
	EO7	1.00		
	EO9	0.870		
	EO10	0.738		
	EO11	0.800		
	EO12	1.00		
	EO15	0.840		
	EO16	0.854		
	EO17	0.794		
	EO18	0.750		
<b>Organizational Performance</b>	NF1	0.846	0.877	0.641
	NF2	0.833		
	NF3	0.846		
	NF4	0.915		
	F1	0.805		
	F2	0.765		
	F3	0.770		
	F4	0.753		
<b>External Environment</b>	EE1	0.774	0.874	0.637
	EE2	0.696		
	EE3	0.785		
	EE4	0.920		

Note: CR = composite reliability; AVE = average variance extracted

Next, factor loadings and average variance extracted (AVE) were assessed to determine the convergent validity of the constructs. Convergent validity is the “extent to which a measure correlates positively with alternative measures of the same construct” (Hair et al., 2017, p. 112).

A factor loading should be 0.708 or higher, and, 0.7 considered close enough to be acceptable (Hair, Ringle, and Sarstedt, 2011). However, indicators with weaker factor loadings (i.e., 0.40 to 0.70) can be retained if other indicators possess high loadings, and overall construct should explain at least 50% variance (AVE = 0.50) (Hair et al., 2017). In this study, the AVE scores for all constructs were all above 0.50 after the process of 3 items deletion (EO8, F5 and F6). As such, all the three construct meet the threshold where all CRs were above the 0.7 cut-off value and AVEs were above 0.5 cut-off values (Hair et al. 2014).

Discriminant validity is “the extent to which a construct is truly distinct from other constructs by empirical standards” (Hair et al., 2017). Henseler, Ringle, and Sarstedt (2015) suggested the Heterotrait-Monotrait ratio of correlations (HTMT) approach to determine the DV of the constructs. To achieve DV, the HTMT value should not be greater than the HTMT.85 value of 0.85 (Kline, 2015), or the HTMT.90 value of 0.90 (Gold, Malhotra, and Segars, 2001). As shown in Table 3, all values have passed both HTMT.85 and HTMT.90 measures (Gold et al., 2001; Henseler et al., 2015; Kline, 2015), hence, discriminant validity has been ascertained. This indicates that, each construct in the model measures a unique subject and captures phenomena not presented by other constructs in the model.

**Table 3: HTMT criterion**

	<b>EO</b>	<b>EE</b>	<b>OP</b>
<b>EO</b>		0.749 CI.90 (0.635,0.841)	
<b>EE</b>			
<b>OP</b>	0.103 CI.90 (0.133,0.214)	0.094 CI.90 (0.092,0.195)	

Note: Criteria: discriminant validity is established at HTMT0.85

### ***Collinearity Assessment***

Before assessing the structural model, it is important to ensure that there are no collinearity issues in the structural model. According to Kock and Lynn (2012) although the criteria of discriminant validity are met, lateral collinearity issue may sometimes mislead the findings in a cautious way, because it can mask the strong causal effect in the model. This study included using variance inflation factors (VIF) to examine multicollinearity. A VIF value greater than 5 indicates multicollinearity (Hair et al., 2014). In this study, the VIF values were below than 5 (entrepreneurial orientation=1.660, external environment=1.672) indicating that the multicollinearity is not concerned in this study. Table 4 presents the outcome of the collinearity test.

**Table 4: Collinearity assessment**

<b>Construct</b>	<b>EO</b>	<b>EE</b>	<b>OP</b>
<b>EO</b>			1.660
<b>EE</b>			1.672

### ***Assessment of Structural Model***

After looking into measurement model, this section proceeds to the structural model assessment. Structural model was assessed to test the causal relationships between entrepreneurial orientation and organizational performance. To assess structural model, Hair et al., (2017) recommended looking at the coefficient of determination ( $R^2$  value), path coefficient ( $\beta$  value) and the corresponding t-values via bootstrapping procedure with 5,000 interaction to confirm statistical significance (Hair et al. 2014).

Table 5 illustrates the results of path coefficient assessment using the bootstrapping procedure for each of the hypothesized relationship in the model. The proposed relationships are significant whereby the relationships are found to have t-value  $> 1.645$ , thus significant at 0.05 level of significant. Specifically, it can be seen that the EO ( $\beta=0.322$ ,  $t=5.283$ ,  $LL=0.238$ ,  $UL=0.435$ ), this result explains that higher EO values are related to high organizational performance. Hence, it is surmised that EO have positive effect on organizational performance of e-business in Malaysia. As such, *H1* is supported.

**Table 5:** Hypothesis Testing

Hypothesis	Relationship	Direct Effect (B)	t-value	Decision
H1	Entrepreneurial Orientation $\rightarrow$ Organizational Performance	0.322	5.283**	Supported

Note: \* $p < 0.05$ ; \*\* $p < 0.01$ (one-tailed)

Hair et al., (2017) also suggested that in addition to these basic measures (path coefficient) should also report the predictive relevance ( $Q^2$ ) as well as the effect sizes ( $f^2$ ) (Ramayah et al., 2017). To measure the effect size ( $f^2$ ), Cohen (1988) guideline is used where the values of 0.02, 0.15 and 0.35 represent small, medium and substantial effects respectively (Ramayah et al., 2016). The  $f^2$  value in Table 6 show substantial effect on entrepreneurial orientation towards organizational performance ( $f^2=0.548$ ). In addition, the predictive relevance ( $Q^2$ ) was examined using blindfolding procedure. Fornell and Cha (1994) and Hair et al., (2014), suggested that a  $Q^2$  value larger than 0 indicates that model has predictive relevance for a certain dependent construct. As shown in Table VI, the  $Q^2$  value of 0.342 represent entrepreneurial orientation and organizational performance has sufficient predictive relevance.

**Table 6 :** Determination of coefficient ( $R^2$ ), effect size ( $f^2$ ) and predictive relevance ( $Q^2$ )

Path	Coefficient of determination ( $R^2$ )	Predictive relevance ( $Q^2$ )	Effect size ( $f^2$ )
Entrepreneurial Orientation			0.548
Organizational Performance	0.507	0.342	Substantial

#### **Assessment of Moderator Analysis**

To perform moderator analysis using interaction effect (moderator variable is continuous variable), external environment play a major role of moderator effect (reflective continuous

variable) (Ramayah et al., 2018). In examining the interaction effects of moderator using PLS-SEM, this study applied the orthogonalizing approach (Henseler & Chin, 2010) in detecting the moderating effect of external environment on the relationship between entrepreneurial orientation and organizational performance. The orthogonalizing approach was preferred in this study is to minimize estimation bias as it is able to avoid multicollinearity issue (Henseler & Chin, 2010). The significant effect of external environment was assessed by using a bootstrapping re-sampling with 5000 re-samples.

Table 7 elucidates the moderating effect of external environment on the relationship between entrepreneurial orientation and organizational performance ( $\beta = -0.273$ ). The results from Table VII allow for a conclusion to be made where the effects of entrepreneurial orientation (t-value = 0.750) on organizational performance were not significantly moderated by external environment, as the t-values are below the critical value of 1.96. As such, *H2* is rejected.

**Table 7: Result of moderating effects of external environment**

Hypotheses	Relationship	Standard $\beta$	SE (STERR)	t-value ((O/STDEV))	Decision
H5	EO*EE $\rightarrow$ OP	-0.273	0.364	0.750	Not Supported

Note: \*p < 0.05; \*\*p < 0.01 (one-tailed)

### Common Method Bias

A Harman's single factor test was performed (Podsakoff et al., 2003) to determine if there were any issues in relation to common method bias (Memon et al., 2017). The common method bias exists if one principal factor accounts for the majority of the total variance, i.e. more than 50% (Podsakoff et al., 2003). From the analysis, the first factor captured only 15.09 percent of the variance in the data. Therefore, it can be concluded that the common method bias did not exist in this study.

### Discussions and Conclusion

In this study, EE reacts as a moderator in the relationship between EO and organizational performance of e-business in Malaysia. The idea behind the moderation effect of EE on the relationship between EO and organizational performance of e-business in Malaysia tends to rely on how the unpredictable situation affects their EO and performance of e-business (Martins and Rialp, 2013). In addition, in terms of moderating variable, this research also gives the information on the importance of EE in enhancing EO and organizational performance. Given the previously held belief that EE plays an important role where the changes and unpredictability in the EE in which firms operate determines how they fit and their ensuing performance.

Surprisingly, the finding in this study reported that EE does not moderate the relationship between EO and organizational performance of e-business in Malaysia. The results of this study challenge the literature, which stipulates that there should be a significant moderating effect of EE on EO and organizational performance relationship (Mohd, 2005; Jabeen & Mahmood, 2014). A possible explanation for these findings is that EE factors affect business activities and performance. In other words, business activities and performance are dependent on external environmental factors (Otahe & Mahmood, 2015).



In the present study, the findings dispel that EE would not be an effect on the relationship between EO and OP of e-business in Malaysia. A plausible reason may relate to different context in Malaysia. Most of the studies on the influence of EE towards EO and organizational performance were conducted outside of Malaysia such as studies by Aliyu et al., (2015); Jabeen & Mahmood (2014); Aliyu & Mahmood (2015). Different context variables can have different influences where the external environmental factors play an important role in business planning, decision-making and business performance (Otahe & Mahmood, 2015). It is possible that the differences may arise from the variation in the context of the study whereby in the Asian context of emerging countries, the EE does not emerge as a significant contributor as moderator to the development of EO and organizational performance. The result from this research can help organization (e-business) in determining and identifying the influence of EE in enhancing EO and organizational performance. Hence, e-business need to be proactive and nurture an enabling business performance that facilitates EO and EE among employees in order to be relevant and sustainable in today's competitive market.

## References

- Aliyu, S. M., & Mahmood, R. (2015). The Moderating Role of Business Environment in the Relationship between Entrepreneurial Orientation and Business Performance among Nigerian SMEs. *Jurnal Pengurusan*, 43, 119–128.
- Aliyu, S. M., Rogo, H. B., & Mahmood, R. (2015). Knowledge Management, Entrepreneurial Orientation and Firm Performance: The Role of Organizational Culture. *Asian Social Science*, 11(23), 140-152.
- Alkali, M., & Isa, A. H. M. (2012). Assessing the Influence of External Environmental Factors, on the Performance of Small Business Manufacturing enterprises in Bauchi state, Nigeria. *Interdisciplinary Journal of Contemporary Research In Business*, 4(7), 621-628.
- Alegre, J. and Chiva, R. (2013). Linking Entrepreneurial Orientation and Firm Performance: The Role of Organizational Learning Capability and Innovation Performance. *Journal of Small Business Management*, 51(4), 491-507.
- Al-Swidi, A.K. & Mahmood, R. (2012). Total quality management, entrepreneurial orientation and organizational performance: The role of organizational culture. *Journal of Business Management* 6(13): 4717-4727.
- Arbaugh, J.B., Cox, L.W. & Camp, S.M. 2009. Is entrepreneurial orientation a global construct? A multi-country study of entrepreneurial orientation, growth strategy, and performance. *The Journal of Business Inquiry* 8(1): 12- 25.
- Anderson, J. (2010). A critical examination of the EO –performance relationship. *International Journal of Entrepreneurial Behavioral and Research*, 16(4), 309- 329.
- Andersen, J.C., and D.W. Gerbing. (1988) “Structural Equation Modelling in Practice. A Review and Recommended Two-Step Approach.” *Psychological Bulletin* 103: 411-23.
- Ambad, S.N.A. & Abdul Wahab, K. (2013). Entrepreneurial orientation among large firms in Malaysia: Contingent effects of hostile environments. *International Journal of Business and Social Science*, 4(16): 96-107.
- Ahmad, S. Z., Rani, A. N. S., & Kassim, M. S. K. (2010). Business challenges and strategies for development of small-and medium-sized enterprises (SMEs) in Malaysia. *International Journal of Business Competition and Growth*, 1(2), 177–197.
- Aliyu, M. S., & Mahmood, R. (2015). The Moderating Role of Business Environment in the Relationship between Entrepreneurial Orientation and Business Performance among Nigerian SMEs. *Jurnal Pengurusan*, 43, 119–128.



- Avkiran, Necmi Kemal. (2017) "An In-Depth Discussion and Illustration of Partial Least Squares Structural Equation Modeling in Health Care." *Health Care Management Science*: 1-8.
- Basu, A. & Muylle, S., (2007). How to Plan E-Business Initiatives in Established Companies. *MIT Sloan Management Review*, 49(1), pp. 28- 37.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.
- Bolton, D. L., & Lane, M. D. (2012). Individual entrepreneurial orientation: Development of a measurement instrument. *Education+ Training*, 54(2/3), 219-233.
- Burns, A.C. and Bush, R.F. (2005), *Marketing Research*, Pearson Prentice-Hall, NJ.
- Bryman, A. & Bell, E. (2011). *Business Research Methods*. Oxford, NY, Oxford University Press.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. 2nd ed. New Jersey: Lawrence Erlbaum.
- Covin, J. G., & Slevin, D. P. (1991). A Conceptual Model of Entrepreneurship as Firm Behavior. *Entrepreneurship: Theory & Practice*, 16(1), 7–25.
- Covin, J.G. & Miles, M.P. (1999). Corporate entrepreneurship and the pursuit of competitive advantage. *Entrepreneurship: Theory and Practice* 23(3): 47-47.
- Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial Orientation Theory and Research: Reflections on a Needed Construct. *Entrepreneurship Theory & Practice*, 35(5), 855–872.
- Covin, J. G., & Slevin, D. P. (1989). Strategic Management of Small Firms in Hostile and Benign Environment. *Strategic Management Journal*, 10(1), 75–87.
- Chang, S.J., van Witteloostuijn, A. and Eden, L. (2010), "From the editors: common method variance in international business research", *Journal of International Business Studies*, Vol. 41 No. 2, pp. 178-184.
- Chang, J., & Dasgupta, B. (2015). An Investigation of the Barriers to E-business Implementation in Small and Medium-Sized Enterprises. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 9(1), 26–36.
- Dess, G. G., Lumpkin, G. T., & Covin, J. G. (1997). Entrepreneurial Strategy Making and Firm Performance : Tests of Con. *Strategic Management Journal*, 18(6), 677–695.
- Deepababu, K. G., & Manalel, J. (2016). Entrepreneurial Orientation And Firm Performance: A Critical Examination. *IOSR Journal of Buiness and Management*, 18(4), 21–28.
- Fairoz, F.M., Hirobumi, T., and Tanaka, T. (2010). Entrepreneurial Orientation and Business Performance of Small and Medium Scale Enterprises of Hambantota District Sri Lanka. *Asian Social Science*, 6(3), 34-46.
- Gold, A.H., A. Malhotra, and A.H. Segars. (2001). "Knowledge Management: An Organizational Capabilities Perspective." *Journal of Management Information Systems*, 18, no. 1: 185-214.
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). *A Primer On Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks, CA: SAGE Publications, Incorporated.
- Hair, Joseph F., G.T.M. Hult, C.M. Ringle, and M. Sarstedt. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 2nd ed. Thousand Oaks, CA: Sage.
- Hair, Joseph F., W.C. Black, B.J. Babin, R.E. Anderson, and R.L. Tatham. (2006). *Multivariate Data Analysis*. 6th ed. New Jersey: Prentice Hall.
- Hair, Joseph F., Christian M. Ringle, and Marko Sarstedt. (2011). "PLS-SEM: Indeed a Silver Bullet." *Journal of Marketing Theory and Practice*, 19, no. 2: 139-51.



- Hakala, H. (2013). Entrepreneurial and learning orientation: effects on growth and profitability in the software sector. *Baltic Journal of Management*, 8(1), 102-118.
- Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2009), "The use of partial least squares path modeling in international marketing", *Advances in International Marketing*, Vol. 20 No. 1, pp. 277-319.
- Henseler, J., & Chin, W. W. (2010), A comparison approaches or the analysis of interaction effects between latent variables using partial least squares path modeling. *Structural Equation Modeling*, 17(1), 82-109.
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.
- Herath, H.M.A. & Mahmood, R. (2013). Strategic orientation based research model of SME performance for developing countries. *Review of Integrative Business and Economics Research* 2(1), 430-440.
- Idar, R., & Mahmood, R. (2011). Entrepreneurial orientation and market orientation relationship Performance: the SME perspective. *Interdisciplinary Review of Economics and Management*, 1(2), 1-8.
- Jabeen, R., Aliyu, S. M., & Mahmood, R. (2016). The Moderating Effect of External Environment on the Relationship Between Market Orientation and Business Performance: a Quantitative Approach. *Ipbj*, 8(1), 16–25.
- Jabeen, R., & Mahmood, R. (2014). Effect of External Environment on Entrepreneurial Orientation and Business Performance Relationship. *Social and Basic Sciences Research Review*, 2(9), 394–403.
- Khamis, N., Sulaiman, A., & Mohezar, S. (2014). Achieving e-Business Excellence through Knowledge Management and Organizational Learning Capabilities: A Malaysian Perspective. *International Journal of Economics and Management*, 8(2), 343–364.
- Kock, N., & Lynn, G.S. (2012). Lateral Collinearity and Misleading Results in Variance-Based SEM: An Illustration and Recommendations. *Journal of the Association for Information Systems*, 13(7), 546–580.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Kline, R.B. (2015). *Principles and practice of structural equation modeling*. Guilford publications.
- Lee, C., Lee, K., & Pennings, J. M. (2001). Internal capabilities, external networks, and performance: a study on technology-based ventures. *Strategic management journal*, 22(6-7), 615-640.
- Lumpkin, G. T., Coglisier, C. C., & Schneider, D. R. (2009). Understanding and measuring autonomy: An entrepreneurial orientation perspective. *Entrepreneurship: Theory and Practice*, 33(1), 47–69.
- Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16(5), 429–451.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance. *Academy of Management Review*, 21(1), 135–172.
- Lo, M. C., Wang, Y. C., Wah, C. R. J., & Ramayah, T. (2016). The critical success factors for organizational performance of SMEs in Malaysia: a partial least squares approach. *Review of Business Management*, 18(61), 370–391.



- Martins, I., & Rialp, A. (2013). Entrepreneurial orientation, environmental hostility and SME profitability: a contingency approach. *Cuadernos De Gestión*, 13(2), 67-88.
- Madhoushi, M., Sadati, A., & Delavari, H. (2011). Entrepreneurial Orientation and Innovation Performance : The Mediating Role of Knowledge Management. *Asian Journal of Business Management*, 3(4), 310–316.
- Memon, M. A., Salleh, R., & Baharom, N. R. (2017). The Mediating Role of Work Engagement Between Pay Satisfaction and Turnover. *International Journal of Economics, Management and Accounting*, 25(1), 43–69.
- Mohd, K. H. (2005). Small and Medium-Sized enterprises in Malaysia-Role in Issues. Sintok: UUM Press.
- Murgor Paul Kimutai. (2014). *External Environment, Firm Capabilities, Strategic Responses And Performance Of Large Scale Manufacturing Firms In Kenya*. PhD Thesis, University of Nairobi, Kenya.
- Naman, J. L., & Slevin, D. P. (1993). Entrepreneurship and the Concept of Fit: A Model and Empirical Tests. *Strategic Management Journal*, 14(2), 137-153.
- Nunnally, J.C. (1978). *Psychometric Theory*. New York, NY: McGraw-Hill.
- Otache, I., & Mahmood, R. (2015). Corporate Entrepreneurship and Business Performance : The Role of External Environment and Organizational Culture : A Proposed Framework. *Mediterranean Journal of Social Sciences*, 6(4), 524–531.
- Podsakof, Philip M., S. MacKenzie, J. Lee, and Nathan P. Podsakoff. (2003). Common Method Biases in Behavioural Research.” *MIS Quarterly* 30, no. 1: 115-41.
- Ramayah, T., Jacky Cheah, Francis Chuah, Hiram Ting, and Mumtaz Ali Memon. (2018). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using SmartPLS 3.0: An Updated Guide and Practical Guide to Statistical Analysis*. Kuala Lumpur, Malaysia: Pearson.
- Ramayah, T., Yeap, J. A. L., Ahmad, N. H., Halim, H. A., & Rahman, S. A. (2017). Testing a Confirmatory model of Facebook Usage in SmartPLS using Consistent PLS. *International Journal of Business and Innovation*, 3(2), 1-14.
- Ramayah, T., Cheah, J., Chuah, F., Ting, H., & Memon, M. A (2016). *Partial Least Squares Structural Equation Modeling(PLS-SEM) using SmartPLS 3.0* (1st ed.). Kuala Lumpur, Malaysia: Pearson.
- Ringle, C.M., Wende, S. and Becker, J.M. (2015), “SmartPLS 3.Boenningstedt: SmartPLS GmbH”, available at [www.smartpls.com](http://www.smartpls.com) (accessed 10 October 2016).
- Richter, Nicole Franziska, Rudolf R. Sinkovics, Christian M. Ringle, and Christopher Schlägel. (2016). A Critical Look at the Use of SEM in International Business Research. *International Marketing Review* 33(3): 376-404.
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 33(3), 761-787.
- Runyan, R., Droge, C. & Swinney, J. (2008). Entrepreneurial orientation versus small business orientation: What are their relationship? *Journal of Small Business Management* 46(4): 567-588.
- Thoo Ai Chin (2014). *Supply Chain Integration And Operational Capability Effects on Performance in Malaysian Small and Medium Enterprises*. Universiti Teknologi Malaysia.



3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Cophorne Hotel, Cameron Highland, Malaysia  
29<sup>th</sup>-30<sup>th</sup> June 2019

- Wang, D. H., & Huynh, Q. L. (2013). Mediating Role of Knowledge Management in Effect of Management Accounting Practices on Firm Performance. *Journal of Knowledge Management, Economics and Information Technology*, 3(3), 1-25.
- Wiklund, J. (1999). The Sustainability of the Entrepreneurial Orientation-Performance Relationship. *Entrepreneurship Theory and Practice*, 24(1), 37-48.
- Wiklund, J., & Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium- sized businesses. *Strategic Management Journal*, 24(13), 1307-1314.
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing*, 20(1), 71-91.
- Zahra, S. A., & Covin, J. G. (1995). Contextual influences on the corporate entrepreneurship-performance relationship: A longitudinal analysis. *Journal of Business Venturing*, 10(1), 43-58.



## DIGITAL STRATEGY FOR ISLAMIC BANKS IN MOROCCO

Benabdelouahed Redouane<sup>1</sup>  
Laiachi Mohamed<sup>2</sup>

<sup>1</sup>University Hassan II Morocco, (Email: redouanebenabdelouahed@gmail.com)

<sup>2</sup> University Hassan II Morocco, (Email: mohamed.laiachi@gmail.com)

---

**Abstract:** *In morocco, there is consumer uncertainty about participating banks. This is due, among other things, to a lack of communication or a defect in the communication of these participating banks.*

*The present research, based on a field study with a group of young Moroccans, attempts to provide answers to the development problem of participative banks in Morocco, by highlighting the poor communication of the products and services of these banks as one of the main defects characterizing their start-up.*

**Keywords:** *Islamic banks, economic development, banking, digital, marketing.*

---

### Introduction

Islamic finance is now an essential component of global finance. It has been innovative, is growing rapidly in several countries, and has been able to establish itself in several Muslim and non-Muslim countries where it coexists with conventional finance.

In Morocco, it took several decades for the country to adopt Islamic finance, for which it chose the name participative. Since the banks started, a real ecosystem has emerged.

Religion is an important and permanent element of the culture of Muslim countries, it is a factor that influences the purchasing decisions of consumers in these countries in several sectors, of which the banking sector remains one of the first sectors influenced by religious reticence.

Certainly, many Moroccans among those who are not yet banked are not necessarily so for religious reasons. Nevertheless, a large proportion of Moroccans express a certain reluctance towards conventional banks for reasons related to sharia law, and find in Islamic banks a solution to their banking problem.

These people are one of the main targets of the participative banks. They are either people who have never had a bank account because of their religious beliefs, or who have already opened an account in a traditional (conventional) bank and used the financing products offered by these banks in a very limited way.

In reality, the start-up of participative banks has not been without problems. And even though they have actually started their activity after years of waiting, the fact remains that these institutions are not operating at full capacity. All they can do now is open accounts and perform traditional deposit and withdrawal operations, in addition to communication operations to attract customers.

There is consumer uncertainty about participative banks. This is partly due to a lack of communication or a defect in the communication of these participative banks.

The marketing and communication strategy is one of the most difficult issues that participative banks should manage. They must respond to the dual imperative of establishing new brands and introducing the general public to an industry that is still little known. And this must be done in a market dominated by conventional institutions, from which it is necessary to



differentiate in order to break through and above all to eliminate the customers' suspicions as to the compliance of this new activity with Sharia law.

Surprisingly, the participative banks in Morocco are very discreet in their communication about their functionalities, unlike conventional institutions, which regularly inform the public about their offers in terms of goods and services offered.

A large proportion of unbanked Moroccans who should be one of the targets of participative banks in Morocco are young people. Indeed, participative banks must make even greater use of the possibilities of new technologies and digitalization should represent an important part of the marketing and communication plans of these banks, but this should first of all involve an awareness of the importance of these media in the lives of these young "future bank customers".

Thus, social networks should benefit from most of this focus, especially when we see the adoption by Moroccans of some social networks, including Facebook, with more than 11 million accounts, or a third of the population, not to mention the substantial increase in the penetration rate among seniors.

The present research, based on a field study with a group of young Moroccans, attempts to provide answers to the development problem of participative banks in Morocco, by highlighting the poor communication of the products and services of these banks as one of the main defects characterizing their start-up.

### **Around participatory finance in Morocco**

The history of Islamic Finance in Morocco can be divided into three main phases. The first is characterized by a total absence of any trace of Islamic Finance. The second shows a partial and timid commercialisation of certain Islamic financial products, without legal references. The third phase is the adoption of a new banking law, but without the effective existence of any participating bank.

For a long time, the Central Bank refused to grant authorisations to banks specialising in Islamic finance. As a result, the position of the Moroccan monetary authorities towards this type of financing was always shocking and inexplicable, especially since Morocco is a country that has always counted in the international Muslim community. It was one of the founding countries of the Organization of Cooperation 6 - Islamic Organization (OIC)

The reasons expressed by the Moroccan authorities, which explain this "anti-Islamic finance" position if we can say so, are diverse. Sometimes, officials declare the non-compliance of Islamic Finance operations with national banking law, in this case participatory financing operations and their corollary the principle of profit and loss sharing. At other times, the authorities announce that the Moroccan banking sector does not have the necessary absorption capacity to accommodate the large number of interested Gulf banks, which could completely disrupt it.

In fact, it took several decades for Morocco to adopt Islamic finance, for which it chose the name of participative.

Indeed, in 2007 the Moroccan authorities authorized for the first time local commercial banks to market certain Islamic financial products. Thus, on 13 September 2007, Bank Al-Maghrib BAM issued a recommendation setting out the general conditions under which banks may offer Islamic products to the public. The products concerned are Murabahah, Ijara and Musharaka.



Among all the Islamic financing techniques, Morocco has chosen those that have more scope and success in the financial world, including Murabaha, Mousharaka and Ijara accredited by The Accounting and Auditing Organization for Islamic Financial Institutions AAOIFI.

Indeed, the Central Bank, in coordination with the GPBM, determines the accounting schemes and recording procedures for transactions related to these products and drafts, on the basis of the rules laid down by the AAOIFI, the standard contract models Morocco has chosen, like countries such as Jordan, Kuwait or Turkey, to have a single banking law with a chapter on participating banks, rather than two separate laws in order to ensure consistency and harmonisation of the banking sector's offer.

Bank Al Maghrib, which is the supervisory body, has naturally participated in the development of the regulatory framework (draft law and implementing regulations). Its role is to grant licences to participating banks but also to supervise them, like conventional banks. However, given the nature of participating banks, there will also be more appropriate supervision for certain prudential issues related to specific risk management. Bank Al Maghrib also participates in the implementation of support measures for the development of participatory finance in Morocco. Since the banks started, a real ecosystem has emerged.

Nevertheless, and after a few months after their launch, the offers and services offered by participating banks are still limited and unknown to the general public. In what follows, we will try to provide some answers to this difficulty faced by participating banks in Morocco.

### **Digital strategies for the development of participatory banks**

We will first present the methodological approach of our survey, then we will proceed to analyze the results of our study.

#### **Approach**

Our study is interested in the development of participative banks in Morocco, we conducted a survey by a questionnaire based on the knowledge of the products offered by the participative banks and on the communication actions of these banks already established in the Moroccan market.

The results we will present are based on a field survey we conducted in a random sample of 200 people, randomly selected on the Facebook social network, where we created a public event designed specifically for the needs of our survey.

The answers were collected with Google Forms, we then exported the database to the SPSS software, with which we performed the various statistical analyses.

#### **Discussion and analysis of the survey results**

Commercial strategy and communication are one of the most difficult issues to manage by participating banks in Morocco. They must respond to the dual imperative of establishing new brands and introducing the general public to an industry that is still little known. And this must be done in a market dominated by conventional institutions, from which it is necessary to differentiate in order to break through and above all to eliminate the suspicions already perceptible to customers as to the compliance of this new activity with Sharia law.

Contrary to what one might think, it is not among traditionalist clients, already convinced by Islamic finance, that participating banks recruit their first clients. International experience, supported by a study by Mc Kinsey, shows that this target (when it is banked) is already in debt with conventional institutions, which prevents its immediate recruitment,



especially since participating banks do not have the possibility of buying back conventional financing.

Thus, the most promising source for the development of participatory banks in a market dominated by conventional institutions is the clientele that remains undecided towards participatory finance because it does not master its concepts and products. This target, which generally has intermediate incomes, can thus join if it is supported. As for the high-income clientele, it is observed that they adopt a "financial" behaviour, i.e. they are not satisfied with sharia compliance and are looking for other attractive elements. It is thus possible to capture these users by highlighting the diversity of the offer, geographical proximity, quality of service, personalized service.

Indeed, by looking back at all the communication of these banks, we note that the authorities concerned began by communicating on an alternative model versus the conventional model, with the launch of Islamic products (mourabaha for example), but without mentioning compliance with the shariâa. However, Islamic banks must incorporate the latest developments in digital banking.

Thus, solutions such as remote banking should be offered to customers, especially young people.

In the following, we will present some proposals likely to participate in the development of participatory banks in Morocco.

### **Digital communication of the simplest solutions**

To promote the public's good initiation to the offer of participating banks, we believe that at this phase, which marks the launch of these banks, digital communication should focus on the simplest solutions, especially those that are easily assimilated by all types of users, which will enable the general public to understand the offer of its banks and subsequently to popularize this offer when entering into contact with customers.

### **Communication not focused on Shariah compliance**

Digital communication should not highlight the "Halal" character of the offer, this argument is not sufficient in any way to position a product offer from participating banks. Indeed, communication should not only focus on Shariah compatibility, but other aspects such as the innovation of these solutions should also be highlighted. However, it is necessary to highlight the correlation of participatory finance with the real economy, to anchor the idea that its institutions no longer position themselves only as financial intermediaries but as economic intermediaries.

### **Digital agency:**

Participating banks should further exploit the possibilities of new technologies by setting up, for example, a digital agency that can strengthen physical service points across the kingdom. This service concept enables participating banks to optimize customer recruitment times by not neglecting any prospecting leads. For example, the digital agency's dedicated advisors can offer services to prospects who had only initially expressed a need for information. A customer who inquires about the characteristics of the bank account proposed by the institution is thus invited, shortly afterwards, to send the digital agency a copy of an identity document to open his account remotely.

In the end, participating banks are still suffering to access the Moroccan market. History and facts show the obstacles and obstacles that are being put on the path of their development



in Morocco. Thus, the challenge for its banks to succeed is to position themselves with professionals and companies, and to go beyond the individual segment.

### **Conclusion**

Islamic Finance is inspired by the principles of Sharia law, in order to develop financial products and services that are in accordance with the precepts of the Islamic religion. As a result, it can also be considered as an alternative financing in its own right.

First of all, because it offers products and services that were not originally developed by traditional banks. Thereafter, because it serves a population excluded from the traditional banking circuit, particularly for religious reasons

Morocco has considerable assets that allow it to position itself as a financial centre that can attract substantial Islamic financing.

By following international trends, Morocco has authorized the marketing of certain alternative financial products. Venture capital and microfinance players are now active on the Moroccan financing market. They have even become key players on the Moroccan financial scene.

Islamic finance is not only a set of "techniques", it is a spirit, an ethics, a moralization of human behaviour and an awareness of its mission on earth as defined in the Koran.

In Morocco, a first experience has emerged over the past three years with the implementation of three Islamic contracts: Murabaha, Ijara and Musharaka. On the other hand, as it has been designed, this experience is not as successful as expected by socio-economic operators and the general public.

### **Bibliographie:**

- ACHEHBAR S., Banques : Les produits «halals » arrivent, TELQUEL Online N : 259 -  
NGHAIZI A., La Finance Islamique et le Maroc, une longue histoire...qui finit par  
commencer, Les Cahiers de la Finance Islamique Numéro Spécial 2013, Ecole de  
Management Strasbourg, 2013. Finance & Finance Internationale N°6 janvier 2017  
<http://revues.imist.ma/?journal=FFI> ISSN: 2489-1290 6
- Echchabi Abdelghani and Hassanuddeen Abd. Aziz, Empirical Investigation of Customers' Perception and Adoption Towards Islamic Banking Services in Morocco, Middle-East Journal of Scientific Research 12 (6): 849-858, 2012 , ISSN 1990-9233 .
- Grant Thornton Cabinet., « Finance Islamique : Etat des lieux et perspectives », Regards Lettre d'information, N : 2 Novembre 2012.
- Naser, K., A. Jamal and K. Al-Khatib, 1999. Islamic banking: a study of customer satisfaction and preference in Jordan. International Journal of Bank ,17(3): 135-50.
- NGHAIZI A., « La Finance Islamique et le Maroc, une longue histoire...qui finit par commencer », Les Cahiers de la Finance Islamique Numéro Spécial 2013, Ecole de Management Strasbourg, 2013.
- ZAROUALI M-J., « Le financement bancaire classique face aux financements alternatifs : relations de concurrence ou de complémentarité ? Analyse comparative dans le contexte marocain », Thèse de doctorat en Sciences économiques et de gestion, FSJES Oujda, 2016.



## A SYSTEMIC REVIEW OF SOCIAL MEDIA STUDIES IN GOVERNMENT ORGANIZATIONS

Ram Al Jaffri Saad<sup>1</sup>

<sup>1</sup>Tunku Putri Intan Safinaz School of Accountacy (TISSA-UUM), Universiti Utara Malaysia

---

**Abstract:** *The use of smartphones by individuals around the world are reaching billions, and this development has also increased the use of social media applications in daily communications. Many studies stated social media can help government organizations to improve communication services and create better engagement with citizens as almost all citizens are using social media applications. The objectives of this study was to perform a systematic literature review to identify important themes in social media research in government organizations. Systematic review of articles related to social media research in government organizations is searched using Google Scholar and other academic databases such as Jstor and Science Direct. Each publication was reviewed by 2 researchers for inclusion and relevant data extraction. Through the analysis of a number of past research, a systematic literature review has been grouped and represented in four different themes including governance, citizen trust, participation and transparency. The studies are analysed, gaps in the literature are identified, and further research directions within the themes are proposed.*

**Keywords:** *Social media, public sector organisations, Facebook, Twitter.*

---

### Introduction

The benefit of modern social media applications around the world today has enables individuals and organisation to disseminate information in a fast and cheap way that was never possible before, to an audience that reach global scale and so diverse, and its impact is so significant that it can bring down a government. Pushed by the swift improvement of individual social media use, many government organizations choose to adopt social media to be in line with current trend and to achieve various objectives in many dimensions such as marketing, public health, safety and mainly communication (M Hisham M Sharif, Troshani, & Davidson, 2015). Social media applications provides dynamic platform for web-based interaction that can create better public engagement between government organisations and citizens (Agostino & Arnaboldi, 2016). Many studies highlighted that social media can help in cutting marketing costs and can provide new and innovative way for government organizations to improve delivery of services to the citizens. Social media applications also provide a platform to get feedback from citizens in an informal manner (Khan, 2017). In order to reap full benefits offered by social media to government organizations, clear objectives and systematic plan are needed in implementing social media in government organisations to assure that the openness that results from social media use is carefully managed. This is to ensure that all types of communications whether formal or informal meet the organization standards and protocol in terms of content development and procedure adherence (Meijer & Torenvlied, 2016). Furthermore, the impact of social media on private and public organisations in term of financial benefits could rise to billions (Jones, Borgman, & Ulusoy, 2015; M Hisham M Sharif et al., 2015), which is gained from effective and efficient communication and collaboration between individuals and organizations.



While there are scant academic work examining social media issues in government organizations; which includes the use of social media applications in local government (Bonsón, Royo, & Ratkai, 2015; M Hisham M Sharif et al., 2015), procedures and protocols in implementing social media (Meijer & Torenvlied, 2016), social media use by public organisation for disaster management (Gao, Barbier, & Goolsby, 2011) and social media impact to government organizations (Bonsón et al., 2015; Karakiza, 2015; Mohd Hisham Mohd Sharif, Troshani, & Davidson, 2018), little has been written about social media overall use in government organizations, particularly on specific theme used in social media research. Given the importance of social media to many sectors of government organizations agencies and the investments being made in social media engagement in the government organizations (Sivarajah, Irani, & Weerakkody, 2015), policymakers stand to benefit from a systematic review of relevant evidence, to guide future practice. This review would also contributes to the growing body of literature in social media and government organizations. This study aimed to address this knowledge gap by utilising the systematic review technique to identify, classify and critically analysed important themes of social media research in government organizations.

### **Literature Review**

There is much more to social media other than Facebook, Twitter and YouTube. Social media terminology was first coined in 2005 to embody various forms of Internet-based applications that are created on Web 2.0 platform where users is highly involved in updating the Web content (O'Reilly, 2007). The term social media has been defined by several notable scholars, for example Kaplan and Haenlein (2010) specify social media as a collection of Web based applications that emphasizes on content generation and interactions. Meanwhile O'Reilly (2007) describe social media as a group of applications that is build on open user involvement. Social media has also been proposed as an Internet-based applications that can drive social interactions where communities can collaborate in creating Web content (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011). Boyd and Ellison (2007) discussed social media as a set of applications that could provide opportunities to its users to construct a public profile, articulate a list of other users with whom they share a connection, and view their connections and those made by others within the applications. More recently, social media has been suggested as a collection of real time channel that allows web audiences to derived value from content generation and live interaction (Carr & Hayes, 2015). Based on the above definitions, content creation by Web users and interactions between them are the two most important aspects in describing social media. Hence, this study refers social media as a collection of innovative Web applications that enables active and real time interactions between Web users to create, share dan derive value from existing information on the Web.

### **Methodology**

This study adopts a desk-research approach in reviewing the recent literature in social media studies particularly in government organizations. This systematic review is based on methodology used by Alzahrani, Al-Karaghoul, & Weerakkody (2017). The review has been divided into three significant phases to identify concerning articles to information system study: (1) review planning; (2) conducting the review; (3) review documentation.

The first step in the systematic review is to investigate the literature based on the research aims. The search of the published literature covers literature since 2008 to 2019 that focused on social networking applications and social media activities used by citizens and government to communicate to, or otherwise interact with each other. The keywords of



searching include: “social media”, “social networking sites”, “Facebook”, “Twitter”, “politic/civic engagement”, “political participation”, “government organizations”, “citizens” and “social media government”. The published literature was identified through several electronic databases including Google Scholar, ScienceDirect, ACM, Proquest, UUM library, Scopus etc.

In conducting the systematic analysis, the presents study draws specific criteria based on the abstracts reading. The criteria are as follows: (1) published after 2012; (2) containing a relevant discussion of social media use in government organizations; (3) published in English. Articles that focused on the conceptual and qualitative data or had a limited discussion on the primary topics were excluded. After a critical process, the study finally reviewed 24 articles which is considered as relevant to the purpose of this study. Each article was read prudently to identify the themes. These studies were then clustered in the identified themes. Four themes emerged from the reviewed articles: public participation, citizen trust, governance, and transparency & accountability.

### **Study Profile**

There are many branches of literatures that addressed on social media in government organizations. For this study, the selected four (4) categories of literatures were reviewed are participation, governance, citizen trust and transparency. Numbers of papers selected for each area are shown in Table 1.

**Table 1:** Findings of Literatures of Social Media in government organizations

Selected Areas	Number of Articles
Participation	7
Governance	6
Citizen Trust	7
Transparency	4

The reviewed articles on papers related to engagement shows that the main body of work is analyzing public engagement within government organization through social media platform, either using Twitter, Facebook, Instagram, etc. The contribution of these social media as one of the medium for citizen engagement is critically analyzed in order to understand the level of organizational impact that social media gives to the organizations.

In regards to governance and social media in government organizations, it shows the pattern of academic articles that is aiming to understand the concept social media governance. This includes institutional governance of social media implementation or Internet governance. In term of citizen trust, analyzed papers shows that organizations use social media to understand citizen attitudes towards the adoption of government organizations, and to further comprehend the reason they continuously use the government organizations services. Furthermore, critical factors that influence citizen trust in government organizations are highlighted and how individual differences influence the adoption and usage of government organizations is also discussed.

Researches related to transparency and social media tend to illustrate government’s effort to increase transparency and accountability of information in social media. Several issues and challenges towards increasing the transparency in social media are also discussed in the reviewed articles.



Majority of the studies (24 studies) are not based on a theory or model. Based on the Table 2, it shows that, only three (3) studies utilized existing model or a theory in their research studies. This includes the use of Agency Theory and Stakeholder Theory to explain engagement and governance in government organizations. DeLone and McLean's IS Success Model is utilized in one of the studies to understand salient factors affecting e-filing continuance usage intention (Veeramootoo, Nunkoo, & Dwivedi, 2018).

**Table 2:** Theoretical Foundation Findings

Theory/ Model	Number of Articles
Agency Theory	1
Stakeholder Theory	1
DeLone and McLean's IS Success Model.	1

Table 3 illustrates the approach used in the reviewed papers. From the table, it is shown that both qualitative and quantitative methods have been frequently used in most of the researches. The other two (2) studies used mixed methods approach (both quantitative and qualitative).

**Table 3:** Results of Research Approach

Research Approach	Number of Articles
Quantitative Approach	11
Qualitative Approach	11
Mixed (Quantitative + Qualitative)	2

### **Findings & Discussions**

Based on the systematic literature review conducted, this study found several common themes emerged in the area of social media adoption by public institutions. The themes are public participation, citizen trust, governance and transparency and accountability. Each of these themes are discussed in detail in the following paragraphs.

Participation is a crucial factor in determining the success of social media used by public institutions. Through social media platform, not only the public institutions can deliver the information, but also get feedback from the society who interact with them. Previous studies have examined the types of social media used, the content of social media posts by the public institutions, and the factors influencing society's participation in the social media. Previous studies on society's participation in public institutions have been conducted in developed countries, such as UK (Boyd & Ellison, 2007), US (Smith & Gallicano, 2015), Italy (Agostino & Arnaboldi, 2016), German (Hofmann, Beverungen, Räckers, & Becker, 2013) and European Unions (Bonsón et al., 2015). However, limited study is found on society's participation in public institutions in developing countries including in Malaysia.

Previous studies have identified various social media platform commonly used by public institutions. The most common platform is Facebook (Agostino & Arnaboldi, 2016; Bonsón et al., 2015; Ellison & Hardey, 2014). Other platforms used are Twitter, Flickr, and Youtube (Ellison & Hardey, 2014). Society's participation can be categorized as either public communication or public participation (Agostino & Arnaboldi, 2016). Public communication is a one-way communication from the public institutions to society, whereas public participation is a two-way interactive communication between the public institutions and the society. In public participation, society interact and provide feedback to public institutions.



Previous studies have also examined the factors that influence the level of participation. Among the factors identified are the content of the information provided by the public institutions. The information provided by public institutions must be useful to the society to encourage the participation by the society (Bonsón et al., 2015; Smith & Gallicano, 2015). For example, information about healthcare (Park, Reber, & Chon, 2016). The information provided also must be of interest to the society. The huge interest can be enhanced by allowing the society to participate actively in the discussion by the public institutions. This is considered as a crucial factor in driving social media engagement as it is fulfilling the emotional and individual needs (Wang, Tchernev, & Solloway, 2012). Other factors identified are existence of a sense of presence or the state of being online (Smith & Gallicano, 2015). Finally, the society participate in social media by public institutions to get social approval (Smith & Gallicano, 2015). Society finds valuable experience when they get approved by others in social media interaction (Wang et al., 2012).

### **Citizen trust**

Citizen trust plays a significant role in the successful adoption of government organizations (Bélanger & Carter, 2008). Despite of the significant advantages of ICT and its great influences to the society, many studies (Bannister & Connolly, 2011; Khasawneh, Rabayah, & Abu-Shanab, 2013; Weerakkody, Irani, Lee, Osman, & Hindi, 2015) found that most of them do not trust online services or government organizations and prefer to use traditional way (over the counter) to access the services offered by government.

In order to explain the citizen trust in government organizations, there are few things to be comprehended. This relationship appears to be complex as the interactions not only between government and citizen but the inclusion of technology and business as well (Bélanger & Carter, 2008; Mahmood, Osmani, & Sivarajah, 2014). In regards to citizens' trust, extant literatures have found to examine this area in many dimensions; citizens' attitudes towards government organizations (Alzahrani et al., 2017), critical factors influencing citizen trust in government organizations (Alzahrani et al., 2017), citizens' use of social media in government (Song & Lee, 2016), the determinant success of an government organizations service (Veeramootoo et al., 2018), the imperative of influencing citizen attitude toward government organizations adoption and use (Al-Hujran, Al-Debei, Chatfield, & Migdadi, 2015), the impact of citizens' trust toward the successful adoption of government organizations (Alzahrani et al., 2017), etc. However, majority of these studies were conducted in developed countries and less to be found in developing country like Malaysia.

In addition, previous findings reveal that limited consideration paid to citizen's aspects of trust (such as personality, culture, gender, experience, education level, beliefs and value of systems (Alzahrani et al., 2017). It is also indicated that, the level of interest in government organizations by the citizens is generally low; however they appreciate personalization, user-friendliness and the ability to communicate (M Hisham M Sharif et al., 2015). According to Song & Lee (2016), the use of government social media is significantly associated with perception of government transparency which highly related to trust in government. Therefore, the perceptions of government transparency mediate the relationship between use of government social media and trust in government. This can become the important indicator for government to improve citizen's trust in government by enhancing their perceptions of government transparency.

The continuance usage intention by citizen is also influenced by system quality, user satisfaction and habit. Among them, user satisfaction plays a significant role (Veeramootoo et



al., 2018). Besides, citizen attitude toward using government organizations services is also found as strong determinant of citizen intention to adopt and use government organizations services, which are jointly determined by perceived public value and perceived ease of use (Al-Hujran et al., 2015). These findings have managerial implications that the government needs to pay closer attention to citizen attitude and satisfaction of using government organizations services. On the other hand, another study found that females are more confident and have a more positive evaluation of online services compared to males and interestingly the same pattern shown by the old people compared to the younger people (Veeramootoo et al., 2018).

### **Governance**

Governance is another important aspect in social media especially among public institutions. According to Stakeholder Theory, the purpose of governance is to align stakeholders' interest with the organization's interest. Public institutions must fulfill the public's need of information with the institutions' objective and interest. Therefore, it is important for the public institutions to provide reliable information and monitor the use of information available from social media, so that the information can then reused by the public to meet their need (Misuraca & Viscusi, 2015).

Previous studies have examined the issue of governance in social media in both private and public institutions. Among the main issue discussed was the non-existence of regulation in monitoring the use of social media. In fact, there is lack of critical study examining the effect of social media on governance especially in private and public organizations as compared to political setting (Hoffmann & Lutz, 2015).

In the past five years, recent studies focus on theoretical aspect rather than empirical aspects of the importance of governance in social media (DeNardis & Hackl, 2015; Hoffmann & Lutz, 2015; Linke & Zerfass, 2013). Although many institutions claimed that governance of social media has been included as part of their management strategy, however very few developed a regulatory framework related to governance of social media (Linke & Zerfass, 2013).

There are other issues or challenges in governing the social media. In the design aspect, there is challenges in developing an effective architecture of the platform (DeNardis & Hackl, 2015). An effective design of social media structure will enhance the effectiveness of communication between the organizations and the public. Another challenge is the public policy related to governing the use of social media (DeNardis & Hackl, 2015). There increase use of personal social media to share work-related information by employees and other stakeholders provides risks and opportunities to the organization (van den Berg & Verhoeven, 2017) Therefore, it is crucial to develop a public policy that is people-friendly so that the organizations can benefit from social media as an interchange of communication and information (Hoffmann & Lutz, 2015).

### **Transparency**

Social media provide a platform for public organisation to have better transparency in communicating with the public. It provides the opportunity for the public to get access to information, participate and collaborate with government organizations which can enable improvement in public service delivery. Transparency is an important element which promotes openness in the delivery of information. Information transparency is a quality that is highly appreciated by the public (Bertot, Jaeger, & Grimes, 2012).



Recent studies have been conducted to examine the use of social media to increase transparency among government organizations. For example, in the context of European Union, many studies highlighted that the use of social media enhanced the level of information delivery transparency in government organizations and enable the citizen to communicate in a more informal manner (Bonsón et al., 2015; Guillamón, Ríos, Gesuele, & Metallo, 2016; Stamati, Papadopoulos, & Anagnostopoulos, 2015).

However, government organizations faced challenges to monitor the two-way communication between the organisations and the public (Bertot et al., 2012). It is difficult to control and verified the information provided by the public, thus may influence the dialogue. The role of the public organization to promote transparency and accountability will continue to evolve in the future despite the challenges faced.

### Conclusion

Social media has provided an opportunity for government organizations to communicate and interact with the public at large. Due to its various advantages, many public institutions have used social media as a communication tools in serving the public. This study aimed to systematically reviewed the literature to identify emerging themes in social media research in public sector organizations. Based on the findings, four themes emerged in the literature: participation, citizen trust, governance and transparency. The findings informed that social media in public institutions can be harnessed to its optimal potential, but it must be monitored and managed to ensure the effectiveness and efficiency of the social media. This findings can enable managers in government organizations to carefully plan their social media presence based on the identified theme so that it will be beneficial to the organization, hence enabling ample resources to be channelled into important themes that will improve social media implementation benefits.

### References

- Agostino, D., & Arnaboldi, M. (2016). A Measurement Framework for Assessing the Contribution of Social Media to Public Engagement: An empirical analysis on Facebook. *Public Management Review*, 18(9), 1289–1307. <https://doi.org/10.1080/14719037.2015.1100320>
- Al-Hujran, O., Al-Debei, M. M., Chatfield, A., & Migdadi, M. (2015). The imperative of influencing citizen attitude toward e-government adoption and use. *Computers in Human Behavior*, 53, 189–203.
- Alzahrani, L., Al-Karaghoul, W., & Weerakkody, V. (2017). Analysing the critical factors influencing trust in e-government adoption from citizens' perspective: A systematic review and a conceptual framework. *International Business Review*, 26(1), 164–175. <https://doi.org/10.1016/j.ibusrev.2016.06.004>
- Bannister, F., & Connolly, R. (2011). Trust and transformational government: A proposed framework for research. *Government Information Quarterly*, 28(2), 137–147.
- Bélanger, F., & Carter, L. (2008). Trust and risk in e-government adoption. *The Journal of Strategic Information Systems*, 17(2), 165–176.
- Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2012). Promoting transparency and accountability through ICTs, social media, and collaborative e-government. *Transforming Government: People, Process and Policy*, 6(1), 78–91. <https://doi.org/10.1108/17506161211214831>
- Bonsón, E., Royo, S., & Ratkai, M. (2015). Citizens' engagement on local governments' Facebook sites. An empirical analysis: The impact of different media and content types in



- Western Europe. *Government Information Quarterly*, 32(1), 52–62.
- Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-mediated Communication*, 13(1), 210–230.
- Carr, C. T., & Hayes, R. A. (2015). Social media: Defining, developing, and divining. *Atlantic Journal of Communication*, 23(1), 46–65.
- DeNardis, L., & Hackl, A. M. (2015). Internet governance by social media platforms. *Telecommunications Policy*, 39(9), 761–770. <https://doi.org/10.1016/j.telpol.2015.04.003>
- Ellison, N., & Hardey, M. (2014). Social Media and Local Government: Citizenship, Consumption and Democracy. *Local Government Studies*, 40(1), 21–40. <https://doi.org/10.1080/03003930.2013.799066>
- Gao, H., Barbier, G., & Goolsby, R. (2011). Harnessing the crowdsourcing power of social media for disaster relief. *IEEE Intelligent Systems*, 26(3), 10–14.
- Guillamón, M. D., Ríos, A. M., Gesuele, B., & Metallo, C. (2016). Factors influencing social media use in local governments: The case of Italy and Spain. *Government Information Quarterly*, 33(3), 460–471. <https://doi.org/10.1016/j.giq.2016.06.005>
- Hoffmann, C. P., & Lutz, C. (2015). The impact of online media on stakeholder engagement and the governance of corporations. *Journal of Public Affairs*, 15(2), 163–174. <https://doi.org/10.1002/pa.1535>
- Hofmann, S., Beverungen, D., Räckers, M., & Becker, J. (2013). What makes local governments' online communications successful? Insights from a multi-method analysis of Facebook. *Government Information Quarterly*, 30(4), 387–396. <https://doi.org/10.1016/j.giq.2013.05.013>
- Jones, N., Borgman, R., & Ulusoy, E. (2015). Impact of social media on small businesses. *Journal of Small Business and Enterprise Development*, 22(4), 611–632.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59–68.
- Karakiza, M. (2015). The impact of social media in the public sector. *Procedia-Social and Behavioral Sciences*, 175, 384–392.
- Khan, M. L. (2017). Social media engagement: What motivates user participation and consumption on YouTube? *Computers in Human Behavior*, 66, 236–247.
- Khasawneh, R., Rabayah, W., & Abu-Shanab, E. (2013). E-government acceptance factors: trust and risk. In *The 6th international conference on information technology* (pp. 8–10).
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54(3), 241–251.
- Linke, A., & Zerfass, A. (2013). Social Media Governance: Regulatory Frameworks for Successful Online Communication. *Journal of Communication Management*, 17(3), 270–286. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Mahmood, M., Osmani, M., & Sivarajah, U. (2014). The role of trust in e-government adoption: A systematic literature review.
- Meijer, A. J., & Torenvlied, R. (2016). Social media and the new organization of government communications: An empirical analysis of Twitter usage by the Dutch police. *The American Review of Public Administration*, 46(2), 143–161.
- Misuraca, G., & Viscusi, G. (2015). Shaping public sector innovation theory: an interpretative framework for ICT-enabled governance innovation. *Electronic Commerce Research*, 15(3), 303–322. <https://doi.org/10.1007/s10660-015-9184-5>
- O'Reilly, T. (2007). What is Web 2.0: Design patterns and business models for the next



- generation of software. *Communications & Strategies*, (1), 17.
- Park, H., Reber, B. H., & Chon, M. G. (2016). Tweeting as health communication: Health organizations use of twitter for health promotion and public engagement. *Journal of Health Communication*, 21(2), 188–198. <https://doi.org/10.1080/10810730.2015.1058435>
- Sharif, M Hisham M, Troshani, I., & Davidson, R. (2015). Public sector adoption of social media. *Journal of Computer Information Systems*, 55(4), 53–61.
- Sharif, Mohd Hisham Mohd, Troshani, I., & Davidson, R. (2018). Determinants of social media impact in local government. In *Media Influence: Breakthroughs in Research and Practice* (pp. 141–164). IGI Global.
- Sivarajah, U., Irani, Z., & Weerakkody, V. (2015). Evaluating the use and impact of Web 2.0 technologies in local government. *Government Information Quarterly*, 32(4), 473–487.
- Smith, B. G., & Gallicano, T. (2015). Computers in Human Behavior Terms of engagement : Analyzing public engagement with organizations through social media. *Computers in Human Behavior*, 53, 82–90. <https://doi.org/10.1016/j.chb.2015.05.060>
- Song, C., & Lee, J. (2016). Citizens' use of social media in government, perceived transparency, and trust in government. *Public Performance & Management Review*, 39(2), 430–453.
- Stamati, T., Papadopoulou, T., & Anagnostopoulos, D. (2015). Social media for openness and accountability in the public sector: Cases in the greek context. *Government Information Quarterly*, 32(1), 12–29. <https://doi.org/10.1016/j.giq.2014.11.004>
- van den Berg, A. C., & Verhoeven, J. W. M. (2017). Understanding Social Media Governance: Seizing Opportunities, Staying Out of Trouble. *Corporate Communications: An International Journal*, 22(1), 149–164. <https://doi.org/10.1108/CCIJ-02-2015-0009>
- Veeramootoo, N., Nunkoo, R., & Dwivedi, Y. K. (2018). What determines success of an e-government service? Validation of an integrative model of e-filing continuance usage. *Government Information Quarterly*, 35(2), 161–174.
- Wang, Z., Tchernev, J. M., & Solloway, T. (2012). A dynamic longitudinal examination of social media use, needs, and gratifications among college students. *Computers in Human Behavior*, 28(5), 1829–1839. <https://doi.org/10.1016/j.chb.2012.05.001>
- Weerakkody, V., Irani, Z., Lee, H., Osman, I., & Hindi, N. (2015). E-government implementation: A bird's eye view of issues relating to costs, opportunities, benefits and risks. *Information Systems Frontiers*, 17(4), 889–915.



## PSYCHOMETRIC FEATURES OF MYMICA MULTIPLE INTELLIGENCE INSTRUMENTS AMONG DELINQUENT STUDENT IN PRIMARY SCHOOL

Syuzianti Shaari<sup>1</sup>  
Mohd. Effendi @ Ewan Mohd. Matore<sup>2</sup>

<sup>1</sup>Faculty Education, Universiti Kebangsaan Malaysia, Malaysia (E-mail: [syuziantishaari@gmail.com](mailto:syuziantishaari@gmail.com))

<sup>2</sup>Faculty Education, Universiti Kebangsaan Malaysia, Malaysia (E-mail: [effendi@ukm.edu.my](mailto:effendi@ukm.edu.my))

---

**Abstract:** *The lack of empirical evidence on the psychometric testing among Multiple Intelligence instruments (MI) has become a serious problem in term of its application. Measurement instrument of MI in the context of delinquent student in primary schools or MyMICA that has been tested by using Rasch Measurement Model is believed to improve the validity and reliability of the items significantly. Hence, this research aims to investigate the features of psychometric test items for MI instruments, that is Malaysian Checklist for Adult (MyMICA) using the Rasch Measurement Model in the context of delinquent students in primary school. A total of 112 students from eight primary schools in Hulu Langat district, Selangor were involved in this study. Respondents selected through the purposive sampling techniques. The findings proved that a total of 62 items met the main assumptions of Rasch Measurement Model which are i)item fit, ii)unidimensionality and iii)local independence. Whereas, 19 items have been omitted. The reliability index and the separation index for MyMICA instrument show high value. Therefore, this research shall be contributing significantly to the aspects of testing items for MI instruments by using Rasch Measurement Model. Thus, MI instrument of MyMICA could be applied in the context of delinquent student in primary school in Malaysia.*

**Keywords:** *Mymica Instrument of Multiple Intelligences, Delinquent Students, Primary School, Psychometric, Rasch Measurement Model*

---

### Introduction

Every individual is born with his or her own intelligence, whether naturally or learned. Around the year 1980's, Howard Gardner of Harvard University, United States of America, had introduced Multiple Intelligence theory (MI). This theory contradicts with the assumption that intelligence of an individual is only instigated by one single factor only. On the other hand, human intelligence can be improved from one level to a higher level through experiences, environment and education.

Gardner (1983) insists that each intelligence is separated, which means that an individual can be successful in a given field of expertise and at the same time fail in other intelligence disciplines.

The theory of MI proves that any individual has eight types of intelligence such as (a) Verbal-Linguistic (VL) –ability in speech and writing specific language and learn multiple languages, (b) Logical-Mathematical (LM) –ability to review the problem of rational, mathematical problem solving and researching the issue scientifically, (c) music (MZ) – ability in performing arts, composing song and able to appreciate the works of music, (d) Bodily-Kinesthetics (KB) –ability to efficiently leverage the movement of the entire body to settle an objective (e) Visual-Spatial (VR) ability to draw visually whether physically on paper or



virtually on mind, (f) Interpersonal (IE) – skillful in understanding the feelings, motivations and habits of other individuals, and (g) Intrapersonal (IT) – capable of understanding oneself which could create its own identity (Siti Rahayah et al., 2008).

Gardner (1999) had redefined the meaning of intelligence by introducing the eighth intelligence, Naturalist (NA). NA is the ability to identify and classify the species of living thing in this environment. In addition, he had also identified the existence of the ninth intelligence which is called Spritual Intelligence (SI) which was then replaced with the Existential Intelligence. Other titles given to award this type of intelligence was intelligence of big questions. However, Siti Rahayah, Rosseni, and Hafsa (2008) pointed out that Gardner has not yet to confirm this ninth intelligence. The Existential Intelligence described for individuals who reflect and think about the fundamental questions of existence (Gardner, 1999).

In Islam, the SI shows solid relationships between spiritual and religious concept that can be realized in terms of faith, worship and morality (Tajulashikin & Nor Faizah, 2014). In other words, the quality of faith, worship, and morality of a person depending on how far the strength of individual SI relationship with religion. Human behavior is a reflection of inner person's soul (Abdul Latif, 2012). Therefore, there is no renunciation that SI played an important role in the field of education to form a noble personality or excellent conducts of a person.

Lately, student disciplinary issues have been rampant either in the national or international level, high school level or lower. The existence of disciplinary issues or delinquency among students is worrying all parties, especially the school administrators and the parents. Those issues has somehow led to the impediments in achieving Government's aspirations as enshrined in the national Philosophy of Education or *Falsafah Pendidikan Negara (FPK)* (Nurul Wahida & Wan Hishamudin, 2017). Delinquent can be defined as (usually used for the younger generation) behaved badly and often forbidden by law (Steel, 2012). Noresah (2015) define delinquent as behaving in violation of the law that is not serious or committing actions contrary to norms of the society. In addition, Nurul Wahida and Wan Hishamudin (2017) state that the term is also found in the field of Criminology which relates to crime. In the context of education, especially in schools, this term refers to a juvenile offence or juvenile delinquency. In other words, juvenile delinquency can be defined as the involvement of children aged from 10 to 17 years old in activities outside the norms of a society. In this context of study, the researcher defined the delinquent students as the phase 2 students; Year 4, 5 until 6 in the primary school who are involved in conduct violations such as bullying, scolding teachers, playing truant and vandalism.

In identifying MI, there are several instruments which are in line to the context and culture in Malaysia. The instruments are *Inventori Kecerdasan Pelbagai (IKP)* (Ibrahim, 2007), *Inventori Kecerdasan Pelbagai (IKeP)* (Kementerian Pendidikan Malaysia, 2017) and Malaysia Adolescence Multiple Intelligences Test (MAMIT) (Rizal & Hairul Nizam, 2007). However, these instruments do not measure the MI of the students at primary school level with ages from 10 years

old. Due to the absence of appropriate instruments, the researcher uses an instrument which is also based on the theory of MI namely, Malaysian Multiple Intelligences Checklist for Adult (MyMICA).

## Literature Review

### *The History of Multiple Intelligences*



Theory of intelligence has begun to exist in modern psychology at the end of the 19th century. The concept of human intelligence is very much influenced by modern psychology. Early theories of human intelligence were first introduced by Francis Galton (Cohen & Swerdlik, 2009). However, those theories of human intelligence were not able to reach human affective domain because the theories were only limited to operational functions of cognitive. Spearman (1904) debated over the intelligence concept was based on the theory of Two Factors, namely the 'g' factor (general) and 's' (specific). The 'g' factor refers to human intelligence due to the hereditary factors. Since 'g' factor does not reflect the human intelligence in total, this concept is improved with the introduction of 's' factor that human intelligence is only due to a factor only. In other words, 's' factors complements 'g' factors (general) in describing the intelligence of the individual holistically. Siti Rahayah, Rosseni, and Hafsa (2008) explain that the theory describes all human intelligence capabilities have duplication called 'g' factor.

Gardner disputed the concept of intelligence which is only limited to the cognitive domain only. Hence, he had introduced a theory in 1983 known as the theory of MI. Initially, MI theory explained that each individual possesses seven types of intelligence which are Verbal-Linguistic (VL), Logical-Mathematics (LM), Visual-Spatial (VR), Bodily-Kinesthetics (KI), Music (MZ), (IE), Interpersonal and Intrapersonal (IT). Then, in 1999, Gardner has introduced an eighth intelligence, namely Naturalist (NA) and followed by the ninth intelligence which is Spritual Intelligence (SQ). Nevertheless, Gardner (2000) had later rejected SI as one type of intelligence because of the view that the essence of intelligence is the ability to do measurements which involves cognitive activities. As such, he replaced SI with Existential Intelligence. He also called this intelligence as 'intelligence of big questions'.

### ***The Definition of Multiple Intelligences***

Each type of intelligence within MI theory has its own meaning. Gardner (1983) defined Verbal-Linguistic intelligence as the ability in speech, writing, remembering facts, trusting other individuals and communicate using a language. Logical-Mathematical intelligence is the ability to use numbers effectively, intelligently argue, understand the group of basic number, causation and the ability to forecast an incident. Visual-Spatial intelligence means the ability to identify and sketch shapes, space, color and line and show the idea of visual and space graphically. Bodily- Kinesthetics intelligence is the ability to use limbs for expressing ideas, feelings and problem solving including physical skills such as coordination, flexibility, speed and balance. Music intelligence means the ability to trace a rhythm and song, know, differentiate or change the rhythm and tempo of the melody. While Interpersonal Intelligence is defined as the ability to realize the feelings, motivation, attitudes or desires of others as well as the skills to act effectively against other individuals. Intrapersonal intelligence is the ability to understand oneself in terms of strengths, weaknesses, needs, skills either different or the same as the other person and capable of controlling feeling and behaved politely. The eighth intelligence that is Naturalist Intelligence is the ability to recognize and classify plants, mineral resources, and animals as well as the ability to identify cultural artifacts in terms of clothing and food (Gardner, 1993). Spiritual Intelligence is the internal strength of the individual which involves soul, heart, feelings, and faith. SI leads to consistent good practices based on the Shari'a of Allah (SWT) and the noble moral character. High SI person is able to appreciate life with the adoption of Islamic atmosphere (Elmi & Zainab, 2014).

### ***Instrument of Multiple Intelligences***



In identifying multiple intelligence, various types of measurement instruments have been developed by previous researchers such as Hillside Assessment of Perceived Intelligences (HAPI), Teele Inventory for Multiple Intelligences (TIMI), Multiple Intelligences Development Scale (MIDAS) and Malaysian Multiple Intelligence Checklist for Adolescence (MyMICA). HAPI instrument was built in 1991 by Shearer from the United States. Initially, the instruments of multiple questions was developed to assess the strengths and weaknesses of pretrauma cognitive for individuals experiencing brain injury based on the theory of MI (Shearer, 1991). As such, the respondent can be assisted by other individuals, such as close friend or family member upon completing this instrument.

TIMI Instrumen was built in 1992 by Teele, Deputy Dean and Director Centre for Advanced Studies, University of California. This instrument has been used in over 1000 schools in the United States and seven other countries (Teele, 1996). TIMI instruments can be used in children as early as three years of age as well as adults, to understand how a person is studying. Meanwhile MIDAS instrument consists of seven main scale and 24 subscales which provides a summary of information on the intelligence of a person (Shearer, 1997). These instruments have been included in the curriculum of the exploration career college for four years. The study found that this instrument has been able to assist students increasing self-awareness in choosing appropriate career.

MyMICA instrument is Malaysia's first instruments assessing the views and the tendency of respondents towards oneself's multiple intelligence (Siti Rahayah et al., 2008). It was developed by several researchers from Universiti Kebangsaan Malaysia (Siti Rahayah, Noriah, & Abdul Ghafur, 2006). MyMICA is 5 points Likert scale instrument, comprising nine constructs that contains 81 items in total. MyMICA is a culture fair instruments which meets the context of Malaysians of different races and religions. On the other hand, HAPI, TIMI and MIDAS instruments were developed by Western scholars which are based on socio-culture of Western society and definitely different from the Malaysian local culture. Based on this factor, the researcher chooses to adopt the instrument of MyMICA in the study of MI on the delinquent student in primary schools.

### ***Literature Review on the Multiple Intelligence Instrument***

Some researches have been conducted in relation to psychometric features of multiple intelligence instrument either in foreign countries or in Malaysia. Shearer (1997b) carried out a research on 2241 primary school students, aged 8-14 years using instruments MIDAS-KIDS that contains 80 items. The results show that the value of the coefficient of reliability of this instrument is between 0.83-0.91. Therefore, this instrument is a valid instrument as well as reliable. Similarly, the testing of a MIDAS-TEEN instruments had been modified and administered over 1809 secondary school students between the ages of 14-18 years (Shearer, 1997a). This instrument shows the good psychometric features when the value of the coefficient of reliability is between 0.85-0.90 (Branton & Jones, 1994).

Jamaris (2014) on the other hand developed an instrument known as Formal Multiple Intelligences Assessment Instruments (FMIAI) with the value of the coefficient of correlation between 0.568-0.817. This instrument is valid and was used to identify eight types of multiple intelligences for 60 Indonesia children between the ages of 4-6 years. Veljko and Mirjana (2016) test IPVIS-OS instrument on 1262 students aged from 10 to 15 years old in 22 schools in Serbia. Overall, this instrument evidencing the ability to evaluate multiple intelligences among teenagers as having high reliability Cronbach's Alpha ( $\alpha = 0.946$ ).



In Malaysia, such studies have been carried out by Ibrahim (2007) by developing and validating Instrumen Kecerdasan Pelbagai (IKP). Rusminah (2008) on the other hand, focuses the research on the psychometric characteristics of MyMICA instruments. Siti Rahayah et al. (2010) carried out a research on the constructs validity of the online version of Malaysian Multiple Intelligences Checklist for Adults (e-MyMICA) instruments. This instrument consists of 81 items as representing nine multiple intelligence constructs and five points Likert scale. Findings having analyzed using Rasch Measurement Model show that the reliability value of the items  $> 0.8$  is suitable and able to measure the variables to be measured.

All these findings prove that the instruments used are valid and reliable because it has high reliability values. However, there are differences in terms of sampling in the process of testing items of the instruments. The testing items in this research is only carried out to the ordinary student and rarely to the delinquent students. This proves that there is a need to test the psychometric features of MI instruments focusing on the delinquent students.

### **Problem Statement**

Assessment of multiple intelligence is believed able to provide empirical information about the various types of students' abilities of various patterns of intelligence. This information is significant to help the related institutions to have more clear understanding about the strengths and weaknesses of the students and formulate the best ways to polish the strengths and to overcome the weaknesses.

Wan Hasmah dan Nur Munirah (2015) pointed out that schools in the United States which implement MI in the teaching and learning have gained positive results. Gardner (1983) was of the view that each individual possesses other intelligence and not just subject to cognitive intelligence only. In Malaysia, previous researches were focusing more on intelligence study in particular students without giving emphasis to certain groups of students who need specific measurement of aspects of MI itself. (Arbaiyah, 2006; Ibrahim, 2007; Noorzalina, 2007; Rusminah Musliman, 2008; Nor Mazni, 2013; Rosyafinaz, 2014).

In Malaysia, one of the target groups who is often marginalised is the student with bad discipline especially in primary schools. Students at the primary school require more attention from the aspect of the emphasis on MI because their potential are easily shaped at young age. However, negative perceptions towards the delinquent student makes them look bad, foolish and instead as by does not have any intelligence to be developed (Mohd. Nuri et al., 2016). This is contrary to the view put forward by Gardner (1983) that every individual has their own special intelligence. In fact, the student with bad discipline who is known as delinquent student, if their MI identifiable, will be able to sharpened and developed to an optimal level.

One of the popular MI measurement in Malaysia is MyMICA instrument by Siti Rahayah et al. (2006). Previous researches about MyMICA instruments were not much highlighting the function of its measurement items in measuring MI of delinquent student. Even MyMICA instruments itself was developed to test the validity and reliability of the respondents of all types of students; unconditional of troubled or not troubled discipline students. Lack of focus on the aspects of strengths and weaknesses of this measurement items led to the need for MyMICA item testing in general and selecting items which are suitable for measuring MI of delinquent student in primary school. Testing against these measurement items contribute to the adaptability of MyMICA items among delinquent students especially in primary school.

Testing of these items require a new psychometric items theory compared to classical test theory that only includes the ability of the respondents only. Limitations of the Classical Test Theory can be overcome with the use of Response Theory Item by Rasch Measurement



Model for one logistic parameter that consider the ability of the respondent and the difficulty level of the items (Mohd Effendi @ Ewan & Ahmad Zamri, 2015). Some previous research that uses MyMICA instruments but not using Rasch Measurement Models such as Hafsa (2006), Siti Rahayah, Roseni, and Hafsa (2008), Awang (2011) and Siti Rahayah et al (2011). Whereas the study which is carried out by Rusminah (2008) applied Rasch Measurement Model in testing MyMICA instruments but not in the context of delinquent students.

The use of the Rasch Measurement Model in testing MI measurement items are expected to be able to improve the aspects of MyMICA validity and reliability. Specifically, it will enhance the ability of measurement items for the use of delinquent student in primary school to become more valid and reliable. Hence, this research aims to investigate the features of psychometric test for MI instruments among delinquent students in primary school using the Rasch Measurement Model. This study is useful in providing empirical information for adoption of MyMICA items for the students of different context; age and stream.

## **Methodology**

### ***Research Design***

This research applies a survey design cross-section type with quantitative approach. This type of survey design spread over to collect data from a sample that has been fixed in advance, at a specific time (Noraini, 2013). Therefore, the design of the type of cross-section is in accordance with the requirements of researchers who would like to test the psychometric feature of MyMICA instruments of multiple intelligence against delinquent students. The period of data collection study takes more than one day up to a few weeks. Survey also implemented to develop, revise and test measurement tools (Hanizah, 2007). Survey is a research method involving the collection of data from a population for understanding a current situation relating to population for one or more variables (Noraini, 2013).

### ***Populations and Samples***

The population of this study is 17 712 students, consisting of secondary and primary school students of Hulu Langat district (KPM 2018). Due to the lack of research on the primary school student using MyMICA instruments, the researcher targets streamlines the sample of level II students; Year 4, 5 and 6. Therefore, the researcher applies purposive sampling techniques as focusing on the level II student with discipline record only. This type of sampling is based on the knowledge of the researchers and the specific purpose of research (Noraini, 2013). The sample of this study has been endorsed by counsellors and discipline teachers of the school involved, as delinquent students. Students are also under guidance and counseling as well as in the school discipline records. Therefore, a total of 112 students from eight primary school involved in the study. The number of this sample meets the ideal number of samples between 108 and 243 (Linacre, 1994). The selection of the school is simple random.

### ***Instrumentation***

This study uses MI instrument, Malaysian Multiple Intelligence Checklist for Adolescence (MyMICA) (Siti Rahayah et al., 2006). Since the sample is primary student aged 10 years to 12 years, so the researcher adapts and adopt the instruments in terms of its content according to the level of the students and based on the views of experts. For the purpose of validity of the content, the researcher has appointed three professional experts and three lay experts. Professional expert consists of lecturers in the field of measurement and evaluation, educational psychologist and language. While the lay experts are counsellors and language teachers.



The set of questionnaire of MyMICA instrument is 5 points Likert scale, for example (1 = strongly disagree to 5 = strongly agree) (Vagias, 2006). This instrument is written in Malay which is the official language and the main language used in most schools in Malaysia. This instrument consists of three parts. Part A is the part of the identification ability or tendency of students based on types of intelligence. This part provides indications or early information about the kinds of intelligence that is owned by students. There are nine MI constructs comprising 28 dichotomous items that need to be marked by students in this section.

Part B is the part of MI questionnaires comprising nine constructs, namely VL, LM, MZ, KB, VR, IE, IT, NA and SI. Each constructs consists of nine items that need to be answered by the respondent on the basis of the score available. Part C is the demography part comprises six items on gender, race, year, class category, school category and the academic achievement. Respondents are required to mark (x) on each item except the sixth item in which students should indicate the latest achievement grade for six exam paper, namely Malay Language (Comprehension), Malay Language (Writing), English (Comprehension), English (Writing), Mathematics and Science.

### ***Procedure for Analysing Data***

In order to apply Rasch Models of Measurement, the data is analyzed using the software program Winsteps 3.63.0. This measurement model is a measurement model that exists as a result of the consideration to the ability of candidates or respondents who answer the questionnaires, tests or instruments, as well as the difficulty for each item tests (Rasch, 1980). Using this measurement model, the researcher has obtained high reliability values to test reliability. Reliability test items and the respondent also proved that the set of questionnaire are valid and reliable to measure MI. One of the advantages of this modeling method is the ability to identify the mismatched items and respondents (Siti Rahayah et al., 2010). For example, the smart students should be able to answer simple questions. The Rasch Measurement model can identify the level of difficulty of the items and the ability of the respondents (Bond & Fox, 2015). By the results obtained in relation to the reliability and validity of the content of this instrument acceptable to answer questions of the study.

Since this study aims to test the features of psychometric instruments, three main assumptions in the Rasch Measurement Model, that are item fit, unidimensionality and local independence are considered. The value of item fit allows the researcher to decide the appropriateness of the items (Wright & Masters, 1982). Unidimensionality refers to items in the instrument is capable of measuring a single ability (Wright & Masters, 1982). The assumption of unidimensionality is very important because this assumption must be complied with to ensure analysis using Rasch Measurement Model can be used in the study (Mohd Effendi@Ewan & Khairani, 2015). The assumption of local independence refers to items in the same constructs, do not have response which correlates each other (Mohd Effendi@Ewan, 2015).

### ***Findings and Discussion***

This study takes into account three key assumptions of the Rasch Measurement Model for the selection of an item that are, item fit, unidimensionality and local independence.

#### ***Item Fit***

The first assumption in Rasch Measurement Model is item fit. This assumption takes into account the value of Infit Outfit Mean-Square Analysis (MNSQ) which is able to identify

whether the data matches or contrasts with Rasch Measurement Model (Siti Rahayah, 2008). The value of item fit allows the researcher to decide the suitability of an item (Wright & Masters, 1982).

**Table 1.** Example of MyMICA Item Measurement for 9 Construct MI

No Item	Total Score	Measure	S.E.	Mnsq		Pt-Measure	
				Infit	Outfit	Corr.	Exp.
3	363	.22	.07	.87	1.49	.26	.40
40	481	-.57	.10	1.35	1.20	.37	.28
29	428	-.16	.08	1.32	1.30	.28	.35
13	349	.29	.07	1.29	1.30	.35	.41
5	422	-.12	.08	1.29	1.24	.36	.35
20	387	.09	.07	1.28	1.25	.31	.38
73	438	-.22	.08	1.27	2.0	.42	.34
28	373	.16	.07	1.26	1.24	.38	.39
50	386	.09	.07	1.15	1.24	.32	.38
41	450	-.31	.09	1.24	1.14	.44	.32
70	351	.28	.07	1.21	1.21	.28	.40
26	332	.38	.07	1.17	1.14	.26	.41
9	414	-.07	.08	1.14	1.17	.22	.36
77	454	-.34	.09	1.06	1.17	.23	.32
1	450	-.31	.09	1.15	1.16	.29	.32
14	381	.12	.07	1.13	1.15	.34	.39
2	381	.12	.07	.86	1.15	.26	.39
55	447	-.29	.08	1.12	1.10	.33	.33
19	396	.04	.08	1.11	1.07	.36	.38
21	410	-.05	.08	1.09	1.08	.31	.37
62	402	.00	.08	.98	1.08	.26	.37
78	487	-.63	.10	1.07	1.02	.36	.27
32	271	.72	.08	1.05	1.07	.40	.42

Table 1 shows some examples of MyMICA items MI instruments based on the nine constructs. MNSQ value recorded is from 0.75 to logits logits for total 1.35 62 items. These values have fulfilled the appointment of MNSQ at the range of acceptance between 0.6 to 1.40 (Bond & Fox, 2015). Therefore, the data available corresponds to Rasch Measurement Model. The value of Zstd is also important in strengthening Misfit items. Zstd value received is between -2.0 to + 2.0 (Bond & Fox, 2015). However, the Zstd can be ignored if MNSQ is accepted (Linacre, 2012). The value of the item polarity indicating early detection to the validity of the constructs are also found between the logits to 0.22 0.50 logits. These values meet the point biserial which includes values from 0.20 logits 0.60 logits for tested well and prove that all items fit measure what is to be measured by certain constructs (Bond & Fox, 2015).

### **Unidimensionality**

The second assumption is unidimensionality. This assumption refers to items that tend to measure only one constructs. It can be fulfilled with Rasch Principal Components Analysis (PCA). Item Response theory can be used to test the psychometric characteristics of the

instrument when this assumption is met (Mohd. Effendi@Ewan & Ahmad Zamri, 2015). Four aspects are studied on unidimensionality and those are the variance explanation of a residual PCA by contrast, the level of interference on items being measured or unexplained variants in a contrast, the compliance rate for the minimum ratio of 3.1 between the variance measurement, and the fourth is the Eigen value.

**Table 2.** Standardized Residual Variance (in Eigen value units)

	Empirical		Model
Total raw variance in observations	79.3	100.0%	100.0%
Raw variance explained by measures	17.3	21.8%	22.5%
Raw variance explained by persons	3.5	4.4%	4.5%
Raw variance explained by items	13.8	17.4%	17.9%
Raw unexplained variance (total)	62.0	78.2%	100.0%
Unexplained variance in 1st contrast	4.8	6.1%	7.8%
Unexplained variance in 2nd contrast	3.2	4.1%	5.2%
Unexplained variance in 3rd contrast	2.9	3.7%	4.7%
Unexplained variance in 4th contrast	2.6	3.3%	4.3%
Unexplained variance in 5th contrast	2.6	3.3%	4.3%

Table 2 is a measurement of the PCA which shows clearly the gross variance was 21.8 %. This value is found to be very close to the expected model of about 22.5 %. This value meets the instrument requirements by at least 20%, which has been achieved in consideration of Rasch most minimal requirements (Conrad et al., 2012). Unexplained variance in 1st contrast is 6.1 %, in which values less than 10% is evidence to the compliance on unidimensionality (Linacre, 2007; Eakman, 2012). Table 2 shows the value of eigen is 4.8 in which eigen values that are less than 5 means the second dimension in MyMICA instruments does not exist clearly (Linacre, 2005). Therefore, the items of MyMICA instruments was in compliance with the assumption of unidimensionality.

### **Local Independence**

The third assumption is local independence. This item is said to have local independence when there does not exist a correlation between the other items in the same constructs (Balsamo, Giampaglia, & Saggino, 2014). In theory, the relationship between different items must be low (Omum, Dunlap, & Shore, 2008).

**Table 3.** Standard Correlation of Residual Values

Correlation	Item Number	Construct	Item Number	Construct
.47	A2	Logic Mathematics	A3	Logic Mathematics
.42	F5	Interpersonal	F9	Interpersonal
.41	A1	Logic Mathematics	A2	Logic Mathematics
.36	C3	Visual-Spatial	C4	Visual-Spatial
.36	I6	Spiritual	I7	Spiritual
.36	I6	Spiritual	I9	Spiritual
.35	I4	Spiritual	I6	Spiritual
.33	D8	Music	E4	Music
-.35	C2	Visual-Spatial	F9	Visual-Spatial
-.35	D4	Music	H6	Music



Table 3 shows 10 items have the standard correlation of residual values between -0.33 to 0.47. Correlation value less than 0.70 is in compliance with local independence assumptions. (Linacre, 2012). This shows all the items is not in touch with response from other items in the same constructs (Balsamo, Giampaglia, & Saggino, 2014). In other words, the ability of the individual reactions of an item is not influenced by the reaction of the other items of the same constructs.

### **Dropping Items**

The findings prove that 19 items out of 81 items tested are dropped. The items were Item 4, 6, 7, 8 for logic mathematic construct, Item 10, 11, 15 for verbal linguistics construct, Item 33, 34 for music construct, Item 37, 38, 39, 42, 44, 45 for bodily-kinesthetic construct, Item 53 for interpersonal constructs, Item 63 for intrapersonal constructs, Item 64 for naturalist constructs and Item 74 for spirituality construct. The dropping of these items because the items did not comply with the value of MNSQ and polariti items. Whereas the remaining items are Item 1, 2, 3, 5, 9 (mathematical logic), Items 12, 13, 14, 16, 17, 18 (verbal linguistics), Items 28, 29, 30, 31, 32, 35, 36 (music), Item 40, 41, 43 (bodily-kinesthetic), Items 46, 47, 48, 49, 50, 51, 52, 54 (interpersonal), Item 55, 56, 57, 58, 59, 60, 61, 62, (intrapersonal), Items 65, 66, 67, 68, 69, 70, 71, 72 (naturalist) and Item 73, 75, 76, 77, 78, 79, 80, 81 (spirituality).

### **Conclusion**

This study showed that MyMICA items is also suitable in the context of primary school and does not conflict with the main assumptions of this model. A total of 62 MyMICA items were proven possessing an outstanding psychometric features of item measurement based on Rasch Measurement Model analysis. Thus, the researcher can use MyMICA to identify the patterns of MI among delinquent students in primary schools. The school in particular and counselors can use this instrument in measuring students' MI, as MyMICA has high validity and reliability after going through Rasch Measurement Model. Indirectly, this study contributed to the diversity of MI surveying tools for the purpose of replication in a new context of the delinquent students in primary schools. With this, the future programmes dealt with delinquent students can be arranged and formulated more effectively through the analysis of weaknesses and strengths of the students at nine MI constructs of MyMICA. Teachers could plan more effective approach during the process of teaching and learning so that potential delinquent students can be developed to the optimal level. Suggested improvements for this study is to carry out research through the analysis on Differential

Item Functioning (DIF). This analysis can help in ensuring either a test score is influenced by different sources of variation in different samples.

### **Reference**

- Abdul Latif Abdul Razak. (2012). The Islamic worldview on the preservation and restoration of mental health. *The Islamic Worldview, Ethics and Civilization: Issues in Contemporary Interdisciplinary Discourse* (p. 77–96). Kuala Lumpur: IIUM Press.
- Arbajyah Md Zin. (2006). Tinjauan kecerdasan pelbagai di kalangan pelajar Tingkatan 4. Tesis Sarjana, Fakulti Pendidikan, Universiti Kebangsaan Malaysia.
- Awang Abdullah. (2011). Profil kajian kecerdasan pelbagai dan gaya pembelajaran dalam kalangan pelajar Tingkatan Enam. Tesis Sarjana, Fakulti Pendidikan, Universiti Kebangsaan Malaysia.



- B. D. Wright & G. N. Masters. (1982). *Rating Scale Analysis Rasch Measurement*. Chicago: MESA Press.
- Balsamo, M., Giampaglia, G. & Saggino, A. (2014). Building a new Rasch-based self-report inventory of depression. *Neuropsychiatric Disease and Treatment* 10: 153–165. doi:10.2147/NDT.S53425
- Bond, T. G. & Fox, C. M. (2015). Applying the Rasch Model: Fundamental Measurement in the Human Sciences. *International Journal of Testing*. Vol. 1. doi:10.1207/S15327574IJT013&4\_10
- Branton, S. & Jones, J. (1994). The validation of the Hillside assessment of perceived intelligences (HAPI): A measure of Howard Gardner's Theory of Multiple Intelligences 1–20.
- Cohen, R. & Swerdlik, M. (2009). *Psychological Testing and Assessment: An Introduction to Tests and Measurement*. 7th Edition. McGrawHill. doi:13: 9780767421577
- Elmi baharuddin & Zainab Ramli. (2014). Definisi dan Konsep Kecerdasan Ruhaniah Menurut Perspektif Sarjana Islam. *Jurnal Penyelidikan Islam JAKIM* 26: 49–61.
- Howard Gardner. (1993). *Multiple Intelligences: The Theory in Practice*. New York: Basic Books.
- Howard Gardner. (2000). Commentary A Case Against Spiritual Intelligence. *International Journal* 10(1): 27–34. doi:10.1207/s15327582ijpr1001\_3
- Hanizah Hamzah. (2007). Kebezaan Kefungsian item berkaitan gender (gender related differential item functioning) dalam peperiksaan matematik peringkat kebangsaan: kewujudan dan perkaitan dengan jenis item. Tesis Sarjana. Fakulti Pendidikan, Universiti Kebangsaan Malaysia.
- Howard Gardner. (1983). *Frames of Mind: A Theory of Multiple Intelligences*. New York: Basic Books.
- Howard Gardner. (1999). *Intelligence Reframed*. New York: Basic Books.
- Hussein Haji Ahmad & Mohammed Sani Ibrahim. (2016). *Transformasi Pendidikan Nasional: Antara Aspirasi dan Anjakan*. Kuala Lumpur: Penerbit Universiti Malaya.
- Ibrahim Mohamed Zin. (2007). Membina dan mengesahkan instrumen pentaksiran kecerdasan pelbagai. Tesis Dr. Fal. Fakulti Pendidikan, Universiti Kebangsaan Malaysia. 2-12-  
Kemeterian Pendidikan Malaysia. (2017). *Pelaporan Pentaksiran Sekolah Rendah*. Kuala Lumpur.
- Linacre, J. M. (2012). *A User's Guide to WINSTEPS: Rasch Model Computer Programs*. Chicago: MESA Press.
- Linacre J. M. (1994). Sample size and item calibration or person measure stability. *Rasch Measurement Transactions* 7(4): 328.
- Mohd Effendi @ Ewan Mohd Matore & Ahmad Zamri Khairani. (2015). Pengujian ciri psikometrik item USMEQ-I dalam kalangan pelajar politeknik menggunakan Model Rasch. *Jurnal Teknologi* 75(1): 251–257. doi:10.11113/jt.v75.3901
- Mohd Effendi @ Ewan Mohd Matore. (2015). *Pembinaan instrumen kecerdasan cabaran (IKBAR) bagi pelajar politeknik menggunakan Model Rasch*. Tesis Dr. Fal. Universiti Sains Malaysia.
- Noraini Idris. (2013). *Penyelidikan dalam Pendidikan*. Edisi Ke-2. Shah Alam: McGrawHill - Education (Malaysia) Sdn. Bhd.
- Nor Mazni Mohamad Aini. (2013). Pemeriksaan ciri-ciri psikometrik IKEM-P menggunakan Model Rasch. Tesis Sarjana, Fakulti Pendidikan, Universiti Kebangsaan Malaysia.
- Noresah Baharom. (2015). *Kamus Dewan*. Edisi ke-6 . Kuala Lumpur: Bahasa dan Pustaka.



- Nuri, M., Turiman, Mohd, Hj Hamzah & Ismi Arif. (2016). Fenomena delinkuen dalam kalangan remaja yang berisiko di sebuah sekolah menengah kebangsaan agama di luar bandar Malaysia. *Jurnal Kemanusiaan*, Iss. 2 Vol. 14(2): 10–34.
- Nurul Wahida Lah Omar & Wan Hishamudin Wan Jusoh. (2017). Cara Pelaksanaan Tindakan Guru Terhadap Pelajar Delinkuen di Sekolah Menengah di Terengganu (2003): 277–280.
- Rasch G. (1980). *Weblogs Models for Some Intelligence and Students Test*. Chicago: The University of Chicago Press.
- Rizal Ariffin & Hairul Nizam Ismail. (2007). Konsep Keadilan dalam Teori Kecerdasan Pelbagai Menurut Perspektif Islam. *Pendidikan Psikologi* 7(2): 66–73.
- Rosyafinaz Mohamat. (2014). Kebolehpercayaan dan kesahan konstruk Indeks Keusahawanan Remaja Malaysia (EIYM) dengan menggunakan Model Rasch. Tesis Sarjana, Fakulti Pendidikan, Universiti Kebangsaan Malaysia.
- Rusminah Musliman. (2008). Kebolehpercayaan dan kesahan konstruk instrumen kecerdasan pelbagai Malaysia (MyMICA). Tesis Sarjana, Fakulti Pendidikan, Universiti Kebangsaan Malaysia.
- Shearer, C. B. (1997b). Reliability, Validity and Utility of a Multiple Intelligences Assessment for Career Planning. *105th Annual Meeting of the American Psychological Association*, hlm. 1–27. Chicago.
- Shearer, C. B. (1997). Reliability, validity and utility of a multiple intelligences assessment for career planning. *105th Annual Meeting of the American Psychological Association*. 1–27. Chicago.
- Shearer Branton. (1991). An investigation into the validity, reliability and clinical utility of the Hillside Assessment of Perceived Intelligences. Union Institute, Cincinnati.
- Siti Rahayah Ariffin, Bishanani Omar, Anita Isa, & Sharida Sharif. (2010). Validity and reliability Multiple Intelligent item using Rasch measurement model. *Procedia - Social and Behavioral Sciences* 9: 729–733. doi:10.1016/j.sbspro.2010.12.225
- Siti Rahayah Ariffin, Ida Kamalawati Abu Bakar, Mohd Sahardi Che Harun & Anita Isa. (2010). Verification of multiple intelligences construct validity in an online instrument. *Procedia - Social and Behavioral Sciences*. Vol. 9, 1894–1899.
- Siti Rahayah Ariffin, Roseni Ariffin & Hafsa Mohamed Makki. (2008). Faktor kontribusi kecerdasan pelbagai dalam kalangan pelajar remaja. *Jurnal Pendidikan* 35–46.
- Siti Rahayah Ariffin, Noriah Mohd. Ishak, & Abdul Ghafur Ahmad. (2006). Manual penggunaan instrumen multiple intelligences. Selangor.
- Siti Rahayah Ariffin, Roseni Ariffin & Hafsa Mohamed Makki. 2008. Faktor kontribusi kecerdasan pelbagai dalam kalangan pelajar remaja. *Jurnal Pendidikan* 35–46.
- Spearman, C. (1904). General intelligence: Objectively determined and measured. *The American Journal of Psychology* 15(2): 201–292. doi:10.2307/1412107
- Steel, M. (Ed.). (2012). *New Oxford Dictionary*, hlm. Edisi ke-2. Shah Alam: Oxford Fajar.
- Tajulashikin Jumahat & Nor Faizah Abdullah. (2014). Perbandingan konsep kecerdasan spiritual dari perspektif Islam dan barat: Satu penilaian semula. *Proceeding of the International Conference on Arabic Studies and Islamic Civilization iCasic 2014*. 589–599.
- Teele, S. (1996). Redesigning the educational system to enable all students to succeed. *National Association of Secondary School Principals, NASSP Bulletin* 80: 65–75.
- Vagias, Wade, M. (2006). *Likert-Type Scale Response Anchors*. Clemson International Institute of Tourism & Research Development. Department of Parks, Recreation and Tourism Management. Clemson University.



*3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)*  
*eISBN: 978-967-2245-13-1*  
*Copthorne Hotel, Cameron Highland, Malaysia*  
*29<sup>th</sup>-30<sup>th</sup> June 2019*

- Veljko Aleksic & Mirjana Ivanovic. (2016). Psychometric evaluation of the reliability of IPVIS-OS multiple intelligences assessment instrument for early adolescents. *Journal of Educational Sciences & Psychology* 6(68): 21–34.
- W. Van Ornum, L. L. Dunlap, and M. F. Shore. (2008). *Psychological Testing Across the Life Span*. Upper Saddle River, New Jersey: Pearson Education.
- Wan Hasmah Wan Mamat & Nur Munirah Teoh Abdullah. 2015. *Kecerdasan Pelbagai*. Edisi Ke-2. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Wright, B. D. & Masters, G. N. (1982). *Rating Scale Analysis Rasch Measurement*. Chicago: MESA Press.



## ISLAMIC PARADIGM ON SOCIAL ENTREPRENEURSHIP IN MALAYSIA

Mashita M.Zin (corresponding author)<sup>1</sup>  
Siti Hafizah Daud<sup>2</sup>  
Khatijah Othman<sup>3</sup>

<sup>1</sup>Faculty of Leadership and Management, Universiti Sains Islam Malaysia, Bandar Baru Nilai, 71800, Nilai, Negeri Sembilan. E-mail: [mashita.mzin85@yahoo.com.my](mailto:mashita.mzin85@yahoo.com.my)

<sup>2</sup>Centre of Liberal Arts and Languages (COLAL), INTI International University, Persiaran BBN, Putra Nilai, 71800 Nilai. E-mail: [hafizah.daud@newinti.edu.my](mailto:hafizah.daud@newinti.edu.my)

<sup>3</sup>Faculty of Leadership and Management, Universiti Sains Islam Malaysia, Bandar Baru Nilai, 71800, Nilai, Negeri Sembilan. E-mail: [khatijah@usim.edu.my](mailto:khatijah@usim.edu.my)

---

**Abstract:** *Social entrepreneurship has been widely emerged at local and international level. Thus, the emerging of social entrepreneurship in Malaysia is no longer a new term, with its aim to assist the unfortunate people it has been widely accepted by the community. However, the discussion on the initiatives and effectiveness of social entrepreneurship from Islamic point of view are still lacking. Therefore, this paper will discuss on the initiatives offered by the social entrepreneurship and its effectiveness from an Islamic point of view. The literature reviews were gained from the library research and website sources. The opinions from scholars on the initiatives and effectiveness of social entrepreneur from the Islamic perspectives will be highlighted.*

**Keywords:** *Social entrepreneur, Islamic Perspectives.*

---

### Introduction.

Social entrepreneur (SE) is a term which started gaining its popularity recently, but it gives a different meaning to different people. People always associate social entrepreneur as a non-profit organization starting for earned –income ventures or integrating business with social responsibility into their operations (Dees, 1998). The entrepreneurs are also believed that they are driven by more than a profit motive. Impact-driven and entrepreneurial individuals have been pioneering social enterprise, that is a new form of enterprise. It is not merely a wealth creation in economy, but also creating a beneficial impact to the society (Malaysian Social Enterprise Blueprint, 2015-2018).

Social entrepreneur involved a collaborated effort to: (i) efficiently identify people with innovative ideas and practical model for achieving major societal impact, (ii) define their function in the society and emphasized on their work, and (iii) develop support systems to help them achieve substantial social impact. Moreover, social entrepreneurship has been deliberated as advance solutions to social problems such as poverty, illiteracy, environmental issues, human rights abuses in order to make a better future life for the society (Bornstein and Davis, 2010). Therefore, social entrepreneurship is believed to assist in solving social problems.

In the case of Malaysia, the concept of social entrepreneur is somehow still new among the society. It is estimated that there are 100 social enterprises operating mostly in the areas of education, poverty, rural development, environmental sustainability, employment for the marginalized, and at-risk youth. Unlike the neighboring country such as Thailand, currently there are over 120,000 social enterprises (Malaysian Social Enterprise Blueprint, 2015-2018). Due to this large significant differences, Malaysian government had come up with a three-year



roadmap, that is the Malaysian Social Enterprise Blueprint 2015-2018. It describes the strategic thrust needed for the development of the sector with the aim by the year 2018, Malaysian social enterprise sector to be self-sustaining, equitable and people centric (Malaysian Social Enterprise Blueprint, 2015-2018). Thus, through the government initiatives and collaboration with for-profit and non-profit sector, the social entrepreneur is recently springing up like mushrooms.

*I. Social Entrepreneur Initiatives in Malaysia.*

There are many global programs and projects that have been initiated by social entrepreneurs. As in Malaysia, youths are seen as key drivers in the establishment of social enterprises, much in line with the Malaysia Education Blueprint charter to create entrepreneurs among university graduates who will become job creators one day. According to the New Straits Times, by 2018 the government aims that some 700 certified and recognized social entrepreneurs will be active in the Malaysian social enterprise sector will be self-sustaining, equitable, people-centric and impact-driven (August 21, 2017). The social entrepreneurs do not just focus on profit but also emphasize in creating a positive impact and a more equitable society. Table 1 below are some up and coming social entrepreneurs and social enterprises who strive to solve social problems in Malaysia.

**Table 1.1** Examples of Social Entrepreneurship in Malaysia.

<b>Social Entrepreneurship</b>	<b>Descriptions</b>
Teach For Malaysia	<ul style="list-style-type: none"> <li>It is a not-for-profit organization that enlists fresh university graduates and young professionals to commit to teaching full-time in schools that need support. The programme was started by Keeran Sivarajah and Dzameer Dzulkifli, who happens to be a speaker at YLA (Youth Leadership Academy) in 2011.</li> </ul>
Project Light a Home	<ul style="list-style-type: none"> <li>The brainchild of Cheryl Teh, the project aims to raise sponsorship to purchase solar-powered light bulbs for members of the Orang Asal (aka Orang Asli) community who do not have access to electricity or who rely on oil lamps or generators for electricity for short lengths of time.</li> </ul>
Gerai Orang Asal (OA)	<ul style="list-style-type: none"> <li>Founded in 2004, markets and sells Orang Asal traditional goods and channels all proceeds back to the artisans in an effort to sustain traditional art forms and provide much-needed income to rural communities.</li> </ul>
<b>Social Enterprises</b>	
Tanoti Sdn. Bhd.	<ul style="list-style-type: none"> <li>It started as a research and development workshop set up by Yayasan Tuanku Nur Zahirah foundation in 2008. This enterprise has a vision to improve lives of women and rural communities through the ancient art of songket</li> </ul>



	weaving, and it brings together Sarawakian women weavers and artisans dedicated to the craft.
Heart Treasures Sdn. Bhd	<ul style="list-style-type: none"> <li>• Founded and managed by Kiew Boon Siew, <a href="#">this enterprise</a> is set out to help youths (their angels) with autism, development delay (slow-learners), cerebral palsy, among other disabilities, by getting them to handcraft products as part of their motor skills development and occupational therapy. This, they hope will help open up career opportunities for them in the future.</li> </ul>

Table 1.1 described some of the initiatives that had been implemented by the social entrepreneurs in Malaysia. Their objective is to assist the government in solving and reducing the number of problems that occurred in the society through social enterprises. The stated social enterprises are among the potential social enterprises in Malaysia and had received Amplify Awards by MaGIC's.

According to the entrepreneur website, the Vulcan post, MaGIC's Social Enterprise (SE) arm is driven by the mandate to empower such enterprises and to champion the growth of similar enterprises within the region. Recently, the Amplify Award was held and equipped 9 social enterprises including Tanoti Sdn. Bhd and Heart Treasures Sdn. Bhd. with a grant of up to RM150K each.

This award was granted to enterprises that had a unique and an innovative value proposition, and was addressing a clear problem in Malaysia. Those enterprises are believed having a credible team, a financially sustainable model and a potential to scale and the opportunity to affect change in Malaysia.

## II. *The initiatives of social entrepreneurship from Islamic perspectives.*

The ideas that triggered the social entrepreneur to help solving the social problems is indirectly related with the inner belief. All religions encourage its believers to have a good deed and help others. As stated by Berger, experimental evidence confirms that good actions are rooted from people's, beliefs and social culture and social believes of every nation are the essence of personality and communities in trends of friendship and voluntary behavior (Berger, 2006). Based on this findings, citizens with strong religious beliefs, in comparison to others had more participations in charity activities.

The statement supported by Bekker et al., (2007) in a field study about effective factors in good activities and friendship found out that the religious values and morale behavior are so important. Wang and Grady (2008) as in their assessment relations between voluntary action, social capital and charitable contributions, found that religious beliefs are one of the factors that determine the voluntary action and increase in charitable and humanitarian assistance. Religious citizens have believed in having more incline to help vulnerable and the disabled people.

Thus, religion or the beliefs of the social entrepreneur do play a significant role in pursuing the initiatives that will be implemented in the future. Aware of this matter, the initiatives from the Islamic perspectives would be an interesting topic to be discussed.



Therefore, this paper will include the Islamic point of view as to highlight that the humanitarian act in Islam is an obligation for the Muslims.

Verses of Quran and many of traditions, has inspired the paradise to Muslims for humanitarian measures and observance. In addition, God has created humankind and asked them to be useful to each other. As stated in the tradition of the Prophet Mohammad: "God love the people whom help the poor and needy mankind". This shows that Islam has encouraged he Muslims to help other people who needs assistance.

Moreover, it also can be seen that whenever faith is evoked in the Quran, an injunction to react immediately follows and charitable acts are especially encouraged. The expression "those who believed and who did charitable works..." is cited a considerable number of times in the Quran.

*"Verily Man is in loss except such as have faith and do charitable works..."*

(Al-Asr:3)

*"For those who believe and do charitable works is every blessedness and a beautiful place of final return..."*

(Ar-Ra'ad:29)

Besides, humanitarian act is considered as a loan to God which will be repaid with significantly high interest. In the Quran, there is the promise of increased rewards for the charitable persons:

*"Verily those who give alms, men and women, and lend to God a goodly loan, it shall be increased manifold, will be amply rewarded..."*

(Al-Hadid:18)

Muslim entrepreneurs particularly, they should search for Allah's blessings above all other factors. Muslim entrepreneurs perform entrepreneurial activities not merely for profit, but above all, to fulfil the *fardu kifayah* (Vargaz-Hernandez, Noruzi, Sariolghalam, 2010). As stated in the Quran;

*"And what do you know what that difficult steep is? It is freeing someone's neck from slavery; or giving food on a day of hunger to an orphan near of kin; or to a destitute lying in dust; and, then besides this, he be one of those who believed"*

(Al-Balad:12-17)

On the basis of a hadith that portrays the obligation of *fardu kifayah* reported by Al Hakim,

*"If a person dies of hunger in a community, then all the residents of that community have put themselves outside God's and the Prophet's protection..."*

Referring to the hadith, the *ulama'* decreed that in such a case all the residents of the said community would be condemned and should be judged because they failed to give assistance. Thus, Islam has stated that the communal obligation is the responsibility of the community. This is to ensure the health and welfare of the society are well preserved. The



initiatives have evidently approved by the Quran, thus the implementation by the social entrepreneur are permissible and encouraged by the Islamic teaching as long as it follows the guideline that has been delineated by Islam.

### *III. The effectiveness of social entrepreneurship*

Business, particularly a relatively small segment known as social entrepreneurship (SE), is increasingly acknowledged as an effective source of solutions for a variety of social problems (Mair, Robinson, and Hockerts, 2006; Nicholls, 2006). Several initiatives have been implemented and proposed by them in giving away assistance to the society in need. Those initiatives are not solely in terms of donation or food aid, but skills and creating job opportunity as well.

Meanwhile, in Malaysia the social entrepreneurs are highly driven and passionate individuals, but lack the business expertise needed to start, grow and measure their impact accurately. Social entrepreneurs lack the option to effectively launch their social enterprise or scale up their impact and footprint due to a lack of funding options available. The reason is in Malaysia, social entrepreneurship is a new term and building awareness from the grass root community is required (Malaysian Social Enterprise Blueprint, 2015-2018).

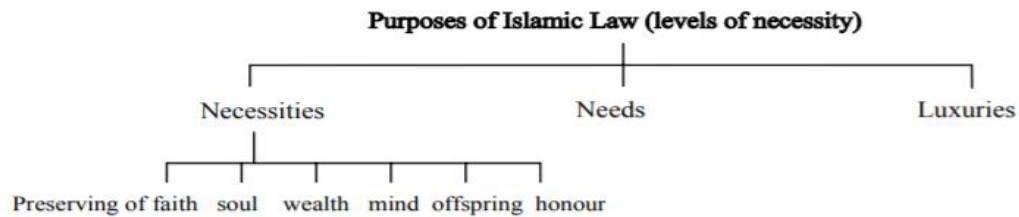
Although, it is hard to measure the effectiveness of social entrepreneurship in Malaysia but, it can be analyzed through the existing initiatives that had been implemented continuously by the social entrepreneurs. For example, for the past two years, Teach for Malaysia (refer Table 1) had reached 73,000 students demonstrated academic and curricular outcomes. (Teach for Malaysia Impact Report, 2016). They also have covered 100 schools in Malaysia, including 60% rural schools and 80% are considered under-performing schools.

Another example is Gerai Orang Asal, in which the mission is to document, revive & revitalize the heritage crafts of the Orang Asal, the indigenous minorities in Malaysia. This is done via publications, photos, workshops & sales. Based on the society's review, their handcrafts are really good and interesting. Many of their products have been sold and this indirectly helps them to generate incomes.

### *IV. Its effectiveness from Islamic perspectives.*

However, in the Islamic point view, the effectiveness of the social entrepreneur initiatives is hardly to measure because it is based on theoretical perspectives. The impact towards the society is very positive. People has benefited so much from the implemented projects, and as a Malaysian, the people should be very grateful.

From the Islamic perspectives, the area that will be highlighted would be analyzing from the Maqasid Syariah (purposes of Islamic law). Maqasid al-sharīah explain the 'wisdoms behind rulings,' such as 'enhancing social cohesion,' which is one of the wisdoms behind charity, being good to one's neighbours, and greeting people with peace. Wisdoms behind rulings also include 'developing consciousness of God,' which is one of the rationales behind regular prayers, fasting, and supplications.



**Hierarchy of the purposes of the Islamic law (dimension of levels of necessity).**

Moreover, in maqasid syariah there are three “levels of necessity” which are necessities (darūrāt), needs (hajīyāt), and luxuries (tahsīnīyāt). Here, the necessities level will be highlighted in which at this level, further classified into what ‘preserves one’s faith, life, wealth, mind, and offspring (A. Jasser, 2008). By referring to the structure of maqasid syariah, the effectiveness of the initiatives can be measured through these classified necessities. These necessities were considered essential matters for human life itself. The impact of the initiatives is related with the essential in maqasid syariah. How the initiatives affect the society’s wealth (al- mal), life (al-nafs) and reason (a’ql). These three category of necessities will be discussed further as how those initiatives could bring changes and improvement.

Firstly, in terms wealth, there are projects that the objective is to help the people in generating their household income for example, the Gerai Orang Asal project. This project really helps the indigenous people to generate their income through promoting and selling their handmade products. Another example is the EPIC Homes, whereby the purpose of this project is housing aid to the indigenous people, particularly the family in need (Malaysian Social Enterprise Blueprint, 2015-2018). Through this project, the family will have a comfortable place to stay and live a better life.

Secondly, the social entrepreneurs project also gives an impact in the society’s reasoning (a’ql). There are few projects that can help the society to improve their a’ql. The best example is the program that organized by Teach for Malaysia. As being mentioned previously, this program aims at helping the students at rural areas and under-performed school. Teach for Malaysia managed to improve the students’ performance in both academic and curricular outcomes via education. The students have widened their mind and get more exposure by joining the activities provided.

Thirdly, the initiatives of the social entrepreneur also able to help in changing the life of the people. One of the example is project Tonibung based in Sabah. The objective of this project is to provide indigenous and remote communities with reliable and affordable sources of electricity. Tonibung solves the lack of accessible, reliable and cheap sources of electricity by using micro-hydroelectric dams that generate an affordable sources of electricity for remote communities (Malaysian Social Enterprise Blueprint, 2015-2018). Another similar project Light a Home, aims to provide much needed light to orang asli settlements, many of which do not have access to electricity. With solar light bulbs, they can receive light for free and at least the children could study at night, which could make all the difference in their lives. (Tally Press, 2016).

Therefore, it can be considered that the social entrepreneurs’ programs are effective and in line with the Islamic teaching. The implemented initiatives given a huge impact towards the



society particularly to the target community that really needs assistance. Moreover, it is also encouraged that the assistance program could be continued and becomes a long term development programs. This long term program is also supported by Islam whereby Islam encourages humanitarian acts which will bring about lasting change in people's lives. There are numerous hadiths on this subject, in one of which, according to Aishah (the Prophet's wife), the Prophet says: "the good work which God likes the best is the one which lasts, even if it is small..." (Sahih Muslim, Hadith No.1305)

In other hadith, "He who gives alms is rewarded for as long as it is lasting..." Thus the length of the reward is connected to the durability of the charitable action. Long-term actions encouraged by the religion include, for instance, those destined to provide water and food, and the gift of tools.

(Tabarani Compilation).

### Methodology

This study will employ content analysis as an approach in data analysis. Content analysis is the method of analysing documents in order to describe and quantify phenomena systematically and objectively (Krippendorff, 1980). Content analysis was first use in the 19th century (Hardwood and Garry, 2003) is a method of analyzing various types of documentation (Cole, 1988) such as hymns, newspaper and magazine articles, advertisements and political speeches.

Content analysis will give the possibility to refine the words into fewer content related categories. Therefore, every words, phrases and the like would share the same meaning (Cavanagh, 1997). In this way, content analysis helps researchers to build-up a clear understanding of social entrepreneur's initiatives and effectiveness portrayed in the Al-Qur'an and Al-Hadis.

### Conclusion

Social entrepreneur's initiatives can be considered as a humanitarian work. The diversity of the texts motivating humanitarian work has had the effect of encouraging a propagation of actions in various domains: food aid, expansion of the educational system and health care, water supplies, and others. The majority of texts do not exclude non-Muslims from receiving aid. Humanitarian actions should be performed independent of all religious, racial or political criteria. The close link between humanitarian action and religious practice guarantees wide public adherence and the endlessness of donations and resources.

### References

- A.Musfir (2015) " *Understanding al- Maqasid Syariah A Contemporary Perspectives*" International Institute of Islamic Thought.
- Asad, M. (1980) " *The Principles of State and Government in Islam,*" Dar al-Andalus, Gibraltar
- F. L. Cole, " *Content analysis: process and application,*" Clinical Nurse Specialist, vol. 2, no. 1, pp. 53–57, 1988.
- J. G. Vargas-Hernández, M. R. Noruzi, and N. Sariolghalam, " *An exploration of the effects of islamic culture on entrepreneurial behaviors in muslim countries,*" Asian Social Science, vol. 6, no. 5, pp. 120–127, May 2010
- Khan, M.A. (1994) " *An Introduction to Islamic Economics,*" The International Institute of Islamic Thought, Islamabad, Pakistan.
- K. Krippendorff, (1980) " *Content Analysis: An Introduction to its Methodology,*" Newbury Park, CA: Sage Publications.



- K. Jamal, “*The influence of Muslim religion in humanitarian aid,*” International Review of The Red Cross, vol. 87, no. 858, June 2005.
- Mair, J., J. Robinson, and K. Hockerts, “Introduction.” In J. Mair, J. Robinson and K. Hockerts (Eds.), (2006), “*Social Entrepreneurship.*” Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.
- MaGIC Social Entrepreneurship, “*Malaysian Social Enterprise Blueprint (2015-2018),*” Retrieved August 20, 2017 from: <http://se.mymagic.my/en/>
- A. Jasser (2008), “*Maqasid Al-Shariah An Introductory Guide*” International Institute of Islamic Thought.
- M. K. Davis, “*Entrepreneurship: An Islamic Perspectives,*” International Journal of Entrepreneurship and Small Business, vol. 20, no.1, January 2013.
- M. Sandelowski, “*Qualitative analysis: what it is and how to begin?*” Research in Nursing & Health, vol. 18, no. 4, pp. 371–375, 1995.
- M. S. Oukil, “*Entrepreneurship and entrepreneurs in an islamic context,*” Journal of Islamic and Human Advanced Research, vol. 3, no. 3, pp. 111–131, 2013.
- Project Renaissance, (August 12, 2014) “*6 Social enterprises in Malaysia you should know,*” Retrieved August 20, 2017 from: <http://www.projectrenaissance.com/social/6-social-enterprises-malaysia-know>
- S. Cavanagh, “*Content analysis: concepts, methods and applications,*” Nurse Researcher, vol. 4, pp. 5–16, 1997.
- Sani, Rozana, New Straits Time (February 3, 2017) “*Rise of social entrepreneurs*”. Retrieved August 20, 2017 from: <https://www.nst.com.my/news/2017/03/209356/rise-social-entrepreneurs>
- Tally Press, (April 1, 2016) “*8 Social enterprises who are the white knights in solving social problems in Malaysia*”. Retrieved August 23, 2017 from: <http://tallypress.com/features/these-8-social-entrepreneurs-attempt-to-solve-social-problems-in-malaysia/>
- Teach For Malaysia, “*2016 Impact Report*”. Retrieved August 28, 2017 from: <https://teachformalaysia.org/home/>
- T. G. Harwood and T. Garry, “*An overview of content analysis,*” *The Marketing Review*, vol. 3, pp. 479–498, 2003.



## ISLAMIC BUSINESS COACHING FROM THE PERSPECTIVE OF INDONESIAN COACHES

Muhammad Sholahuddin<sup>1</sup>  
Moha Asri Abdullah<sup>2</sup>  
Mohd. Nizam Barom<sup>3</sup>  
Ibrahim Nuhu Tahir<sup>4</sup>

<sup>1</sup>Kulliyah of Economics and Management Sciences, International Islamic University of Malaysia, Malaysia.  
Faculty of Economics and Business, Universitas Muhammadiyah Surakarta (UMS), Indonesia, (E-mail:  
muhammad.sholahuddin@ums.ac.id)

<sup>2</sup>Kulliyah of Economics and Management Sciences, International Islamic University of Malaysia, Malaysia,  
(Email: mosri@iium.edu.my)

<sup>3</sup>Kulliyah of Economics and Management Sciences, International Islamic University of Malaysia, Malaysia, (E-  
mail: mohdnizam@iium.edu.my)

<sup>4</sup>Kulliyah of Economics and Management Sciences, International Islamic University of Malaysia, Malaysia, (E-  
mail: [ibrahimnuhu@iium.edu.my](mailto:ibrahimnuhu@iium.edu.my))

---

**Abstract:** *In an increasingly competitive era of trade, training is insufficient to help solve business problems and challenges that often change daily. Meanwhile, business professionals realise that the coaching process used for the past dozen years by athletes, orators and artists to improve their performance can also be used to help entrepreneurs to help accelerate business goals and personal success. Organisations that offer coaching have grown rapidly over the past decade. Even though in Indonesia, several coaching Islamic businesses have their communities, until now there is limited literature on Islamic business coaching. This study develops definitions for Islamic business coaching along with its characteristics for the Indonesian setting. This is achieved using a content analysis of interviews with five Islamic business coaches in Indonesia. The paper concludes that Islamic business coaching differs from conventional coaching due to being based on Islamic religiosity and principles.*

**Keywords:** *Islamic Business Coaching, Training, Mentoring, Small Business, Coach*

---

### Introduction

It has been generally recognised that business coaching plays a vital role in developing small businesses. Although it is still an emerging area in human and organisational development (Whiteside, 2013), its role in the start-up of small businesses is increasingly recognised (Audet & Couteret, 2012) and is expected to increase performance and help expand businesses. However, many have emphasised the inability of existing training method in dealing with the ever dynamic issues and challenges faced by entrepreneurs at a daily basis. Entrepreneurial leaders need day-to-day attention because of changing business situations, but education and training received do not seem able to meet that challenge. For this reason, there is increasing attention on business coaching practised especially among small businesses as they are exposed to a highly challenging and competitive market environment. Business coaching is coaching, which focuses on how to maximise empowering the client's potency to increase the performance of the client's business.

The existing business environment presents many difficulties for Muslim entrepreneurs to be consistent with their religious principles in doing business, such as avoiding interest or usury and the absence of values in the market environment. Here lies the importance of Islamic



Business Coaching (IBC), which is not only making businesses thrive with modern knowledge but does so according to Islamic values and principles. Islamic business coaching (IBC) is business coaching in Islamic principle. Muslim entrepreneurs should follow the IBC programme so that they can have professional modern business management while understanding Islamic economic jurisprudence, avoiding improper transactions, and inappropriate religious and spiritual values (Arifin, 2015).

Many studies have recognised the importance of incorporating Islamic values and principles in the practice of business coaching. The importance of Islamic coaching has been acknowledged (Grine, 2014; Habib, 2012). Habib (2012) described how to create one's life vision, set goals, and have life-skills such as time management and financial management, and build self-esteem through a merging of daily practical advice, toolkits for changing one's life, diagnostic exercises and spiritual wisdom led by selected verses from the Holy Qur'an and sayings of Prophet Muhammad (PBUH). Grine (2014) studied the use of executive coaching and mentoring to empower. Social and institutional development is influenced based on the quality of Muslim women concerning self-development. Despite such efforts, there is a lack of evidence about Islamic business coaching, especially in Indonesia. Indonesia has the biggest Muslim population globally. Thus, this study examines the Islamic business coaching from the perspective of Indonesian coaches.

## Literature Review

### *Religion and Spirituality In Business Coaching*

Islam is not only a religion instructing to pray, worship and do some rituals, but also a way of life concerning every aspect of the existence of individuals, groups and societies. As a part of its goals, Islam regards developing human beings as one of its supreme moral values (Hassi, 2012). Earning a living by doing *halal* jobs (lawful and permissible) is an important part of one's role as a Muslim.

Although Dana (2009) argues that Islam constrains entrepreneurship because of the prohibition of interest that also represents a barrier to capital, Prophet Muhammad (P.B.U.H) and some of his companions were successful entrepreneurs with Islamic business ethics, including using interest-free capital. Thus, Islam is not merely a religion but also spirituality and a way of life from God.

To be good at work, knowledge (*'ilm*) is an important requirement. In this regard, Islam gives high status to seeking knowledge as stated by Prophet Muhammad (PBUH) in Sunan Ibn Maja (Fatoohi, 2009): "Looking for knowledge is an obligation laid on every Muslim." Additionally, individuals are expected to "seek knowledge from the cradle to the grave," as suggested by the Prophet (Fatoohi, 2009). Learning is a never-ending process that also includes various coaching, training, and other educational activities based on Islamic guidelines – as occurred at Dar Al Arqam during the Prophet's lifetime. There is little doubt if any education constitutes the lifeline of any society. It transmits values and the legacy of a given society from one generation to another generation (Hashim, 2010).

Allah says in the Holy Quran, "O my Lord! Increase me in knowledge" (20:144). Similarly, Muhammad (P.B.U.H) said, "He whom death overtakes while he is engaged in seeking knowledge with a view to reviving Islam with the help of it, there will be only one degree between him and the Prophets in Paradise". Since that, Islam rates education highly.

Within the Islamic perspective on education, there are three primary dimensions: *tarbiyah*, which means to encourage growth; *ta'dib*, which signifies discipline; and *ta'lim*, which means to instruct (Halstead, 2004). In its essence, education in Islam aims to nurture



human beings, deals with individual development, moral gaining and training, and pursuit of knowledge. The system of education in Islam aims to teach learners about knowledge related to the world and hereafter and to assist them in the process of becoming good members of their family, society and humanity as a whole (Akdere et al., 2006). More specifically, it focuses on advancing individual development, improving the understanding in society and its rules and transmitting knowledge (Halstead, 2004).

It is important to mention that education, from the Islamic perspective, involves not only a cognitive or emotive matter but also a practical one as learners ought to perform some actions in order to develop their capabilities. In this respect, not only does coaching from the Islamic tradition provides entrepreneurs and leaders with theoretical principles, but it also draws their attention to the importance of basing coaching activities on practical wisdom. It should be noted that wisdom in Islam refers to the ability to make correct judgements and appropriate decisions; that act is to maximise beneficial results through doing what is best in any given situation (Khan, 2017).

As for the forms of coaching and other educational models in the early stages of Islam, three particular methods are commonly used with adult learners. These methods have left their imprint on current teaching and learning practices within business organisations and teaching institutions. The first form, the communication and discursive approach interact in nature. Its guidelines can be found in Quran, “Call to the way of your Lord with wisdom and beautiful preaching and argue with them with that which is best” (16:125). As for the parts of this form, Alam and Muzahid (2006) stated that the following methods are included. First, the wisdom application which refers to the use of instruction materials that are suitable to learners age, qualifications and experience; second, the beautiful preaching application which refers to the use of logic while instructing and adapting language; and finally, the application of the best possible way of arguing in interacting with learners through being patient and caring. In this regard, Muhammad (P.B.U.H) adopted various techniques such as storytelling which share moral values from meaningful stories from the past and indirect instruction which allowed the entire audience to take the benefit from a given topic without embarrassing any individual.

The second form, *halaqa* or the circle, begins initially as a group of students in a mosque, adopted over centuries and has taken different forms in dealing with diverse content. It has contributed to the appearance of structured institutions of higher learning. The *halaqa* is an informal teaching and learning approach, a study group in which adult learners come together in semi-circles in front of an instructor. This educational method facilitates collaborative discussions and interactions between learners.

The third form is known as the tentative nomination consists of nominating people with high competence to certain positions to test their ability to assume various responsibilities and tasks. It also implies that their attitude will be closely observed. When they do a job well, they are promoted; however, if they fail, they will be dismissed as the second Caliph Omar did concerning one of his subordinates (Ali & Weir, 2005). This form seems the same as on-the-job training, probation and temporary assignment strategies and techniques common to the modern-day workplace context.

### ***Islamic Business Coaching***

In terms of coaching, the literature has indicated that the concepts and practices of business coaching based on religion and spirituality are fundamentally different from conventional secular coaching. A fundamental difference between Islamic and conventional business coaching is that the majority of Muslim coaches use Qur’anic and the Prophetic saying in their



approach to supporting the clients in obtaining God-perceived goals. Meanwhile, Islamic business coaches adhere to the rudimentary principles of conventional coaching, which are not contrary to the principle of Islam, such as asking powerful questions and attentive listening. Another is that the highest goal of IBC is seeking the blessings of God, which are not merely material profit. Unlike conventional coaching, the average emphasis is on the coachee's agenda and material goal achievement.

In the context of Christian coaching, Webb (2007) concludes that coaches who integrate their Christian beliefs, values, and worldview with coaching practices are better equipped to assist their coachees. When it is applied in IBC, those basic coaching principles, which are in keeping with Islamic beliefs, might reinforce coaching values and skills. Islamic business coaches should study the principles of Islamic worldview and Islamic business jurisprudence with regard to coaching from an Islamic framework. Also, both conventional and IBC impact on small businesses' performance is highly indicated, but conventional business coaching orientations indicate worldly needs. IBC orientation is part of non-particular worship (Yusanto & Widjajakusuma, 2002).

Religion and spirituality have important roles in changing attitudes and behaviour. In order to support the change in the long-term, Covey (1989) incorporates three important factors supporting the internal changes, the awareness, desire and skill. Business coaching, which touches on basic values and paradigms of thinking has a huge impact on changes. Change from within is a change of habits and behaviours that have been repeated for some time. It is important to pinpoint that business coaching in Islam with its inherent practical wisdom unequivocally appeals to both faith and reason, hence contributing to making business coaching systems in Islamic societies more relevant and meaningful. Based on this literature, religious jurisprudence principles should be applied in business, capital and debt interest-free, the awareness of self-change, be harmonious with one another, straightforwardness, responsibility, truthfulness, with equity representing religion and spiritual values. Nonetheless, to determine values in IBC, there is a need to investigate coaches who are experts in this field.

Islamic business coaching is interpreted as a process of mentoring, training, consulting, and facilitating in business with comprehensive awareness and understanding of doing business in the Islamic principle, in terms of transactions, employment constructs, business cooperation, and customer service to achieve business and self-goals in world life and hereafter. Although there is a definition of Islamic business coaching based on literature, there is no evidence in Indonesia Islamic master coaches' perspective.

### **Research Methodology**

This study explores, examines and describes the philosophical meanings of Islamic business coaching based on the understanding of Islamic business coaches in Indonesia and associated literature. It is a qualitative study that examines phenomena that occur in society. The primary data is collected from the Indonesian Islamic business coached and published academic literature (Singleton et al., 1988).

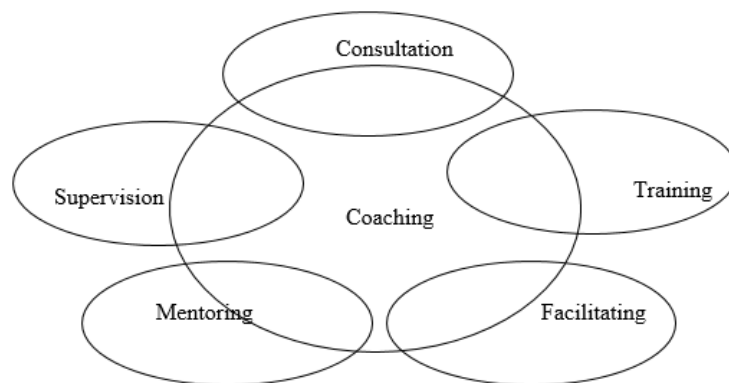
The research is conducted across several stages. The preliminary study phase begins with a review of the literature to identify the research gap. This is followed by the preparation phase in which we articulate the problems and objectives of this study, along with the appropriate research instruments consisting of preparing interview guides, selection of research subjects that fit the criteria of 5 (five) coaches of Islamic business coaching, methods of gathering information with in-depth interviews and field notes. In the implementation stage, we collect information in accordance with the interview guide via in-depth interviews with five

Islamic master business coaches in Indonesia. In the coding stage, the results of the interviews are recorded in writing. This is followed by the verification stage by sharing the recorded notes with the interviewees to check their validity. This is a continuous process to ensure robust results. The final phase in data analysis using content analysis to find definitions, philosophical meanings, and characteristics of Islamic business coaching.

## Result and Discussion

### *Islamic Business Coaching from Coaches' Perspective*

Based on the interview with the first informant, he explained that coaching is not only a subset of consultation, but also training and facilitation, mentoring, and supervision. He described it with the Venn diagram below:



**Figure 1:** Venn Diagram of Coaching

Source: adopted from informant #1

A consultant is a person who is trying to help the client to solve the problems with indirect influence and collaborative relationship. As a subset of consultation, coaching provides consultancy services by establishing a collaborative relationship with experts in facilitating learning and goal attainment. Training is the process of imparting knowledge to a group for a general or specific purpose (Thompson & Bale, 2006). A fundamental difference between 'training' and 'coaching' is that coaching personally determines kind of the best work personally. Coaches help each client to be a more effective person and business leader (McGovern et al., 2001).

The term 'facilitation' is used to describe any activity that is given, should be designing and run successfully, carry out productive and impartial meetings, develop team and group that allows change, and be concerned with decisions and how they are (Bacal, 2003). Although sometimes coaching is facilitation, there are some differences. Facilitation skills means working with groups and coaching means working for change which both on an organisational and an individual bases, enabling growth and change which are essential in team development (Zeus & Skiffington, 2000). Meanwhile, mentoring is the directive sharing of wisdom and experiences with the client. The client listens and absorbs what has been told. Coaching is non-directive, where both the coach and the client jointly participate in an engagement. One of the coaching success parameters is how much the coach can elicit from the client (Heah, 2009).

Supervision refers to helping and educating professionals (van Kessel, 2007). Coaching is as a form of supervision, but coaching can also be education and learning through pointers, observations and feedback. Cox et al. (2014) studied various fields of coaching for instance, Attention Deficit Hyperactivity Disorder ([ADHD coaching](#)), sports coaching, career coaching,



financial coaching, spiritual coaching, Christian coaching, homework coaching, health and wellness coaching, life coaching, executive coaching, relationship coaching, and business coaching.

To sum up, coaching is the process of facilitating, consulting, mentoring, training and supervising to support the coachee (learner) in achieving a specific personal or professional goal by capitalising on his/her potential. On the other word, the term 'coaching' is used to describe a structured and continuous process of facilitating, consulting, mentoring, training and supervising to help the client reach meaningful and vital objectives as well as optimise his potential.

Based on the definitions of coaching, we conclude that business coaching is the process used to improve the coachees' business. The third informant mentioned that a business coach will help guide the business owner in developing their business by helping to explain their business vision and how it fits their personal goals. The second informant said that adjusting the business vision with the personal goals of the business owner is a step that is often overlooked by most business coaching since they only tend to focus on business goals. By doing so, it means they completely ignore the purpose of the business owner.

The fourth and fifth informants explained that business owners who take part in business coaching try to understand why achieving business growth goals are important to them personally and their impact on their lives. They are the principal determiners who determine the speed and enthusiasm in achieving the specified goals. If business owners do not have their dreams, goals, and plans for themselves, there will be no strong reason for the urgency to achieve their business goals (Mcguinness, 2008).

After clarifying where business owners want to run their business, according to the first and the fifth informants, business coaching will help the client to strategise and prioritise what goals and strategies are needed to help move the business closer to its goals. Business coaches will meet business owners regularly, weekly or monthly, to keep them on the commitment path made during the previous coaching session (Mcguinness, 2008).

### ***The Characteristics of Islamic Business Coaching***

The characteristics of Islamic business coaching can be seen from Islamic religiosity and its principles in the role of the coach, business coaching session focus, the result of business coaching and its satisfaction.

### ***Islamic Business Coach's Role***

Based on interviews about the role of the coach with five master coaches in IBC, it can be described that the key elements that underpin the role of the Islamic business coach are being effective listeners and sounding boards for small businesses practitioners. The indicators are giving the clients feedback on their ideas and opinions, very open approaching, promoting honest business, and sustainable relationships with you in business activities. As a listener, the coach shows empathy to your problem, becomes a good listener, provide coachees with knowledge, and listens attentively to the client's business experience.

While Ellinger et al. (2008) found that inhibiting coaching behaviour included directive, controlling, and dictatorial styles, several employers respecting a no-nonsense approach and direct feedback from business coaches. In contrast, other entrepreneurs prefer the consultative and facilitative styles provided by empathetic and non-judgemental business coaches but are involved in questions that provoke thought (Creane, 2006).

As an adviser, the coach assists me to state the commitment, to advise clients' problems, analysis coachees' problem, becoming coachees mentor. Business coaches are involved for a



variety of reasons including increasing awareness of entrepreneurs, and recognition of the loneliness and alienation of positions, and the need to get advice from others (Cooper & Quick, 2003).

The second informant said that as a spiritual motivator, the coach encourages them in spirituality, motivates them in businesses transaction based on the strengthening of spirituality, advises them on practising business ethics, and becoming passionate for a more meaningful life. Other employers seek business coaches for their skills, knowledge, and ability to act as network advisers, advisers and facilitators. Small businesses want the opportunity to learn from experienced business coaches especially spirituality who enhance the skills and knowledge of entrepreneurs, helping them to develop into their role as leading companies with strength of spirituality (Gibbons, 2000).

Overall, business coaches who are able to direct them to be closer to God, adapt to Islamic personalities and styles that best suit small business practitioners seem to be most effective (Ross et al., 2018). In addition, business coaches who are able to work with employers in matters relating to improving company performance, and providing spirituality support are highly valued by employers (Garcia-Zamor, 2003).

#### ***Focus of Islamic Business Coaching Session***

The fourth and fifth informants explained IBC session focus is the current focus of Islamic business coaches during sessions that contribute to the performance of self and the company. This entails strategic management, stakeholder management, organisation, business skill, Islamic business coaching value, and business ethics. The element of strategic management consists of the company's vision and mission, business goals, business strategy, and strategising business plan. This explanation is similar to Blackburn, Hart & Wainwright (2013), and Starman (2007). Stakeholder management indicators are the personal performance, customer satisfaction, labour performance, and stakeholder involvement (Gaskell et al., 2011). The indicator of the organisation is leadership development, character building, organisational culture, and organisational transformation. Business skill indicators are how to increase sales, customer services satisfaction, financial management, and cost efficiency. The element of Islamic business coaching value are Islamic rule in a business transaction, raising capital, labour construct, and customer relations (Hassi, 2012). The indicators of business ethics are truthfulness, social responsibility, respect for humanity, and legal compliance (Passmore & Mortimer, 2011).

The results of this study support Clegg et al. (2003) and Leonard & Swap (2005) who stated that business coaching is a semi-structured process, focused on goals based on collaborative relationships and is very effective when done based on practical experience of coaching business. Coachees positively look at structured programmes that include training and business coaching. A coach works collaboratively with coachees to focus on their needs in learning as an effort to achieve their life goals and company performance (Gibb, 2009).

#### ***Business Coaching Results***

The coaches of Islamic business coaching argued that the result of business coaches acquire skills in strategic management, stakeholder management, organisation, business skill, Islamic value in business coaching, and business ethics. In strategic management, the coachees are able to achieve their objective/goals, make a better, action plan, have a master plan. Their statements are supported by Cox et al. (2009), Vidal-Salazar, Ferrón-Vílchez & Cerdón-Pozo (2012). While, in stakeholder management, they have the ability to make better decisions, have more



ideas/options to deal with issues, and encourage employees to achieve high performance (Raven & Le, 2015).

In organisations, the coaches support better leadership development, build a better character, and reform a better organisational culture (Vries, M. F., Korotov & Floreant-Treacy, 2007). They advance business skills, increase their sales and revenue, service the customer in a better way, and practice cost efficiency (Wu, 2009). They also support Shari'ah compliant business transactions, raise Shari'ah compliant capital, and make customer relations Shari'ah compliant (Hassi, 2012; Rulindo & Mardhatillah, 2007). In business ethics, they cultivate a more positive attitude towards life, have a more peaceful mind, and be more obedient in the law (Passmore & Mortimer, 2011).

### **Conclusion**

The definition of business coaching from the perspective of Indonesian Islamic coaches is slightly different from the common definition. The result of this study shows that the method of business coaching in Indonesia is a combination of methods, including training, mentoring, supervising, consulting, and facilitating. Thus, they interpret Islamic business coaching as a business coaching without ignoring the principle of Islamic law, spirituality and morality in business and self-development.

The characteristics of Islamic business coaching in Indonesia were summarised as follows: (1) Master coaches in Islamic business coaching serve as a sounding board, listener, adviser, and spiritual motivator. The prominent characteristics in the Islamic business coach's role are spiritual motivator consisting of encouraging spirituality, spiritual motivating on business, advice, and passionate for a meaningful life. These prominent characteristics were significant in Islamic business coaching but not significant in conventional business coaching; (2) In the focus of business coaching session and result after getting business coaching, the prominent characteristics of Islamic business coaching is Islamic value in business coaching. It is represented by following Islamic rules in business transactions, raising capital, labour constructs, and customer relations.

### ***Limitations and Future Research***

The principal limitation of this study is that it uses a qualitative approach while generalising the result for Indonesia requires a quantitative approach. Nevertheless, the qualitative study could prove valuable in understanding the definition and characteristics of IBC. This was done by recording as many as five interviews, which could then be transcribed and analysed. The transcripts were inter-judged by a small panel of trained researchers working with a codebook developed by the authors. Content analysis research is time-consuming but was worth the effort. Further research could use a quantitative approach to confirm this result.

### **References**

- Akdere M, Darlene Russ-Eft, & Natalie Eft. (2006). The Islamic Worldview of Adult Learning in the Workplace: Surrendering to God. *Advances in Developing Human Resources*, 8(3), 355–363. <https://doi.org/10.1177/1523422306288428>
- Alam, K. U. A., & Muzahid, M. A. U. (2009). Informal Islamic Education and its Role in Human Resource Development in Society: A Theoretical Evaluation. *IIUC Studies*, 3, 83–92. <https://doi.org/10.3329/iiucs.v3i0.2667>
- Ali, A. J., & Weir, D. (2005). *Islamic Perspectives on Management and Organization*. Cheltenham: Edward Elgar Publisher.



- Arifin, S. (2015). Syariah Business Coach. Retrieved November 2, 2016, from <http://sbcglobal.co.id/who-whe-are-syariah-business-coach>
- Audet, J., & Couteret, P. (2012). Coaching the Entrepreneur: Features and Success Factors. *Journal of Small Business and Enterprise Development*, 19(3), 515–531. <https://doi.org/10.1108/14626001211250207>
- Bacal, R. (2003). *The Manager's Guide to Performance Reviews*. McGraw-Hill Professional. Retrieved from <http://site.ebrary.com/lib/ncent/docDetail.action?docID=10051505&p00%5Cnhttp://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Manager's+guide+to+performance+reviews#0>
- Blackburn, R. A., Hart, M., & Wainwright, T. (2013). Small Business Performance: Business, Strategy and Owner Manager Characteristics. *Journal of Small Business and Enterprise Development*, 20(1), 8–27. <https://doi.org/10.1108/14626001311298394>
- Clegg, S. R., Rhodes, C., Kornberger, M., & Stilin, R. (2005). Business coaching: Challenges for an emerging industry. *Industrial and Commercial Training*, 37(5), 218–223. <https://doi.org/10.1108/00197850510609630>
- Covey, S. R. (1989). *The 7 habits of highly effective people*. New York: Simon and Schuster.
- Cox, E., Bachkirova, T., & Clutterbuck, D. (2009). *The Complete Handbook of Coaching* (2nd ed.). London: Sage. Retrieved from <papers2://publication/uuid/0B92C583-355E-40F3-9552-B07BBBEA91E7>
- Crompton, B. M., Smyrnios, K. X., & Bi, R. (2012). Measuring the influence of business coaching on fast-growth firms. *Small Enterprise Research*. <https://doi.org/10.5172/ser.2012.19.1.16>
- Dana, L. P. (2009). Religion as an explanatory variable for entrepreneurship. *The International Journal of Entrepreneurship and Innovation*, 10(2), 87–99.
- Fadila Grine. (2014). Empowering Muslim Women Through Executive Coaching & Mentoring. *International Journal of Nusantara Islam*, 2(1), 53–70.
- Fatoohi, L. (2009). *Jihad in the Qur'an: The Truth from the Source*. Birmingham, UK: Luna Plena Publishing.
- Fillery-Travis, A., & Passmore, J. (2011). A critical review of executive coaching research: a decade of progress and what's to come. *Coaching: An International Journal of Theory, Research and Practice*, 4(2), 70–88. <https://doi.org/http://dx.doi.org/10.1080/17521882.2011.596484>
- Garcia-Zamor, J. (2003). Workplace Spirituality and Organizational Performance. *Public Administration Review*, 63(3), 355–363.
- Gaskell, C., Logan, J., & Nicholls, L. (2011). Igniting Business Performance Through Transformational Coaching. *Strategic HR Review*, 11(1), 18–24. <https://doi.org/10.1108/14754391211186278>
- Gibbons, P. (2000). Spirituality at Work: Definitions, Measures, Assumptions, and Validity Claims. *Work and Spirit: A Reader of New Spiritual Paradigms for Organizations*, 111–131.
- Halstead, J. M. (2004). An Islamic Concept of Education. *Comparative Education*, 40(4), 517–529.
- Hashim, J. (2010). Human Resource Management Practices On Organizational Commitment: The Islamic Perspective. *Personnel Review*, 39(6), 789–799.



- Hassi, A. (2012). Islamic Perspectives on Training and Professional Development. *Journal of Management Development*, 31(10), 1035–1045. <https://doi.org/10.1108/02621711211281816>
- Heah, M. (2009). *Dialogue With The Coach: 100 cases, 100 strategies, 100 solutions*. MPH Group Publishing Sdn Bhd.
- Khan, S. (2017). The Exercise of Hikmah.. Wisdom. Retrieved November 1, 2017, from <https://www.islamicity.org/3092/the-exercise-of-hikmah-wisdom/>
- Leedham, M. (2005). The Coaching Scorecard: a holistic approach to evaluating the benefits of business coaching. *International Journal of Evidence. Based Coaching and Mentoring*, 3(2), 30. Retrieved from <http://www.desafiobc.cl/wp-content/uploads/vol03issue2-paper-03.pdf>
- McGovern, J., Lindemann, M., Vergara, M., Murphy, S., Barker, L., & Warrenfeltz, R. (2001). Maximizing the Impact of Executive Coaching: Behavioural Change, Organizational Outcomes And Return On Investment. *The Manchester Review*.
- Mcguinness, M. (2008). *Creative Management for Crative Teams: Business Coaching and Creative Business*. *Wishfulthinking.co.uk*. London: Creative Commons licence.
- Passmore, J., & Mortimer, L. (2011). Ethics in coaching. In *Advanced executive coaching*. San Fransisco: Wiley.
- Raven, P., & Le, Q. V. (2015). Teaching business skills to women: Impact of business training on women’s microenterprise owners in vietnam. *International Journal of Entrepreneurial Behaviour and Research*, 21(4), 622–641. <https://doi.org/10.1108/IJEBr-06-2014-0099>
- Ross, A., Brock, V. G., Grodzki, L., Langner, H., Keller, J., Margariti, M., ... Sabatine, J. M. (2018). Coaching and Spirituality: A Mutually Resourceful Relationship. In S. S. English Janice Manzi; Brownell, Philip (Ed.), *Professional Coaching: Principles and Practice* (1st ed.). New York: Springer Publishing Company. <https://doi.org/10.1891/9780826180094>
- Rulindo, R., & Mardhatillah, A. (2007). Spirituality , Religiosity and Economic Performances of Muslim Micro- Entrepreneurs. *8th International Conference On Management From Islamic Perspective, International Islamic University Malaysia And Islamic Research And Training Institute ( IRTI )*, Kuala Lumpur, 1–13. <https://doi.org/10.1016/j.ijcard.2017.03.069>
- Sayeda Habib. (2012). *Life Coaching for Muslims: Discover the Best in You!* Kube Publishing.
- Spiller, R. (2000). Ethical Business and Investment: A Model for Business and Society. *Journal of Business Ethics*, 27(1/2), 149–160. <https://doi.org/10.1023/A:1006445915026>
- Starman, J. (2007). *The Impact of Executive Coaching on Job Performance From The Perspective of Executive Woman*. Capella University. Capella University.
- Thompson, J., & Bale, R. M. (2006). Effective Entrepreneur Enabling – Increasing the Effectiveness of Advising , Coaching and Mentoring Support. *Institute for Smail Business & Entrepreneurship*, (November), 1–12.
- Tichy, N. M. (2002). *The leadership engine: How winning companies build leaders at every level*. New York: HarperCollins Publishers.
- van Kessel, L. (2007). Coaching, a field for professional supervisors? *Ljetopis Socijalnog Rada*, 14(2), 387–432.
- Vidal-Salazar, M. D., Ferrón-Vílchez, V., & Cordón-Pozo, E. (2012). Coaching: An effective practice for business competitiveness. *Competitiveness Review*, 22(5), 423–433. <https://doi.org/10.1108/10595421211266302>
- Vries, K. de, M. F., Korotov, K., & Floreant-Treacy, E. (2007). *Coach and couch: The psychology of making better leaders*. New York: Palgrave Macmillan.



*3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)*  
*eISBN: 978-967-2245-13-1*  
*Copthorne Hotel, Cameron Highland, Malaysia*  
*29<sup>th</sup>-30<sup>th</sup> June 2019*

- Webb, K. E. (2007). Why Faith-Based Professional Coach Training? Retrieved November 1, 2015, from <http://www.creativeresultsmanagement.com/whycoaching>
- Whiteside, S. T. (2013). *Impact of Executive Coaching on Small Business and Franchisees*. Fielding Graduate University.
- Wu, D. (2009). *Measuring Performance in Small and Medium Enterprises in the Information & Communication Technology Industries*. RMIT University.
- Yusanto, M. I., & Widjajakusuma, M. K. (2002). *Menggagas Bisnis Islami (Initiated Islamic Business)*. Jakarta: Gema Insani Press.
- Zeus, P., & Skiffington, S. (2000). *The Complete Guide To Coaching At Work*. Australia: McGrall-Hill.



## PROPOSAL FOR A HOLISTIC MINDFULNESS-BASED INTERVENTION PROGRAM FOR THE CLASSROOM TEACHERS WITH MENTAL HEALTH PROBLEMS

Nguyen Phuong Lan<sup>1</sup>  
Huynh Cong Du<sup>2</sup>

<sup>1</sup>Faculty of Tourism, Ho Chi Minh City University of Food Industry (HUFI), Vietnam (E-mail: phuonglank15@yahoo.com)

<sup>2</sup>Department of Psychology, University of Labour and Social Affairs (ULSA2), Ho Chi Minh City, Vietnam, (Email: [hoangcdu@gmail.com](mailto:hoangcdu@gmail.com))

---

**Abstract:** *In school setting, mental health problems of students have been often discussed. Teachers have also been found to have the mental health problems, which could have a detrimental effect upon all of those students who are associated with him or her, but there has been no or very few interventions designed to help them. To address this, the current study has two main goals: 1) to review related literature in order to categorize common mental health problems among teachers and 2) to propose a holistic mindfulness-based intervention program for the teachers.*

**Keywords:** *Classroom teachers' mental problems, anxiety, depression, emotional, holistic mindfulness-based intervention*

---

### Introduction

An optimal classroom climate has been described to have low levels of conflict and disruptive behaviour, smooth transitions from one type of activity to another, appropriate expressions of emotion, respectful communication and problem solving, strong interest and focus on tasks, and supportiveness and responsiveness to individual differences and students' needs (La Paro & Pianta, 2003). In fact, in school setting, mental health of students has been largely discussed and concerned and past studies have focused on the effectiveness of classroom-learning environment (CLE), in which teachers' instructional techniques, teacher-student interactions (Connor et al., 2010; Hamre & Pianta, 2005), and teachers' role in school students' mental health has been emphasized (Nikolaou et al, 2017). However, fewer studies have investigated the contributions of teachers' psychological health, even in light of growing concern about the effects of teachers' chronic stress on educational quality (Alliance for Excellent Education, 2005). Individual depressive symptoms, such as stress and poor emotional regulation, have been found to affect teachers' contribution to the CLE. Mashburn, Hamre, Downer, and Pianta (2006) found that teachers who exhibited more maladaptive psychological characteristics were more likely to rate their relationships with students as hostile.

### Purpose of the study

Because teachers have also been found to have mental health problems, which could have a detrimental effect upon all of those students who are associated with him or her, but there has been very few interventions designed to help the teachers. To address this, the current study has two main goals: 1) to review related literature in order to categorize common mental health problems among teachers and 2) to propose a holistic mindfulness-based intervention program for the teachers.



## **Review of Related Literature**

### ***Definition of terms***

According to Medilexicon's medical dictionary, mental health is " Emotional, behavioral, and social maturity or normality; the absence of a mental or behavioral disorder; a state of psychological well-being in which one has achieved a satisfactory integration of one's instinctual drives acceptable to both oneself and one's social milieu; an appropriate balance of love, work, and leisure pursuits." And according to the WHO (World Health Organization), mental health is: "...a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community."

Psychological traits of mental health includes factors of anxiety, depression, and loss of behavioural /Emotional control (The Mental Health Act, 1987). The current paper would like to employ these factors as guidelines to review the teachers' mental health problems.

### ***Teachers' mental health problems***

Past studies conducted on teaching professional, has shown that teachers also have mental health problems and these problems have detrimental effect upon their students as below.

The first factor of teachers' mental health problem is anxiety. For examples, recently, a 2017 educator work-life study survey conducted by the American Federation of Teachers and the Badass Teachers Association confirmed teacher anxiety is higher than most other professions. According to the survey, 61 percent of educators reported their work was "always" or "often" stressful—twice the rate of other professions (American Federation of Teachers, 2017). In their study on inherent personal traits behind teacher anxiety such as personality, Fontana and Abouserie (1993) found that the more extroverted teachers were, the less stress they were likely to experience. In addition to internal factors, teachers' anxiety has been attributed to the influence of external agents. Gresham (2008) found that there was a significant correlation between high levels of efficacy and low levels of anxiety. Ferguson, Frost, & Hall (2012) found that sources of anxiety or stress identified in the literature including time constraints and heavy workloads.

The second common factor is depression: Teachers are responsible for the implementation of many important classroom factors, they play a crucial role in defining the learning context in which students participate (Eccles & Roeser, 1999). Therefore, teacher practices and the classroom-learning environment (Q-CLE) are important contributors to children's development (Hamre & Pianta, 2007). In connection with the mentioned viewpoints, Hamre et al. (2008) found that classroom emotional climate and teacher stress level were predictive of teachers' reports of conflict, over and above students' diagnosed behaviour problems. While these studies strongly support the notion that teachers' everyday interactions with students, classroom management, reactions to student behaviour, and ability to implement curriculum are impacted by the presence of depressive symptoms, few conceptualize "depression" as a whole construct composed of multiple symptoms, while those that do have found mixed results. Additionally, Li Grining et al., (2010); and Swartz & McElwain (2012) discovered that teachers' negative psychological characteristics may influence classroom. For example, personal stress in teachers has been associated with lower quality classroom interactions, and teachers who have stronger emotion regulation are more likely to reinforce positive student behaviour and respond supportively to students' negative emotions; and in their study, McLean and Connor (2015) also revealed that depression in teachers has been



found to have impacts classroom learning and that teachers who have more symptoms of depression may have a negative influence on classroom quality and student achievement.

The third factor in teachers' mental health problem is emotional: Teaching is a high-stress profession, and many teachers experience serious emotional problems related to the stress of their job (Eaton et al, 1990). Similarly, teaching is an emotional activity (Hargreaves, 1998, 2001), and as such, it carries with it our own emotional experience as well as that of those who surround us. Therefore, according to Miller DF, Wiltse J. (1979) classroom environment is affected by the emotional stability of the teacher. A teacher with personal mental health problems can have a detrimental effect upon all of those students who are associated with him or her. Frenzel, Götz, Stephens, and Jacob (2009) describe the relationship that occurs between teacher emotions and student behavioural responses. Their model proposes that teachers' emotions, impacted by student behaviours, in turn influence instruction; thus continuing the cyclical effect in the impact of teachers' emotions on student behaviours and outcomes. For those reasons, there have been studies conducted to investigate the impact teachers' emotion upon teaching and learning, for examples, Pekrun, Goetz, Titz and Perry (2002) found that while negative deactivating emotions on the part of the teacher take a negative toll in the classroom, positive activating emotions render a positive effect on student learning. Similarly, teachers are susceptible to the influence that emotions exert over them (Day & Leitch, 2001). Students can learn that a topic or learning task is valuable by teachers' comments, as well as by observing their teacher's enjoyment of the topic or learning task. High task values acquired through such "value induction" (Pekrun, 2000,) may in turn have positive effects on students' own enjoyment of learning. Frenzel et al. (2009) found that enjoyment of teachers was positively related to that of students, even when controlling for student enjoyment in the previous school year, and that enjoyment as reported by teachers was positively associated with student perceptions of teacher enthusiasm, and teacher enthusiasm in turn was positively linked to students' levels of enjoyment. This implied that that teachers do make a difference in terms of students' emotional experiences in the classroom and in terms of how students' experiences change across years.

So far, there has been very few existing interventions designed to address teachers' mental problems found in literature while there has recently been a research trend and a good amount of interest in mental health benefits of mindfulness (Brown and Ryan, 2003).

### ***Mindfulness and its benefits***

Recently, there has been an amount of interest in mental health benefits of mindfulness (Brown and Ryan, 2003). Mindfulness which involves bringing a certain quality of attention to moment by moment experience (Kabat-Zinn, 1990), is the heart of Buddhist mediation practice and psychology (Siegel and Fulton, 2005). According to Siegel (2009), mindfulness is actually not only a form of attention training (which many investigators studied it as) and it is not only a form of affect regulation training (which some people were studying it as being as well). Maybe mindfulness is actually a relational process where you become your own best friend. Mindfulness appears to change how we see ourselves in the world; our experience of the self-changes with mindfulness. Mindfulness is an integrative process that promotes well-being in body, mind and relationships. Baer et al. (2006) described mindful awareness as: (1) act with awareness; (2) be less reactive; (3) be non-judgemental; (4) develop the ability to label and describe with words the internal world and (5) self-observe. Mindful awareness contains attention focusing and includes behaviours such as intense looking at objects or scenes, careful examining, fingering and inspecting them with interest for details (Ruff & Rothbart 1996).



Psychotherapy patients are increasingly seeking the psychotherapists who understand their meditation practice; therefore most therapists are familiar with meditation as a relaxation technique (Benson, cited in Agnes, 2009). Mindfulness practice brings about many psychological and mental health benefits. For instance, mindfulness enables its practitioners: to develop ability to observe self and thus becomes less identified with the contents of consciousness (Segal, Williams & Teasdale, 2002); to see thoughts as merely thinking without feeding or fighting them (Sogyal, 1992); to stay present to the other person without being caught up in destructive emotions (Doherty, 1997). Moreover, mindfulness allows covert desensitization to unpleasant thoughts and negative feelings that make one suffer from himself (Breslin 2002).

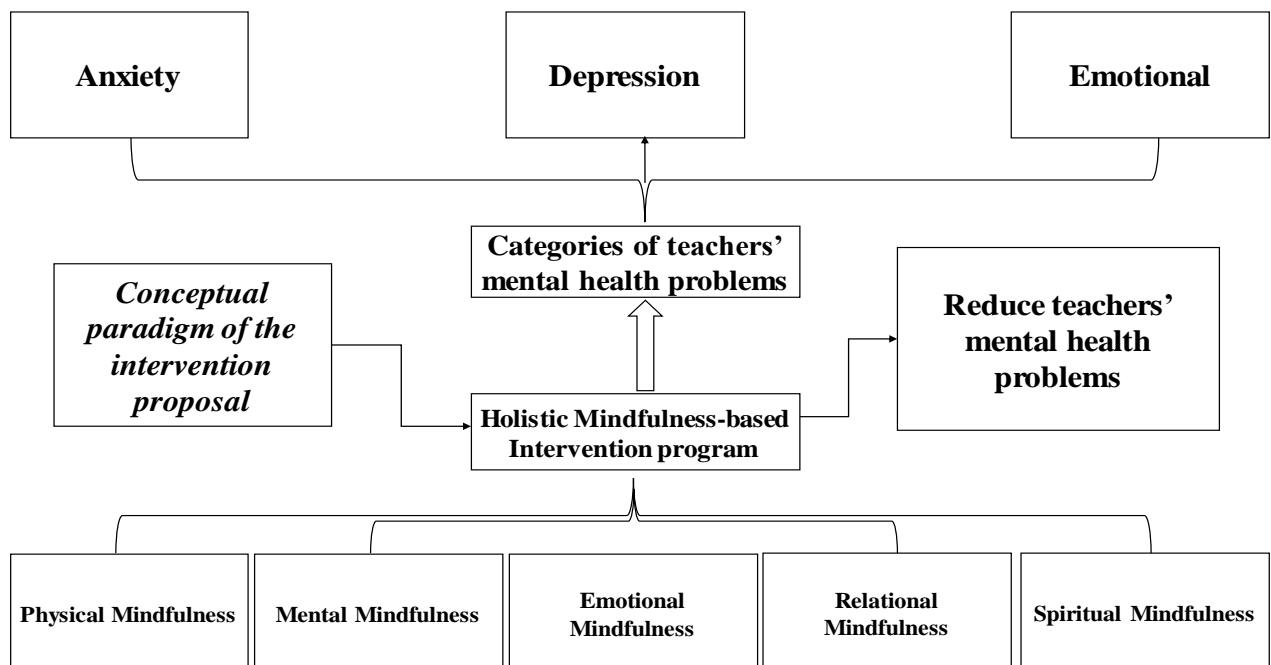
Mindfulness is also beneficial to the mind and body. For example, a 2006 qualitative study followed the effects of one year of Transcendental Meditation on ten middle school students showed that students gained greater ability of self-control and improved social relationships, as well as better academic performance (Rosaen, 2006). Other investigators have found that Sahaja Yoga Meditation, an awareness practice related to mindfulness could reduce child'ADHD symptom; enhanced the self-esteem of the children and improved relationship between parents and the child (Harrison et al., 2004). In another study for adolescents with ADHD, mindfulness training significantly reduced symptoms associated with their disorder (Zylowksa et al., 2008). Iyengar Yoga as a complement to medication in the treatment of depression was found to significantly reduce in overall depression, anger, and anxiety among participants. Participants also consistently rated their moods higher after the completion of each class than before each one commenced (Shapiro et al., 2007). In one 6-week study with anxious children, teachers reported an improvement in academic functioning and decrease in symptoms of anxiety in the children (Semple et al., 2005). A mindfulness intervention for several adolescents with conduct disorder, resulted in a significant decrease in aggressive behaviour. They reported benefits from mindfully returning their attention to the soles of their feet during distressing situations (Singh et al., 2007). Mindfulness-based cognitive therapy significantly reduced observable internalizing and externalizing symptoms (Lee et al., 2008).

Mindfulness intervention is also helpful in educational settings. In their study of MBSR for primary school teachers included 10 intervention participants and no control group, Gold et al. (2010) discovered that teachers reported improvement in depression and stress and greater accepting without judgment (a component of the mindfulness scale). Another study focused on meditation coupled with emotion regulation training for female teachers conducted by Kemeny et al. (2012) revealed that teachers in the experimental group as compared to the control group reported more positive trait affect and increased mindfulness, showed improved ability to recognize others' emotions, as well as greater sensitivity to compassion-related words in a behavioural task, and amount of practice was related to less physiological reactivity. Recently, in a randomized controlled pilot trial of a modified Mindfulness-Based Stress Reduction course (mMBSR) adapted specifically for teachers, Lisa et al. (2013) found that participants showed significant reduction in psychological symptoms and burnout, improvements in observer-rated classroom organization and performance on a computer task of affective attentional bias, and increases in self-compassion. Furthermore, changes in mindfulness were correlated in the expected direction with changes across several outcomes (psychological symptoms, burnout, and sustained attention) in the intervention group. This Results suggest the mindfulness may be a promising intervention to support teachers.

### *Synthesis of the literature review*

While the articles reviewed in this research described that teachers has some symptoms of mental health problems including anxiety, depression and emotional, there has been very little efforts to address mental health problems among teachers to help them stay focus on teaching and be free from the problems. There has recently been a research trend and a good amount of interest in mental health benefits of mindfulness for teachers but showed a promising intervention.

The current study and the previous ones have some points in common, for instance: address the same concern of the mental health problems among teachers. However, the contribution of the current study is to categorize the concrete factors of mental health problems experienced by teachers in a more systematic way for a better understanding and assessment and at the same time to propose a holistic mindfulness-based intervention program, adding one more treatment approach to the field of educational psychology in general and teaching professionals in particular. The categories of mental health problems of teachers and components proposed in the current mindfulness-based intervention in this study are illustrated in the conceptual paradigm below.



-The mental health problems of teacher in this study refer to anxiety, depression and emotional problems.

- The holistic mindfulness-based intervention in this study refers to mindful experience about wholeness of body, mind, and spirit of students in class, which is called holistic approach (Krishnamurti, 2003) consisting of five components: physical, mental, emotional, relational and spiritual mindfulness. Each component contains one major technique to help the students with moment by moment experience.

- Physical Mindfulness (*body scan technique*), a process of moving attention from head to toes, observing sensations in the different regions of the body to enable participants to become aware of themselves physically;



- Mental Mindfulness (*mantra technique*), a meditation on a word/ phrase that gives one a meaning/ power of concentration when mental suffering arises such as self-negative judgment or unhappy thoughts about the self;

- Emotional Mindfulness (*emotion anchor technique*), a way of freeing from one's own emotional sufferings using deep breathing to enhance awareness of what is happening in the body;

- Relational Mindfulness (*metta technique/ loving-kindness meditation*), a good intention or compassion one wants to extend to the self, teachers and classmates;

- Spiritual Mindfulness (*centering meditative prayer*), a way of adding depth of meaning and building of faith through the grace of contemplation on a meaningful word that best supports one's sincere intention.

**Proposal for a Holistic Mindfulness-based Intervention Program:**

The intervention consists of 2 modules with 9 sessions. Each session is expected to last in 60 minutes. Please see Table 1 for a detailed description of the modules.

**Table 1**

Module	Sessions	Preliminary
1		
Day 1	Assessment	<p><u>Session objectives:</u> To get the baseline for the selection of the participants.</p> <p><u>Expected outcomes:</u></p> <p><u>Strategy:</u> Teachers are invited to complete the scale: <i>Mental Health Inventory (MHI) 38</i></p>
	Preparation of the participants:	<ul style="list-style-type: none"> <li>- Getting to know each other</li> <li>- Orientation on confidentiality</li> <li>- Establishing the rules during the sessions</li> <li>- Expectations</li> <li>- Getting nick names or emails for later feedbacks</li> </ul>
Day 2	Educating the participants	<p><u>Session objectives:</u> To help teachers discover consequences of mental health problems</p> <p><u>Expected outcomes:</u> The participants will be able to understand the consequences</p> <p><u>Strategy:</u></p> <ul style="list-style-type: none"> <li>- Lectures on the mental health problems and their consequences.</li> </ul>

		<ul style="list-style-type: none"> <li>- The participants are invited to reflect the questions: <i>What mental health problems do you often experience: anxiety, depression or emotional problem?</i></li> <li>- Group sharing: The participants will be invited to share their reflections in group (s).</li> </ul>
Module 2	<i>Session No.</i>	Intervention Sessions
Day 3	Educating of Mindfulness	<p><u><i>Session objectives:</i></u> To introduce the benefits of mindfulness and to demonstrate general mindfulness techniques</p> <p><u><i>Expected outcomes:</i></u></p> <ul style="list-style-type: none"> <li>- The participants will become aware of the importance of mindfulness practice, and be familiar with themselves with the basic techniques and skills to apply in daily life.</li> <li>- The participants will be able to stay in the present, to feel peace and happiness in their life.</li> </ul> <p><u><i>Strategy:</i></u></p> <ul style="list-style-type: none"> <li>- Lecture</li> <li>- The participants watch a video clip of a mantra song: “Que Cera Cera” by Doris Day, and will be invited to sing altogether.</li> <li>- Practice 1: Basic Mindfulness Exercises: sitting down, relaxing and breathing deeply following the facilitator’s instruction.</li> <li>- Practice 2: <i>Waiting For Yourself Exercise following the facilitator’s instruction.</i></li> <li>- Home work: Practice seeing, hearing exercise and sitting meditation guided by the hand-outs.</li> </ul>
Day 4	Physical mindfulness	<p><u><i>Session objectives:</i></u></p> <ul style="list-style-type: none"> <li>- To introduce the body scan practice and help the participants stay focused on the different parts of the body and anchor their awareness in the present moment;</li> <li>- To help the participants practice the body scan exercise daily at their convenient time;</li> </ul>

		<ul style="list-style-type: none"> <li>- To help the participants stop “running from themselves” for becoming physically mindful about what is happening to their bodies.</li> </ul> <p><u>Expected outcomes:</u></p> <ul style="list-style-type: none"> <li>- The participants will become aware of themselves physically and give kindness to themselves physically as a way to reduce anxiety and depression.</li> <li>- The participants will be able to learn the experience of settling their body</li> <li>- The participants will be able to become aware of body sensation and practice at their convenient time.</li> </ul> <p><u>Strategy:</u></p> <ul style="list-style-type: none"> <li>- Review of the previous session</li> <li>- Lecture</li> </ul> <p>Practice 1: <i>Mindfulness of the body sensations</i>: The participants will be asked to notice one tense part of the body and soften it using relaxing breaths following the facilitator’s instruction.</p> <p>Practice 2: <i>Warm hands, warm heart exercise</i> using hot coffee or hot tea or hot water activity.</p> <p>Home work: do anything you can to comfort the body when you feel discomfort. For example:</p> <ul style="list-style-type: none"> <li>Watch funny movies;</li> <li>Eating nourishing food and eat slowly and taste deeply to feel its deliciousness;;</li> <li>Drink warm water and take warm bath to warm the body;</li> </ul> <p>Can you think of a few strategies to take care of yourself physically? Write down and try it.</p>
Day 5	Mental mindfulness	<p><u>Session objectives:</u></p> <ul style="list-style-type: none"> <li>-To introduce Mantra technique known as tool for the mind when mental suffering arises such</li> </ul>

		<p>as self-negative judgment/ unhappy thoughts about the self</p> <ul style="list-style-type: none"> <li>- To introduce, relaxing breath technique, the most common anchor for the mind</li> </ul> <p><u>Expected outcomes:</u></p> <ul style="list-style-type: none"> <li>- The participant will become aware of mental states and be able to acquire common mantra techniques such as repeating one nice word/phrase that is applicable to them in their current situation.</li> <li>- The participants will be able to give anchor to their mind when they notice unhealthy thoughts take place.</li> </ul> <p><u>Strategy:</u></p> <ul style="list-style-type: none"> <li>- Review of the previous lesson and share result of home works.</li> <li>- Lecture</li> <li>- The participant will watch a video clip about a mantra song “Que Cera Cera, What Will be Will be” by Thai disable children and then will be asked to repeat the phase from the song.</li> <li>- Practice 1: Centering meditation to discover personalized compassionate mantra word/phrase. The participant will do this exercise following the facilitator’s instruction.</li> <li>- Practice 2: Anchor the mind using mindfulness technique of breathing. The participants will do this exercise following the instruction from a video clip.</li> <li>- Home work: What is your personal mantra in this mental state: you were given a question by your teacher, but you were not able find the answer?</li> </ul> <p>Hint: you assign your students homework but they did not accomplish. Your mantra phase may be: they did not finish their homework, he may need help.</p> <p><i>Or: your brain overworked last night to complete check your students’ papers. Your mantra</i></p>
--	--	---



		phase maybe: poor brain! So much hard but meaningful work!
Day 6	Emotional Mindfulness	<p><u>Session objectives:</u> To introduce basic techniques and related activities enabling one to be free from emotional sufferings.</p> <p><u>Expected outcomes:</u> The participants will become aware of and accept negative feelings and become friendlier toward un-comfortable emotions and toward oneself</p> <p><u>Strategy:</u></p> <ul style="list-style-type: none"> <li>- Review of the previous session and sharing the experience from homework exercise.</li> <li>- Presentation of Emotional Free Technique (EFT)</li> </ul> <p>Practice 1: Mindfulness of difficult emotion using relaxing breaths following the facilitator's instruction.</p> <p>Practice 2: Soft soft soft! Allow allow allow! and love love love activity using relaxing breaths to move one from physical to mental and to comfortably emotional level. The participants do this activity following the facilitator's instruction.</p> <p>Homework:</p> <p>Try this: treat yourself with one of the following activities: listening to music, going to church, riding a bike, working in the garden, cooking delicious food, collecting shells.</p> <p><i>Do you have any way to be kind to yourself emotionally? Keep in mind that engaging in activities that are intrinsically enjoyable, rather than those that feel like work, is a way to be kind to yourself emotionally.</i></p>
Day 7	Relational Mindfulness	<p><u>Session objectives:</u> To introduce loving-kindness meditation (Metta Meditation) to help one stop isolating but relate oneself to human beings, for example: connect to students and co-teachers:</p> <p><u>Expected outcomes:</u></p> <ul style="list-style-type: none"> <li>- The participants will be aware that they are part of class.</li> </ul>

		<p>- The participants should be able to kindly relate to others as students and co-teachers because how to relate to others have huge impact on how they feel inside themselves too.</p> <p><u>Strategy:</u></p> <ul style="list-style-type: none"> <li>- Review of the previous session and sharing the experience from the practice at home</li> <li>- Lecture</li> <li>- Demonstrate of Loving Kindness meditation modality by a Video clip.</li> </ul> <p>Practice 1: <i>Loving Kindness meditation/ wishing happiness for others</i></p> <p>The participants are invited to imagine how hard the learning task of their students is or how difficult of a lesson is for students to understand and do exercises, then give them good wish. The participants will follow the facilitator's instruction. At the end of the activity, the participants will be asked to continue reciting the following Metta phrases:</p> <ol style="list-style-type: none"> <li>1. May my students be healthy and learn well.</li> <li>2. May my students be happy and safe all the time.</li> <li>2. May my co-teachers be fine all the time and teach well.</li> <li>3. May my students accept limitations of teachers</li> </ol> <p>PPactice 2: <i>Loving Kindness meditation/ Wishing happiness for oneself</i></p> <p>The participants will be asked to give themselves loving attention following the facilitator's citations. At the end of the activity, the participants will be asked to continue reciting the following Metta phrases:</p> <ol style="list-style-type: none"> <li>1. May I be fine all the time;</li> <li>2. May teach well;</li> </ol>
--	--	--



		<p>3. May be able to concentrate in class all the time;</p> <p>4. May I accept my limitation as a teacher;</p> <p>Home work: Take your time and create some Metta phrase in your own words that shape your experience. Here are some examples:</p> <p>May I be kind to myself and my students in classroom</p> <p>May I truly be happy</p> <p>May I find peace in this uncertain world</p> <p>May I have happiness and causes of happiness</p> <p>May I live in peace without too much attachment and too much aversion</p> <p>May I be free from anxiety</p> <p>May I love and be loved.</p> <p>May we be completely free from all dangers</p> <p>May we happy completely teaching-learning</p> <p>May we have peace in mind and heart</p>
Day 8	Spiritual Mindfulness	<p><u>Session objectives:</u> To Introduce advantages of spiritual benefits and steps to Centering Prayer to the participants.</p> <p><u>Expected outcomes:</u></p> <ul style="list-style-type: none"> <li>- The participants will become aware of the importance of spirituality in human life.</li> <li>- The participants will nourish their spirit as a way to cultivate closeness to an idea-transcendent being, a process that one hopes and accepts selfish desires and personal limitations.</li> </ul> <p><u>Strategy:</u></p> <ul style="list-style-type: none"> <li>- Review of the previous session and sharing of the personal nice phrase.</li> <li>- Lecture on centering meditative prayer, a spiritual approach.</li> </ul>



		<p>Practice: Christian, Buddhist, Ancestral worship Prayer/ Meditation using relaxing breaths following demonstration from a video clips.</p> <p>Home work:</p> <p>Before going to bed, kindly open prayer book of your religion or any book meaning to you and a passage. Choose a word that you like from the text and payer over it using the technique learnt and practiced. Kindly write down your experience and share with each other in the next meeting.</p> <p><i>Do you have any other way to enhance spiritual life?</i></p>
Day 9	Evaluation and recognition	<p><u>Session objectives:</u> To allow the participants to give feedback about the program.</p> <p><u>Expected outcomes:</u> The participants will become aware of strengths and limitations of the program</p> <p><u>Strategy:</u></p> <p>Sharing experiences about the whole program</p> <p>Evaluation forms</p> <p>Awarding of Certificates of the participants/ Tokens</p> <p>Final administration of the Mental Health Inventory (38) to the teachers in order to see improvement in mental health.</p>

### Conclusions and Recommendations

From the literature, the teachers have been found to have mental health problems in terms of anxiety, depression and emotional, which has affected teaching-learning process. The problems have not been largely dealt by different interventions. However, this paper tried to systematically rearrange the problematic behaviors in categories for a better understanding and assessment. Moreover, in the trends of research and application of mindfulness benefits, this paper proposed a holistic mindfulness-based intervention to address to the problem concerned because in the country no such an intervention model, so far, has been built. The proposed intervention program in this study aims to add one more tool to the field of mental health and educational psychology, concretely to the educators, teachers, guidance counsellors and school psychologists. This program consists of 2 modules as mentioned. Since this is just a proposed intervention model, the educators, teachers, guidance counsellors and school psychologists and those working in mental health are highly recommended to implement this intervention program



to examine whether it is effective in treating the teachers' mental health problems in classroom. Future researchers are encouraged to apply the program to validate its effectiveness for future use.

## **References**

- Alliance for Excellent Education (2005). *Teacher attrition: A costly loss to the nation and to the states*. Washington, DC: Author.
- Agnes, G. T. (2009). *Effectiveness of Mindfulness-Based Cognitive Intervention in Promoting Quality of Life of Caregivers of Cancer Patients: Unpublished Dissertation*, University of Santo Tomas, Manila, Philippines.
- Anne C. Frenzel, Thomas Goetz, Oliver Lu'dtke, Reinhard Pekrun, Rosemary E. Sutton (2009). Emotional Transmission in the Classroom: Exploring the Relationship between Teacher and Student Enjoyment. *Journal of Educational Psychology*, Vol. 101, No. 3, 705– 716.
- Baer, R.A., Smith, G.T., Hopkins, J., Krietemeyer, J. & Toney, L., 2006, 'Using self-report assessment methods to explore facets of mindfulness', *Assessment* 13, 1. <http://dx.doi.org/10.1177/1073191105283504>.
- Brown, K.W., Ryan, R.M., (2003). The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being, *Journal of Personality and Social Psychology*, 84 or 34, No 4, 822-848.
- Breslin, F. C., Zack, M., & Mcmain, S. (2002). An Information-processing Analysis of Mindfulness: Implications for Relapse Prevention in the Treatment of Substance Abuse. *Clinical Psychology: Science and Practice*, 9(3), 275-299.
- Connor, C. M., Ponitz, C. E. C., Phillips, B., Travis, Q. M., Day, S. G., & Morrison, F. J. (2010). First graders' literacy and self-regulation gains: The effect of individualizing instruction. *Journal of School Psychology*, 48, 433–455. doi:10.1016/j.jsp.2010.06.003.
- Day, C., & Leitch, R. (2001). Teachers' and teacher educators' lives: the role of emotion. *Teaching and Teacher Education*, 17(4), 403–415.
- Doherty, R.W. (1997). The Emotional Contagion Scale: A Measure of Individual Differences. *Journal of Nonverbal Behavior*, 21:131-154.
- Eaton, W. W., Anthony, J. C., Mandel, W., & Garrison, R. (1990). Occupations and the prevalence of major depressive disorder. *Journal of Occupational and Environmental Medicine*, 32, 1079–1087.
- Gold E, Smith A, Hopper I, Herne D, Tasey g., Hulland C. Mindfulness-Based Stress Reduction (MBSR) for primary school teachers. *Journal of Child and Family Studies*. 2010;19:184–189.
- Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education*, 14, 835–854.
- Hargreaves, A. (2001). Emotional geographies of teaching. *Teachers College Record*, 103, 1056–1080
- Hagenauer, G., Hascher, T., & Volet, S.E. (2015). Teacher emotions in the classroom: associations with students' engagement, classroom discipline and the interpersonal teacher-student relationship. *European Journal of Psychology of Education*, 385–403.
- Hamre, B. K., & Pianta, R. C. (2005). Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure? *Child Development*, 76, 949–967. doi:10.1111/j.1467-8624.2005.00889;
- Kabat-Zinn, J. (1990). *Full Catastrophe Living: Using the Wisdom of Your Mind to Face Stress, Pain and illness*. New York: Dell Publishing.



- La Paro, K. M., & Pianta, R. C. (2003). *CLASS: Classroom Assessment Scoring System*. Charlottesville: University of Virginia Press.
- Lee, J., et al. (2008). Mindfulness-Based Cognitive Therapy for Children: Results of a Pilot Study. *Journal of Cognitive Psychotherapy*, 22(1), 15-28
- Mashburn, A. J., Hamre, B. K., Downer, J. T., & Pianta, R. C. (2006). Teacher and classroom characteristics associated with teachers' ratings of prekindergarten's relationships and behaviors. *Journal of Psychoeducational Assessment*, 24, 367–380. doi:10.1177/0734282906290594
- Medilexicon's medical dictionary. Definition of Mental health. Retrieved on March 9, 2019 from: <https://www.medicalnewstoday.com/articles/154543.php>
- Miller DF, Wiltse J. (1979). Mental health and the teacher. *J Sch Health*. Sep;49(7):374-7.
- World Health Organization (August 2014). Mental health: a state of well-being. Retrieved on March 9, 2019, from [https://www.who.int/features/factfiles/mental\\_health/en/](https://www.who.int/features/factfiles/mental_health/en/)
- The Mental Health Act (1987). Government of India. Retrieved February 3, 2016. Mental Health Inventory (MHI) 38 Training Manual and Slides (<http://www.amhocn.org/publications/mental-health-inventory-mhi-38-training-manualand-slides>).
- American Federation of Teachers. 2017 Educator Quality of Work Life Survey. Retried from [https://www.aft.org/sites/default/files/2017\\_eqwl\\_survey\\_web.pdf](https://www.aft.org/sites/default/files/2017_eqwl_survey_web.pdf)
- Gresham, G. (2008). Mathematics anxiety and mathematics teacher efficacy in elementary pre-service teachers. *Teaching Education*, 19(3), 171–184.
- Fontana, D., & Abouserie, R. (1993). Stress levels, gender and personality factors in teachers. *British Journal of Educational Psychology*, 63, 261–270.
- Frenzel, A. C., Götz, T., Stephens, E. J., & Jacob, B. (2009). Antecedents and effects of teachers' emotional experiences: an integrative perspective and empirical test. In P. A. Schutz and M. Zembylas (Eds.) *Advances in Teacher Emotions Research: The Impact on Teachers Lives* (pp. 129–148). New York: Springer.
- Ferguson, K., Frost, L., & Hall, D. (2012). Predicting teacher anxiety, depression, and job satisfaction. *Journal of Teaching and Learning*, 8(1), 27–42. Folkman, S., & Lazarus, R. S. (1988). *Manual for the ways of coping questionnaire*. Palo Alto: Consulting Psychology Press. Fontana, D., & Abouserie, R. (1993).
- Eccles, J. S., & Roeser, R. (1999). School and community influences on human development. In M. H. Bornstein & M. E. Lamb (Eds.), *Developmental psychology: An advanced textbook* (4th ed., pp. 503–554).
- Hamre, B. K., & Pianta, R. C. (2007). Learning opportunities in pre-school and early elementary class-rooms. In Pianta, R. C., Cox, M. J., & Snow, K. L. (Eds.), *School readiness and the transition to kindergarten in the era of accountability* (pp. 49–84). Baltimore, MD: Brookes.
- Hamre, B. K., Pianta, R. C., Downer, J. T., & Mashburn, A. J. (2008). Teachers' perceptions of conflict with young students: Looking beyond problem behaviors. *Social Development*, 17, 115–136. doi:10.1111/j.1467-9507.2007.00418.
- Kemeny ME, Foltz C, Cavanagh JF, Cullen M, Giese-Davis J. Contemplative/emotion training reduces negative emotional behavior and promotes prosocial responses. *Emotion*. 2012;12(2):338–350
- Li-Grining, C., Raver, C. C., Champion, K., Sardin, L., Metzger, M. W., & Jones, S. M. (2010). Understanding and improving classroom emotional climate in the “real world”: The role



- of teachers' psychosocial stressors. *Early Education and Development*, 21, 65–94. doi:10.1080/10409280902783509.
- Leigh McLean and Carol McDonald Connor (2015). Depressive Symptoms in Third-Grade Teachers: Relations to Classroom Quality and Student Achievement. *Child Development*; Volume 86, Number 3, Pages 945–954.
- Simon B. Goldberg, Laura Pinger, Katherine Bonus, and Richard J. Davidson (2013). Mindfulness for teachers: A pilot study to assess effects on stress, burnout and teaching efficacy. *Mind Brain Educ*, Sep; 7(3): 10.1111/mbe.12026; doi: 10.1111/mbe.12026
- Nikolaou, Eleni & Markogiannakis, Georgios (2017). The Role of Teacher in Primary School Students' Mental Health Promotion. *Global Journal of Human-Social Science: (A) Arts & Humanities - Psychology*. 17. pp.
- Pekrun, R. (2000). A social-cognitive, control-value theory of achievement emotions. In J. Heckhausen (Ed.), *Motivational psychology of human development* (pp. 143–163). Oxford, England: Elsevier.
- Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Journal of Educational Psychology*, 37, 91–106.
- Rosaen, C. & Benn, R. (2006). The Experience of Transcendental Meditation in Middle School Students: A Qualitative Report. *Explore*, 2, 422-425.
- Siegel & Fulton (2005). *Mindfulness and Psychotherapy*. New York, London: The Guilford Press.
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness based Cognitive Therapy for Depression: A New Approach to Preventing Relapse*. New York: Guilford.
- Semple, R., Reid, E., & Miller, L. (2005). Treating Anxiety with Mindfulness: An Open Trial of Mindfulness Training for Anxious Children. *Journal of Cognitive Psychotherapy*, 19(4), 379-392.
- Shapiro D, Cook IA, Davydov DM, Ottaviani C, Leuchter AF, Abrams M. (2007). Yoga as a Complementary Treatment of Depression: Effects of Traits and Moods on Treatment Outcome. *Evidence-Based Complementary and Alternative Medicine*, 4(4), 493-502, Doi: 10.1093/ecam/nel114.
- Singh, N., et al. (2007). Adolescents with Conduct Disorder Can Be Mindful of Their Aggressive Behavior. *Journal of Emotional and Behavioral Disorders*, 15(1), 56-63.
- Siegel, D.J., (2009). Mindful Awareness, Mindsight and Neural Integration. *The Humanistic Psychologist* 37, 137-158. <http://dx.doi.org/10.1080/08873260902892220>
- Sogyal, R. (1992). *The Tibetan Book of Living and Dying*. Sydney: Random House.
- Swartz, R. A., & McElwain, N. L. (2012). Preservice teachers' emotion-related regulation and cognition: Associations with teachers' responses to children's emotions in early childhood classrooms. *Early Education and Development*, 22, 202–226. doi:10.1080/10409289.2012.619392.
- Zylowksa, L., et al. (2008). Mindfulness Meditation Training in Adolescents and Adults with ADHD: A Feasibility Study. *Journal of Attention Disorders*, 11(6), 737-746.



## PROPOSAL FOR A TRAINING MODEL OF SKILLS FOR STUDENTS AS REQUIREMENTS OF INDUSTRIAL REVOLUTION 4.0

Nguyen Phuong Lan<sup>1</sup>  
Huynh Cong Du<sup>2</sup>

<sup>1</sup>Faculty of Tourism, Ho Chi Minh City University of Food Industry (HUFI), Vietnam, (E-mail: phuonglank15@yahoo.com)

<sup>2</sup>Department of Psychology, University of Labour and Social Affairs (ULSA2), Ho Chi Minh City, Vietnam, (Email: [hoangcdu@gmail.com](mailto:hoangcdu@gmail.com))

---

**Abstract:** *The study has two objectives: 1) to provide an overview of the impact of the fourth industrial revolution and 2). Based on the overview, to propose a training model of skills to help students adapt to future work that machines and technology cannot replace people in this revolution. The proposed model includes three skills for students: Complex problem solving, critical thinking and creativity skills. The model consists of 2 modules with 6 sessions. Each session is expected to last in 60-90 minutes. This study is significant for students, lecturers and vocational instructors in particular as well as universities, colleges and vocational training centers in general.*

**Keywords:** *Industry 4.0, complex problem solving, critical thinking, creativity skills*

---

### Introduction

The Industry 4.0 concept was first presented in 2011 at the Hannover Technology Fair in the Federal Republic of Germany. By 2012, the term was used for leading German industry researchers and associations to improve management and manufacturing processes in industries through "computerization". On January 20, 2016, the World Economic Forum opened with the theme "Mastering the Fourth Industrial Revolution". Since then, the term has been widely used around the world and is widely mentioned in the media.

According to Klaus Schwab, the fourth industrial revolution will have a profound and multi-faceted impact on the world economy in the years to come, which can fundamentally change the mode of production, business and market labor, and changes are hard to predict. No matter you accept or not, the education system will be affected by this revolution. For this reason, this paper sets out two main goals: 1) to provide an overview of the impact of the fourth industrial revolution and 2). Based on the overview, to propose a training model of skills to help students adapt to future work that machines and technology cannot replace people in this revolution.

### Literature review

#### *The Impacts Fourth Industrial Revolution 4.0*

The First Industrial Revolution began in the 18th century through the use of steam power and mechanization of production; the second in the 19th century through the discovery of electricity and assembly line production; the third in the 70s in the 20th century through partial automation using memory-programmable controls and computers. We are currently implementing the Fourth Industrial Revolution which is characterized by the application of



information and communication technologies to industry and is also known as Industry 4.0 and built on the developments of the Third Industrial Revolution (Egham, 2015).

The basic concept was first presented at the Hannover fair in the year of 2011. Since its introduction, Industry 4.0 is in Germany a common discussion topic in research, academic and industry communities at many different occasions. The main idea is to exploit the potentials of new technologies and concepts such as: 1) availability and use of the internet and IoT; 2) integration of technical processes and business processes in the companies; 3) digital mapping and virtualization of the real world; 4) ‘Smart’ factory including ‘smart’ means of industrial production; and 5) ‘smart’ products (Andreja Rojko, 2017; Đào Quang Vinh, 2017). Industry 4.0 is expected to bring about more changes compared to the previous three industrial revolutions, but the focus is on the development of internet of things, artificial intelligence, 3D printing technology, automation, recycled energy. Artificial intelligence will replace some future work. According to futurists, this will happen between 2029-2050 and even earlier, and it affects almost all aspects of life including society, economy, culture, cooperation and labor market.

In the previous industrial revolutions, changes in work, in cooperation and in communication that allow workers to adapt and integrate while the change of industry 4.0 this time is said to be very difficult and its effects are unpredictable, especially in the field of employment. The problem in the future is not the lack of jobs, but of skills to meet the demands that new work poses. Therefore, education have no exception but to have to reinvent itself quickly by stepping out of the cover, enclosed space and creating suitable contexts for students to have a chance to prepares for future work (Scientix, 2017). According to Nguyen Cuc (2017), the industry 4.0 places higher education in front of new challenges. Universities may not have anticipated the skills that the labor market needs. The training and research activities of traditional methodological universities will face drastic changes in both thinking, knowledge, skills and methods. This rapid change of technology requires education to provide learners with new pattern of thinking, new skills, creativity, and adaptation to the change brought about by the industry 4. This is a big challenge, especially in the context of Vietnam where higher education has revealed many limitations, both the foundation and development factors.

***Skills required in the Fourth Industrial Revolution***

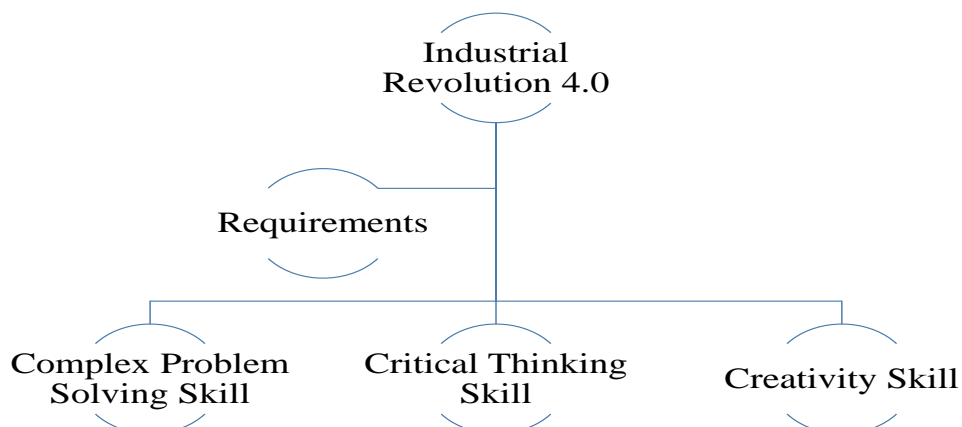
According to a report at the World Economic Forum (WEF), the key to successful work in the future is that workers need a new set of skills. According to the Forum, five years from 2015 to 2020, more than one-third (35%) of the skills considered important in the current labor force will change. By 2020, the Fourth Industrial Revolution will bring us groundbreaking changes such as internet of things, artificial intelligence, and 3D printing technology. Artificial intelligence will replace some future work. These developments will change the way we live and work. Some jobs will disappear, others will grow. What is certain is that the future workforce will need to align its skillset to keep pace (World Economic Forum, 2016). The WEF has also released a set of 10 essential skills by 2020.

<b>In 2020</b>	<b>In 2015</b>
1. Complex problem solving	1. Complex problem solving
2. Critical thinking	2. Coordinating with others
3. Creativity	3. People management
4. People management	4. Critical thinking
5. Coordinating with others	5. Negotiation

6. Emotional intelligence	6. Quality control
7. Judgment and Decision making	7. Service orientation
8. Service orientation	8. Judgment and Decision making
9. Negotiation	9. Active listening
10. Cognitive flexibility	10. Creativity

The above table shows that the 10 most important skills in 2015 no longer exist, but shift or change significantly in 2020. The most changing skills are creativity, negotiation and active listening. While negotiation and flexibility are high on the list of skills for 2015, by 2020, these skills will rank down in the top 10 skills. The reason of this change, according to WEF (quoted in Nguyen Thao, 2017) is that machines will use a large amount of data and start making decisions on behalf of people. Also, active listening considered to be a current core skill, will completely disappear from the 10 skills of 2020. Intellectual emotional skills which are not included in the top 10 of these skills, will become one of the top skills needed. The list also implies that in order to be successful in the industry 4.0, workers should have new skills such as creativity, critical thinking, solving complex problems and high emotional intelligence. Therefore, the training of the above soft skills for workers has become an urgent issue and requires countries to change the education system, in which each student's ability to study by self is the key factor.

Generally, the review of the literature suggests that the industrial revolution 4.0 is expected to generate profound impacts, especially to the labour market, and that some of the existing skills will disappear or will change to necessary level. Scholars in the WEF (2006) show that three new skills that are critical to the workforce are: 1) Complex Problem Solving, 2) Critical Thinking, and 3) Creativity. Scholars have affirmed the importance and necessity of these three skills in education and training. These three skills do not seem to have been trained in our educational institutions. To address the gap between requirements of the industry 4.0 and the ability to adapt to this revolution, the paper aims to propose a model of training of the three skills because they are the most concerned points of the education. Having opportunity to practice these three skills through the learning process in the school, students may adapt themselves to the job requirements posed by the industry 4.0. The proposal of skill training model is mapped in the conceptual framework below.



*Conceptual paradigm of the proposal*



### Definition of terms

To have a better understanding of the proposal, the following terms in the conceptual paradigm above need to be clarified:

**Complex problem solving skills.** These are defined as the ability to solve complex problems. This process can be divided into the following steps: 1) Identify the problem; 2) Identify the causes; 3) Look for solutions; 4) Make a decision and put it in place; and 5) Evaluate feedback (Stephen Fetters, 2017). During the industry 4.0, robots are supposed to replace humans performing repetitive tasks with skills for a long time and never making mistakes. Software technology using algorithms is also replacing people. Algorithm is a mathematical formula for completing a well-defined task. Software technology can count, add, subtract, multiply, divide, search, compare, compile and analyze patterns with large amounts of data at a speed beyond human understanding. However, it is not a matter of which robots and software can change people, they can tell problems, and only humans can judge and solve. In this paper, complex problem-solving skills are understood as the students' capacity needed to solve new problems, unspecified issues in complex situations in the learning process.

**Critical thinking skill.** This is defined as the ability to think clearly and reasonably about what to do or what to believe, including the ability to reflect and think independently. People with critical thinking skills can: 1). Understand the logical relationship between ideas; 2) Identify, build and evaluate arguments; 3) Detect common conflicts and mistakes in reasoning; 4) Solve problems in a systematic way; 5) Identify the rationality and importance of ideas; and 6) Evaluate one's own belief and values (Joe. Y. F. Lau, 2011). During the industry 4.0, robots and software technology are changing people at an increasing speed. A skill that technology does not have is judgment or critical thinking skills. In the context of this paper, critical thinking is understood as the students' ability to: 1) Read, listen and write a problem with critical thinking; 2) Identify useful and non-useful information; 3) Analyse the logical relationship between ideas in the relevant information system; and 4) Make the right decision.

**Creativity skill.** This is defined as: 1) The ability to think outside the box; 2) Coming up with something that's never been done before; 3) Applying old methods in new ways; and 4) Perceiving the world in new ways (Stephen Fetters, 2017). During the industry 4.0, creativity is one of the top concerns. With the rapid growth of new technology products and new ways of working, robots may replace people in some jobs, but they do not have skill of creativity. In the context of this article, creativity skill refers students' ability to have new way of learning, performing tasks and perceiving problems in learning process.

### Proposal for a proposal for a training model of skills

The model consists of 2 modules with 6 sessions. Each session is expected to last in 60-90 minutes. Please see Table below for a detailed description of the modules.

Module	Session titles	
1		PRELIMINARY
		<u>Objectives:</u> Rate students' knowledge of the industry 4.0



Day 1	Assessment	<u>Strategy:</u> Students are asked to complete questionnaires about behaviour of technology and awareness about the industry 4.0 by Barbara Motyl (2017).
	Prepare the participants	<ul style="list-style-type: none"> <li>- Getting to know each other</li> <li>- Orientation on confidentiality</li> <li>- Establishing the rules during the sessions</li> <li>- Expectations</li> <li>- Getting nick names or emails for later feedbacks</li> </ul>
Day 2	Educate the Participants	<p><u>Objectives:</u> To enable students to understand and recognize the importance of the industry 4.0 in life and future jobs.</p> <p><u>Expected outcomes:</u> At the end of the session, students is able to understand the revolution's benefits, opportunities and challenges.</p> <p><u>Strategy:</u></p> <p>TEACHERS' ACTIVITIES: present the industry 4.0 content</p> <p>a. <i>Core element of industry 4.0:</i> Artificial Intelligence (AI), Internet of Things (IoT) and Big Data</p> <p>b. <i>Research areas of industry 4.0:</i> 1) In biotechnology, the Industry 4.0 studies to create leaps in Agriculture, Fisheries, Medicine, food processing, environmental protection, renewable energy, chemistry and materials; 2) In physics, it is searching to create new generation robots, 3D printers, self-driving cars, new materials (grapheme, skyrmions ...) and nano technology.</p> <p>c. <i>Skills required in industry 4.0</i></p> <p>STUDENTS' ACTIVITIES: students are required to work on the following questions:</p> <p>a. <i>Awareness questions:</i> as a student, <b>how important</b> is industry 4.0 to your current studying and future career?</p> <p>b) <i>Skill-oriented questions:</i> in your opinion, what skills that robots and technology cannot replace people and skills you need to train from now in the university so that you can later be adaptive to employment requirements in the industry 4.0?</p> <p>c) <i>Sharing / group discussion:</i> students will be invited to share and discuss work results from the 2 questions above.</p>



Module 2	Session titles	SKILL TRAINING
Day 3	<i>Complex problem solving</i>	<p><u>Objectives:</u> Help students understand the basic principles of problem solving in the learning process, then apply to reality.</p> <p><u>Expected outcomes:</u></p> <p>At the end of the session, students will be able to:</p> <p>Identify problems in learning and research;</p> <p>Assume the cause of the underlying basic problem based on data collected to export and select solutions;</p> <p>Prepare a program to implement solutions and evaluate effectiveness.</p> <p><u>Strategy:</u></p> <p>TEACHERS' ACTIVITIES:</p> <p>a. Introduction. Teachers may begin the lecture with questions about students' experience, for example, please share an experience about how you solved a problem you have encountered in your studies or in your life (be it successful or unsuccessful).</p> <p>b. Presentation Content. Present model of Edgard Schein's <i>Complex problem solving</i> with 6 steps:</p> <p>Step 1. Define the Problem: "What is the problem?"</p> <p>Step 2. Identify the Causes of the Problem: "Why is this happening?"</p> <p>Step 3. Brainstorm Possible Solutions: <b>during this process, assumptions are uncovered and underlying problems are further revealed.</b></p> <p>Step 4. Select the Best Solutions: <b>decisions are made within the group to determine the appropriate solution and process through creative selection.</b></p> <p>Step 5. Implement the Plan: <b>develop an action plan to implement and execute the solution process.</b></p> <p>Step 6. Follow-Up, Evaluate, and Monitor Progress: <b>This final stage requires an evaluation of the outcomes and results of the solution process.</b></p>

	<p><b>c. Provide hint questions. In order to help students understand more deeply and easily apply their knowledge to solve a problem in any complex situation, teachers can ask students questions and suggestions:</b></p> <p><b><u>1. Questions for problem definition:</u></b></p> <p><b>Could you please write down a problem you have encountered and gone through (be it successful or unsuccessful)?</b></p> <p><b><u>2. Questions for identification of the problems causes:</u></b></p> <ul style="list-style-type: none"> <li>- Where do you think the source of this problem?</li> <li>- What do you know about and what you are unaware of your problem?</li> </ul> <p><b><u>3. Questions for brainstorming possible solutions:</u></b></p> <ul style="list-style-type: none"> <li>- What are ideas to solve this problem?</li> <li>- How can you divide the problem into small steps?</li> <li>- How do you solve the problem for each step?</li> <li>- I do not understand much about your idea at this step. Would you please explain?</li> </ul> <p><b><u>4. Questions for best solution selection:</u></b></p> <ul style="list-style-type: none"> <li>- In the above solutions, which solution do you think is feasible? Please rank the feasibility of the solutions.</li> <li>- What could possibly go wrong if we do this?</li> </ul> <p><b><u>5. Questions for the plan implementation:</u></b></p> <ul style="list-style-type: none"> <li>- Can you tell me when you can start solving the problem?</li> <li>- How long will it take you to solve the problem?</li> <li>- Who can be your resources of support?</li> <li>- What information channels do you use to solve the problem?</li> </ul> <p>Please write this information in an action plan for easy monitoring.</p> <p><b><u>6. Questions for Follow-Up and Evaluation:</u></b></p> <ul style="list-style-type: none"> <li>- <b>Do your decisions meet your expectations?</b></li> </ul>
--	--

		<p><b>- If you need to change something in the action plan, what details will you change?</b></p> <p>STUDENTS' ACTIVITIES :</p> <p><b>Group discussion with question below:</b></p> <p><b>Are the problem-solving steps in the lecture different from how you and your team members usually do?</b></p> <p><b>b) Individual practice</b></p> <p><i>Exercise 1:</i> If you solve again the problem you shared at the beginning of the session, how will you do it?</p> <p><i>Exercise 2:</i> your teacher give you a topic and ask you to present it after two week from now, but you have difficulties because it is very new to you. Please solve your problems.</p> <p><i>Note:</i> Do not forget to make use of internet of things as well as knowledge and suggestions in the lesson.</p>
<p>Day 4</p>	<p><b><i>Critical thinking</i></b></p>	<p><u>Objectives:</u> Help students develop critical thinking skills during their learning process.</p> <p><u>Expected outcomes:</u> at the end of the lesson, students are expected to be able to:</p> <ul style="list-style-type: none"> <li>- Read, listen and write a problem with critical thinking;</li> <li>- Identify useful and non-useful information, right or wrong information;</li> <li>- Analyze the logical relationship between ideas in the relevant information system.</li> <li>- Make convincing conclusions</li> </ul> <p><u>Strategy:</u></p> <p>TEACHERS' ACTIVITIES:</p> <p>a. Introduction.</p> <ul style="list-style-type: none"> <li>- Invite students to share their knowledge of an area that they have learned / experienced;</li> <li>- Encourage them to try to make comments about what they know, their views on that knowledge, including misperceptions.</li> </ul> <p>Examples:</p>

	<p>1. Have you used any internet applications to connect things and people, for examples: Whatsapp, WeChat, Facebook Messenger, and others?</p> <p>2. Do you think that the above applications have the same function as connection?</p> <p>3. Which of the applications is most useful to you?</p> <p>- Invite students to share some personal views about the above questions and provide evidence of their arguments.</p> <p>b. Presentation Content</p> <p>Suggestion Question (will be used throughout the session): Do you think that a trusted friend provides accurate information. Do you have proof of that?</p> <p>Presentation: Pearson’s Critical Thinking-RED Model of 3 step:</p> <p>Step 1: Recognize Assumptions</p> <p>We easily believe what others say or comment and are easily convinced that what they say is true and sometimes there is no sufficient evidence. Therefore, in order to have a correct view of a problem or a right decision, it is necessary to identify the logical gap in words and subjective opinions that are disguised as true.</p> <p><u>Definition.</u> Assumption recognition is understood as the ability to separate objective reality from subjective opinions.</p> <p><u>Skills for assumption recognition:</u> Check the information provided by asking yourself, or listen to what others say or associate similar situations that you have experienced about.</p> <p><u>Questions to help students recognize assumptions:</u></p> <table border="1"> <thead> <tr> <th><i>Sample questions for assumption recognition</i></th> <th><i>Suggestion questions for you to answer the question from the start of the lesson</i></th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> <li>- What are you assuming?</li> <li>- Can you make another alternative assumption?</li> <li>- How do you argue for this assumption?</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>- I assume that the friend I trust provide accurate information.</li> <li>- Do I have any other assumptions?</li> <li>- Do other people think like me?</li> </ul> </td> </tr> </tbody> </table>	<i>Sample questions for assumption recognition</i>	<i>Suggestion questions for you to answer the question from the start of the lesson</i>	<ul style="list-style-type: none"> <li>- What are you assuming?</li> <li>- Can you make another alternative assumption?</li> <li>- How do you argue for this assumption?</li> </ul>	<ul style="list-style-type: none"> <li>- I assume that the friend I trust provide accurate information.</li> <li>- Do I have any other assumptions?</li> <li>- Do other people think like me?</li> </ul>
<i>Sample questions for assumption recognition</i>	<i>Suggestion questions for you to answer the question from the start of the lesson</i>				
<ul style="list-style-type: none"> <li>- What are you assuming?</li> <li>- Can you make another alternative assumption?</li> <li>- How do you argue for this assumption?</li> </ul>	<ul style="list-style-type: none"> <li>- I assume that the friend I trust provide accurate information.</li> <li>- Do I have any other assumptions?</li> <li>- Do other people think like me?</li> </ul>				

		<ul style="list-style-type: none"> <li>- Do other people have same assumption as your do?</li> <li>- What information is important and relevant to your assumptions?</li> <li>- What's missing? Is there any information that needs to be included?</li> </ul>	<ul style="list-style-type: none"> <li>- How do I prove the assumption that a trusted friend provides accurate information?</li> <li>- Do I have any experience in the case of assumption?</li> </ul>		
<p>Note: The answers of questions above will offer wide information because there is a lot of evidence and many views around to evaluate the problem.</p> <p>Step 2: Evaluate Arguments</p> <p>In the age of information explosion, we often have trouble analysing information because: on the one hand we receive conflicting sources of information, on the other hand we let them intervene or just listen to what I like to hear, or is familiar. In order to have objective and accurate information, it is necessary to have reasoning skills to make accurate an argument evaluation which helps us change our opinion when the evidence shows that it is something necessary to do.</p> <p><u>Definition.</u> Reasoning is understood as assessing information with accompanying evidence to draw conclusions about an assumption (a logical conclusion). Evidence is often found in editorials, course reports, scientific journals, radio.</p> <p><u>Skills for assumption recognition:</u> including</p> <ul style="list-style-type: none"> <li>- Evaluate information by asking questions with accompanying evidence to find out if feelings affect the argument; and</li> <li>- Assessing the level of prejudice and feeling of yourself or others' that affect your objectivity.</li> </ul> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><i>Sample questions for assumption recognition</i></p> <ul style="list-style-type: none"> <li>- Can you explain the reason for that?</li> <li>- Are these reasons sufficient?</li> <li>- Is there any evidence of that?</li> </ul> </td> <td style="width: 50%; vertical-align: top;"> <p><i>Sample questions for yourself to answer the question from the start of the lesson</i></p> <ul style="list-style-type: none"> <li>-What reason do I believe a trusted friend will provide accurate information?</li> <li>- Are those reasons sufficient?</li> </ul> </td> </tr> </table>				<p><i>Sample questions for assumption recognition</i></p> <ul style="list-style-type: none"> <li>- Can you explain the reason for that?</li> <li>- Are these reasons sufficient?</li> <li>- Is there any evidence of that?</li> </ul>	<p><i>Sample questions for yourself to answer the question from the start of the lesson</i></p> <ul style="list-style-type: none"> <li>-What reason do I believe a trusted friend will provide accurate information?</li> <li>- Are those reasons sufficient?</li> </ul>
<p><i>Sample questions for assumption recognition</i></p> <ul style="list-style-type: none"> <li>- Can you explain the reason for that?</li> <li>- Are these reasons sufficient?</li> <li>- Is there any evidence of that?</li> </ul>	<p><i>Sample questions for yourself to answer the question from the start of the lesson</i></p> <ul style="list-style-type: none"> <li>-What reason do I believe a trusted friend will provide accurate information?</li> <li>- Are those reasons sufficient?</li> </ul>				

		<ul style="list-style-type: none"> <li>- How can I find out if that is true?</li> <li>- How do people talk about this?</li> <li>- What experience did I have about this?</li> </ul> <ul style="list-style-type: none"> <li>- Is there any evidence that the trusted friend provided the correct information?</li> <li>- What do other people say about the accuracy of the information my friend provides and how many people?</li> <li>- Does anyone have ideas against me and what values are in their arguments?</li> <li>- Was I previously provided accurate information by my friend?</li> </ul> <p>Note: Being able to answer the above questions, students can make a more accurate conclusion about the assumption.</p> <p>Step 3. Draw Conclusions</p> <p>Making conclusions is the result of the work of the previous two steps. When thinking critically, the surrounding issues will become clear and students can make difficult decisions, or know how to overcome difficult problems.</p> <p><u>Skills for drawing conclusions</u></p> <p>After reviewing all the hypothetical facts and events, ask questions while making conclusions:</p> <ul style="list-style-type: none"> <li>• What is the best conclusion?</li> <li>• Can there be any other conclusions?</li> <li>• What new information can change my conclusions?</li> <li>• Does this conclusion seem reasonable based on my common sense and experience?</li> <li>• What are the implications of this conclusion?</li> </ul> <p><b>STUDENTS' ACTIVITIES:</b></p> <p>a) Discussion (group) with the question: what do you learn from the 3-step model in critical thinking?</p> <p>b) Practice (individual).</p>
--	--	--

		<p>Question: You think that in the industrial revolution 4.0, robots and technology can change people and therefore affect your future work?</p> <p>Requirements: Use your learned knowledge and question system presented to find information with evidence to argue and make your own decisions.</p> <p>Materials: Refer to industrial revolution 4.0 documents from editorials, course reports, scientific journals, broadcasting and internet of things.</p>
<p>Day 5</p>	<p><i>Creativity skill</i></p>	<p><u>Objectives:</u> To help students develop creativity skill in learning process to be adaptable to the challenges of the revolution.</p> <p><u>Expected outcomes:</u></p> <p>At the end of the session, students are expected to:</p> <p>know how to use imagination,</p> <p>be able to interact / collaborate with people inside and outside the group,</p> <p>have ability to build new ideas, and</p> <p>perform tasks in a new way</p> <p><u>Strategy:</u></p> <p>TEACHERS' ACTIVITIES:</p> <p>a. Introduction: lecturers suggest some questions that stimulate students' creative ideas:</p> <ol style="list-style-type: none"> <li>1. What would you do if you had to do a job you didn't study in school?</li> <li>2. How will you handle if your career is no longer timely and will disappear in the next few years.</li> <li>3. Some other questions with same purpose may be asked.</li> </ol> <p>b. Presentation content</p> <ol style="list-style-type: none"> <li>1. <u>Definition.</u> Creativity refers to ability to: <ul style="list-style-type: none"> <li>- Think, give a new idea to do a job that has never been done before</li> <li>- Recognize problems in new ways and apply old methods in new ways.</li> </ul> </li> </ol>

		<p>2. <u>Skills for creativity:</u></p> <p>2.1. <i>The Osborne-Parnes Creative Process</i> (cited in Halil Özmen, 2006). Teachers brings students to the creative process of work according to the Osborne-Parnes model in the table below which <b>will tell students what to do at each immediate step in order to eventually produce one or more creative, workable solutions. A unique feature is that each step first involves a divergent thinking phase in which one generates lots of ideas (facts, problem definitions, ideas, evaluation criteria, implementation strategies), and then a convergent phase in which only the most promising ideas are selected for further exploration.</b></p> <table border="1"> <thead> <tr> <th>6 Steps</th> <th>Objectives</th> <th>Guideline Questions</th> </tr> </thead> <tbody> <tr> <td><b>Objective Finding</b></td> <td><b>Identify goal, wish and challenge</b></td> <td>What is the goal, wish, or challenge upon which you want to work?</td> </tr> <tr> <td>2. Fact-finding</td> <td>Data gathering</td> <td>-What's the situation or background?  - What are all the facts, questions, data, feelings that are involved</td> </tr> <tr> <td>Problem finding</td> <td>Clarify the problem</td> <td>- What is the problem that really needs to focuses on?  - What is the concern that really needs to be addressed?</td> </tr> <tr> <td>4. Idea-finding</td> <td><b>Generate Ideas</b></td> <td>What are all the possible solutions for how to work with the  problem?</td> </tr> <tr> <td>5. Solution-finding</td> <td><b>Select &amp; Strengthen Solutions</b></td> <td>How can you select  the solutions to know which one will work best? How can you strengthen the  solution?</td> </tr> <tr> <td>6. Acceptance finding</td> <td><b>Plan for Action</b></td> <td>What are all the action steps that need to take place in order to implement your solution</td> </tr> </tbody> </table>	6 Steps	Objectives	Guideline Questions	<b>Objective Finding</b>	<b>Identify goal, wish and challenge</b>	What is the goal, wish, or challenge upon which you want to work?	2. Fact-finding	Data gathering	-What's the situation or background?  - What are all the facts, questions, data, feelings that are involved	Problem finding	Clarify the problem	- What is the problem that really needs to focuses on?  - What is the concern that really needs to be addressed?	4. Idea-finding	<b>Generate Ideas</b>	What are all the possible solutions for how to work with the  problem?	5. Solution-finding	<b>Select &amp; Strengthen Solutions</b>	How can you select  the solutions to know which one will work best? How can you strengthen the  solution?	6. Acceptance finding	<b>Plan for Action</b>	What are all the action steps that need to take place in order to implement your solution
6 Steps	Objectives	Guideline Questions																					
<b>Objective Finding</b>	<b>Identify goal, wish and challenge</b>	What is the goal, wish, or challenge upon which you want to work?																					
2. Fact-finding	Data gathering	-What's the situation or background?  - What are all the facts, questions, data, feelings that are involved																					
Problem finding	Clarify the problem	- What is the problem that really needs to focuses on?  - What is the concern that really needs to be addressed?																					
4. Idea-finding	<b>Generate Ideas</b>	What are all the possible solutions for how to work with the  problem?																					
5. Solution-finding	<b>Select &amp; Strengthen Solutions</b>	How can you select  the solutions to know which one will work best? How can you strengthen the  solution?																					
6. Acceptance finding	<b>Plan for Action</b>	What are all the action steps that need to take place in order to implement your solution																					

		<p><i>Questions to stimulate creative ideas at each stage:</i></p> <p>Objective Finding-Use following questions prepared by Parnes in 1981 to prod students' thinking:</p> <ul style="list-style-type: none"> <li>• What would you like to get out of life?</li> <li>• What are your goals, as yet unfilled?</li> <li>• What would you like to accomplish, to achieve?</li> <li>• What would you like to have?</li> <li>• What would you like to do?</li> <li>• What would you like to do better?</li> <li>• What would you like to happen?</li> <li>• In what ways are you inefficient?</li> <li>• What would you like to organize in a better way?</li> <li>• What ideas would you like to get going?</li> <li>• What relationship would you like to improve?</li> <li>• What would you like to get others to do?</li> <li>• What takes too long?</li> <li>• What is wasted?</li> <li>• What barriers or bottlenecks exist?</li> <li>• What would you wish you had more time for?</li> <li>• What do you wish you had more money for?</li> <li>• What makes you angry, tense or anxious?</li> <li>• What do you complain about?</li> </ul> <p>Fact finding- use who, what, when, where, why and how questions</p> <ul style="list-style-type: none"> <li>• Who is or should be involved?</li> <li>• What is or is not happening?</li> <li>• When does this or should this happen?</li> </ul>
--	--	--

		<ul style="list-style-type: none"> <li>• Where does or does not this occur?</li> <li>• Why does it or does not it happen?</li> <li>• How does it or doesn't it occur?</li> </ul> <p>Problem-finding-Listing alternative definitions of the problem. One principle of creative problem solving is that the definition of a problem will determine the nature of the solutions.</p> <ul style="list-style-type: none"> <li>• What is the real problem?</li> <li>• What is the main objective?</li> <li>• What do you really want to accomplish?</li> <li>• Why do I want to do this?</li> </ul> <p>Idea-finding- The divergent-thinking, brainstorming stage. This is where a variety of idea-generation ("creativity") techniques can be used. Ideas are freely proposed without criticism or evaluation, for each of the problem definitions accepted in the second stage.</p> <p>Solution-finding- Three related steps:</p> <ol style="list-style-type: none"> <li>1. Criteria for evaluation listed</li> <li>2. The ideas are evaluated (evaluation matrix is useful)</li> <li>3. One or more of the best ideas are selected</li> </ol> <p>Criteria might include:</p> <ul style="list-style-type: none"> <li>• Will it work?</li> <li>• Is it legal?</li> <li>• Are the materials and technology available?</li> <li>• Are the costs acceptable?</li> <li>• Will the public accept it?</li> <li>• Will higher-level administrators accept it?</li> </ul> <p>Acceptance finding- ways to get the ideas into action. This may involve creating an action plan, which is a plan containing specific step to be taken and a timetable for taking them.</p> <p><b>STUDENTS' ACTIVITIES:</b></p> <p>Discussion (group)</p>
--	--	---



		<p>Today, your group is going to present a topic (on PowerPoint), but 10 minutes before the presentation schedule, the group was informed of the power outage. How will you handle the group's work?</p> <p>Requirements:</p> <ol style="list-style-type: none"> <li>1. Illustrate the steps to solve problems by diagram</li> <li>2. The groups is required to make cross-review, discussing similarities and differences in the implementation steps between the groups. Do the similarities and differences create any new value (what is that value? For example, the other group finished in shorter time but efficiently, and easily to understand, and others ...)</li> </ol> <p><b>Practice (individual or group)</b></p> <p>Choose 1 of 2 topics:</p> <p><i>Topic 1:</i> Make an action plan for a career / job you / your group is aiming for.</p> <p><i>Topic 2:</i> You have a desire to start a business, but you see a lot of friends who set up businesses, but many of them have not been able to "celebrate" first year of foundation. However, you still have the ambition to start a business, please create your start-up plan based on the knowledge you have acquired.</p> <p><i>Note:</i> apply the steps in the creative model to plan.</p>
<p>Day 6 <i>Final</i></p>	<p><i>Program evaluation</i></p>	<ul style="list-style-type: none"> <li>- Groups present career plans as assigned</li> <li>- Share experiences about the whole program</li> <li>- Grant awards and certificates of completion of training courses</li> <li>- Evaluate changes of students after completing the training.</li> </ul>

### Conclusions and Recommendations

The industrial revolution 4.0 is predicted to have profound and multi-faceted impacts on the world economy in the years to come, which can fundamentally change the mode of production, business, consumption, labor market, in which education is exceptional. The problem in the future is not the lack of jobs, but of skills to meet the demands that new jobs pose. The paper attempts to propose a training model, which focuses on the three most important skills as required by the revolution. The model proposed aims to add a tool to the field of education, specifically for educators, teachers, academic advisors and students. Because these skills may help students adapt and do well the jobs that machines and technology cannot replace. The program includes 2 modules as mentioned. This is just a proposal, therefore educators, teachers, vocational counselors and students are encouraged to experiment to explore if the program is



effective. Future researchers are also encouraged to apply this program for evaluation to reinforce its effectiveness.

## References

- Andreja Rojko (2017). Industry 4.0 Concept: Background and Overview. Special Focus Paper, *International Journal of Interactive Mobile Technologies (IJIM)* – eISSN: 1865-7923,
- Barbara Motyl (2017). *How will change the future engineers' skills in the Industry 4.0 framework? A questionnaire survey*. Retrieved 05/09/2017, from <https://www.researchgate.net/profile/.../142-FAIM2017-Motyl.pdf>
- Đào Quang Vinh (2017). *Vấn đề lao động, việc làm và an sinh xã hội trong kỷ nguyên số*, Tài liệu tập huấn "Hội nhập quốc tế trong lĩnh vực lao động - xã hội và hợp tác về lao động và phúc lợi xã hội trong ASEAN", date: 18-28/7/2017 tại Tp. Hồ Chí Minh.
- Egham (May 18, 2015), *What Is Industrie 4.0 and What Should CIOs Do About It?* Retrieved 29/08/2017, from <http://www.gartner.com/newsroom/id/3054921>.
- Ernst & Young LLP, 2017. *Leapfrogging to Education 4.0: Student at the core*. Retrieved 05/09/2018, from [https://www.ey.com/Publication/vwLUAssets/ey-leap-forgging/\\$File/ey-leap-forgging.pdf](https://www.ey.com/Publication/vwLUAssets/ey-leap-forgging/$File/ey-leap-forgging.pdf)
- Halil Özmen (2006). Creative Problem Solving. Retrieved June 17, 2019, from <http://members.optusnet.com.au/~charles57/Creative/Brain/cps.htm>
- Keller, J. M. (1987b). The systematic process of motivational design. *Performance & Instruction*, 27(9-10), 1-8.
- Khuong Nha - Duy Tín (29/05/2017). *Cách mạng Công nghiệp 4.0 là gì?* Retrieved 17/08/2017, from <http://news.zing.vn/bai-do-xe-cong-cong-chua-dap-ung-nhu-cau-cua-nguoi-dan-ha-noi-post751184.html>
- Laura H. Lippman, Renee Ryberg, Rachel Carney, Kristin A. Moore Child Trends (2015). *Workforce Connections, Key "Soft Skills" That Foster Youth Workforce Success: Toward a Consensus across Fields*. Retrieved 31/03/2018, from <https://www.childtrends.org/wp-content/uploads/2015/06/2015-24WFCSOFTSKILLS1.pdf>
- Nguyễn Cúc (23/8/2017). Tác động của cuộc Cách mạng công nghiệp 4.0 đối với cơ sở giáo dục đại học ở Việt Nam và gợi ý chính sách cho Việt Nam, *Tạp chí Công Sản*, Retrieved 27/12/2017, from <http://www.tapchiconsan.org.vn/Home/Van-hoa-xa-hoi/2017/46536/Tac-dong-cua-cuoc-Cach-mang-cong-nghiep-4-0-doi-voi-co.aspx>.
- Nguyễn Thảo (12/08/2017). *Thành công thời 4.0: Không thể thiếu năng lực sáng tạo*. Retrieved 30/08/2018, from <http://vietnamnet.vn/vn/giao-duc/khoa-hoc/nguoi-lao-dong-muon-thanh-cong-trong-nen-cong-nghiep-4-0-phai-co-nang-luc-sang-tao-390060.html>
- Joe. Y. F. Lau (2011). *An Introduction to Critical Thinking and Creativity: Think More, Think Better*. John Wiley and Sons, Inc., ISBN: 978-0-470-19509-3.
- John Lodder (21/02/2016), *The Fourth Industrial Revolution and the Education System, how to respond?* Retrieved 26/11/2017, from <https://www.linkedin.com/pulse/fourth-industrial-revolution-education-system-how-respond-john-lodder>.
- Pearson's RED Critical Thinking Model (2018). Retrieved 14/08/2018, from <https://www.thinkwatson.com/the-red-model/red-critical-thinking-model>.
- Ron Vonk (07-07-2016). *Complex problem solving skills more important than ever*. Retrieved (25/10/2018), from <http://www.cothink.com/who-we-are/publications/complex-problem-solving-skills-more-important-than-ever>
- Schein, E.H. (2010). *Organizational culture and leadership*, (Vol 2). John Wiley & Sons.



*3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)*  
*eISBN: 978-967-2245-13-1*  
*Copthorne Hotel, Cameron Highland, Malaysia*  
*29<sup>th</sup>-30<sup>th</sup> June 2019*

Scientix (17/07/2017), *the Unknown Impact of the Fourth Industrial Revolution in Education*. Retrieved 16/11/2017, from [http://blog.scientix.eu/2017/07/the-unknown-impact-of-the-fourth-industrial-revolution-in-education/#\\_ftn1](http://blog.scientix.eu/2017/07/the-unknown-impact-of-the-fourth-industrial-revolution-in-education/#_ftn1)

Stephen Fetters (2017). *Successful Content Marketing*. Retrieved 05/09/2018, from <https://successfulm.com/>

World Economic Forum (2016). *The Future of Jobs*. Retrieved 20/09/2018, from <http://reports.weforum.org/future-of-jobs-2016>



## TEACHING GEL ELECTROPHORESIS IN A STUDENT-CENTERED ENVIRONMENT

Nur A. Mohamed Paid<sup>1</sup>

<sup>1</sup>Dept of Agrotechnology and Bio-industry, Politeknik Nilai, Malaysia ([assyakirin.paid@polinilai.edu.my](mailto:assyakirin.paid@polinilai.edu.my))

---

**Abstract:** *Molecular techniques taught in biotechnology courses can be complex and challenging for students to understand. This paper presents a student-centered learning approach comprising four activities designed to help students understand how gel electrophoresis functions and its application in DNA fingerprinting to solve crime cases. The approach includes the utilization of digital flashcards accessed via Quizlet.com, hands-on activity where students had to assemble the gel apparatus, interactive online activity of DNA fingerprinting and a paper simulation of gel electrophoresis activity where students pretended to be Crime Scene Investigators to solve a murder case by cutting and matching hypothetical DNA samples to determine the culprit of the crime. The objective of this student-centered learning approach is to help students familiarize with the terms used in gel electrophoresis and visualize how gel electrophoresis works besides learning how to analyze the results of gel in DNA fingerprinting. The results from the given assessments suggest that students can comprehend the fundamental principle of gel electrophoresis and manage to analyze DNA fingerprinting results to correctly determine the culprit. Nonetheless, the results also suggest that students lacked the ability to integrate logical reasoning in figuring out critical thinking questions. Hence, improvement should be made to the activities planned in the student-centered approach to achieve better comprehension among the students.*

**Keywords:** *student-centered learning, gel electrophoresis, biotechnology teaching*

---

### Introduction

The presence of biotechnology is increasingly recognized in everyday life that makes it relevant to introduce its basic concepts in the education curriculum. It is a field of study where new technologies emerged from the manipulation of biological processes, organisms, cells or cellular components. In the undergraduate level, techniques used in biotechnology such as gel electrophoresis, polymerase chain reaction, blotting are commonly taught in lectures and lab setting to demonstrate how to test scientific hypotheses (Phillips, Robertson, Batzli, Harris & Miller, 2008) and has become a crucial part for any biology or biotechnology diploma/degree program.

DYB2012 or Introduction to Biotechnology is a lecture course in Nilai Polytechnic that covers a variety of molecular biology topics including nucleic acids, the central dogma, the molecular techniques and the application of biotechnology in areas such as healthcare, agriculture, environment and more. This compulsory course is taken by students who are pursuing a diploma certificate in Biotechnology. Students' grade comes from three subjective assessments and one cumulative final. In addition, students have to submit a case study report and conduct an in-class group presentation. This Introduction to Biotechnology course is solely a lecture class that meets once a week for 2 hours. Its syllabus does not include any lab or experimental activities that demonstrate the molecular techniques covered in the lecture class.

Therefore, most of these students are having difficulties to connect the theoretical knowledge of the molecular techniques they have learned in this course with the lab activities



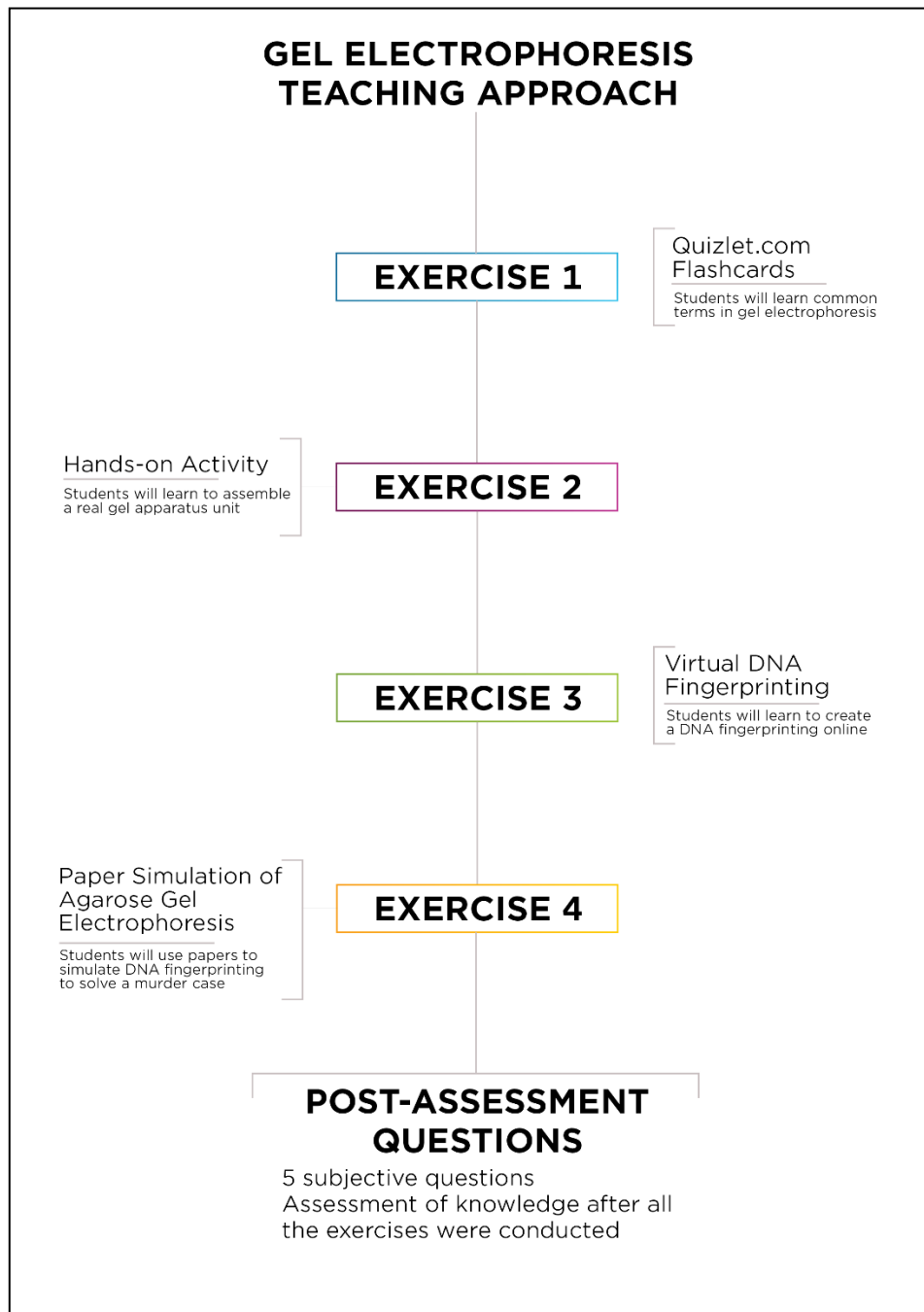
that they will partake when they take advanced molecular biology subjects in the subsequent semesters. Phillips et al. (2008) stated that the cause of the problem is probably due to the fact that these complex techniques are usually taught as a set of instructions rather than tying them to the biological concepts. It is also challenging for educators to illustrate the dynamic procedures of molecular biology by using two-dimensional tools (McClellan et al., 2005). Moreover, most Malaysian polytechnic students have inadequate or no prior knowledge on this subject as these biotechnology techniques are not included in the Malaysian Secondary School Science/Biology Curriculum, hence, making it difficult for the students to understand them during the initial exposure during class. The curriculum only focuses on broader examples of biotechnology application in areas such as medical, food processing and agriculture (Gelandin, Alias & Dewitt, 2017).

A lecture class tends to make students acquire knowledge by memorization and it lacks the means to shape critical thinking and problem-solving skills in students. Studies have shown that the traditional means of teaching i.e. giving lecture and then, assessing the students via tests is ineffective particularly if the class involves a large number of students (Powell, 2003) and since DYB2012 is a two-hour lecture class, a student-centered approach is considered to tackle this problem. Student-centered education is a process of learning where students no longer act passively in absorbing new information (Wright, 2011) from educators i.e. they are given the 'power' to lead the journey of learning while being facilitated by their educators. (Estes, 2004). It has been evidently shown that learning becomes more effective when the students can engage actively in the process of learning (Baxter & Gray, 2001). With the aim to encourage a deeper understanding and visualization of gel electrophoresis, a common and widely used technique in the field of biotechnology, a set of student-oriented activities were designed focusing on its mechanism and functions and how it is applied in DNA fingerprinting. Gel electrophoresis is a technique that separates DNA molecules based on size. It is a simple procedure where the negatively charged DNA fragments move toward the positive electrode. Larger DNA molecules migrate slower than the smaller fragments due to frictions and after a certain time, the DNA fragments will form a ladder of discrete DNA bands when visualized under the UV light (Albert et al., 2002). One of its importance is the application in DNA fingerprinting. DNA fingerprinting is a technique that determines the genetic information contained within the sample of individuals and in crime scene investigations, it is used to compare the genetic information of a person to the evidence collected from the scene of the crime.

### **Methodology**

The aim of the designed student-centered approach is to help students familiarize themselves with the principles and functions of gel electrophoresis. The activity comprises four different exercises that allow students to learn how to assemble a gel apparatus themselves and analyze or predict the results of DNA fingerprinting. At the end of the exercises, students should be able to explain how DNA molecules migrate through the agarose gel and how they are separated by size. In addition, they should also be able to explain why DNA fragments move toward the positive pole.

The activities are also designed to teach students to estimate the size of the DNA fragments by comparing it to a DNA ladder. Figure 1 highlights the overview of each exercise for teaching gel electrophoresis in the student-centered environment. A set of questions were also given to the students as a post-assessment to assess how they retain the knowledge they have acquired about gel electrophoresis.



**Figure 1:** Overview of Student-Centered Activity Comprising Four Exercises and One Post-Activity Assessment

***Exercise 1 – Quizlet.com Flashcards to Introduce Gel Electrophoresis***

The activity started with the introduction of several common terminology used in gel electrophoresis and DNA fingerprinting. This exercise was carried out by using digital flashcards available online on Quizlet.com, a well-known study support website. Flashcards may be a traditional tool for learning, but they can be helpful for subjects like biotechnology that involves new, unfamiliar non-layman words and terms (Bryson, [2012](#)). It has been shown



that the use of these digital flashcards, tests and interactive games available on this platform has improved the assimilation of new vocabulary among students (Ismailova, Gleason, Provotorova, Matukhin, 2017). Moreover, these flashcards can be embedded on LMS system making it easier for the students to access them. Instead of using PowerPoint slides, students learned the new terms during class session and the process of learning becomes interesting, later on, they were divided into a few groups and battled in completing the matching game on Quizlet.com the fastest.

### ***Exercise 2 us– Hands-on Activity: Assembly of Gel Apparatus***

In the second exercise, students were divided into four groups and they were given a task to assemble a real unit of gel apparatus without being provided with any instructions or manual to facilitate them. The goal is to encourage them to collaborate with each other and apply the information they found on the internet in completing the task. Studies have shown that by incorporating a problem-solving task that requires student participation and cooperation boosts their understanding significantly (Knight & Wood, 2005). In this exercise, educator acted as a facilitator for the students to question any problems or confusion. Educator went around the classroom to assess the progress of each group in assembling the gel apparatus and once all the groups successfully completed the task, one of them was asked to demonstrate the assembly of the gel apparatus in front of their classmates. This hands-on approach is included because most of the students have never seen a gel apparatus and when they were first introduced to gel electrophoresis during lecture session, they were having difficulties to process the new information. Therefore, learning to assemble the gel apparatus in a group setting allowed them to hold the gel apparatus, identified its parts and components and at the same time collaborated with their fellow group members to complete the task. Hands-on learning has been shown to improve learning significantly as compared to the use of presentation slides or images (Hearns, Miller & Nelson, 2010).

### ***Exercise 3 – Virtual DNA Fingerprinting***

The utilization of digital flashcards via Quizlet.com is useful in learning new terms and functions of gel electrophoresis but it is not sufficient in helping the students to understand how to use them in a particular context. Regan (1996) suggests that virtual courseware can enhance hands-on learning experience. Therefore, the third exercise is then followed by an interactive or virtual DNA fingerprinting exercise that can be accessed online via <https://www.pbs.org/wgbh/nova/sheppard/labwave.html>. In this virtual lab, students acted as a lab technician who was required to create a DNA fingerprint from the saliva left on the evidence from a crime scene and analyzed it to determine the culprit. At the end of the task, students had to explain how comparing the DNA fingerprints can assist in identifying a person who has committed a crime and why it is more conclusive to prove a person's innocence through DNA fingerprinting rather than using it to confirm his or her guilt.

### ***Exercise 4 – Paper Simulation of Agarose Gel Electrophoresis***

The final exercise of this student-oriented learning approach is a simulation of gel electrophoresis by using papers to solve a hypothetical murder case. The objective of this exercise is to have students explore one of the applications of gel electrophoresis in forensic science which is crime solving using DNA evidence (DNA fingerprinting). In this activity, students first learned the function of restriction enzymes in gel electrophoresis, how DNA

molecules separate through agarose gel (these were also emphasized in Exercise 1) and how to analyze the result of gel electrophoresis (the students have also learned this in Exercise 3). To help them visualize this procedure, they also watched a video on gel electrophoresis on YouTube. McClean et al. (2005) stated that an effective visualization tool such as animation videos can assist students to absorb large and complex information in a short period of time. After that, collaborating in groups of four, the students were given a case file containing information about the murder case, a paper agarose gel and paper DNA strips from the crime scenes, Suspect 1, Suspect 2 and Suspect 3. The students played the role of Crime Scene Investigators where they worked together to identify the real culprit of the murder. They are required to cut the paper DNA strips, count the base pairs of each cut DNA fragments and match them to the DNA found on the crime scene by sticking them on the paper agarose gel. For this activity to complete, the students needed to understand how a restriction enzyme works and how DNA fragments migrate through and separate in gel electrophoresis. At the end of the exercise, students were also given a set of analysis questions where they have to determine the murder suspect based on their simulated paper gel electrophoresis and how gel electrophoresis works. This form of learning activity gives the students the opportunity be actively engaged in the learning process (Wright, 2011) rather than having them listen to a lecture explaining how DNA fingerprint results is analyzed to solve crime cases.



**Figure 2:** (a) Students Assembling a Gel Apparatus (b) Students Conducting Exercise 3 (c) An Example of Paper Simulation of Agarose Gel Submitted

### Results and Discussion

Teaching molecular processes and procedures requires both theoretical knowledge and practical experience (DiBartolomeis & Mone, 2003). Educators find it challenging and difficult to explain the complexity of these processes and procedures to novice students especially those with insufficient prior knowledge. Often, students struggle to interrelate the theoretical part to the practical part (McClean et al., 2005). Salter et al (2009) recommends to actively involve students in planning classroom activities to increase participation resulting in better comprehension and understanding in the particular subject.

### ***Students' Performance in Post-Exercise Questions in Virtual DNA Fingerprinting***

In Exercise 3, students were grouped into four groups (G1 – G4) and required to complete a virtual DNA fingerprinting activity that is available on the World Wide Web via <https://www.pbs.org/wgbh/nova/sheppard/labwave.html>. Then, they answered two questions based on this activity (see Table 1) and according to the results, all the groups were able to answer Question 1 (Q1) correctly. This question is relatively easy and direct as it basically inquires student about the mechanism principle behind gel electrophoresis and how it applies in DNA fingerprinting.

	G1	G2	G3	G4	Total percentage
<b>Q1:</b> Explain how comparing DNA fingerprints can help identify a person who has committed a crime?	√	√	√	√	100%
<b>Q2:</b> Why is DNA fingerprinting more conclusive when proving a person's innocence rather than their guilt?	No correct answer given by any of the group				0%

**Table 1:** Students' Performance in Virtual DNA Fingerprinting Exercise

However, all groups of students were not able to answer Question 2 correctly. Answers submitted by students mostly revolve around how gel electrophoresis functions in general. This indicates that the students may have understood gel electrophoresis in terms of its functions and how it works but improvement needs to be added to the teaching/learning materials to increase students' critical thinking skill in applying new knowledge in answering out-of-the-box questions.

### ***Students' Performance in Post-exercise Questions for Paper Simulation of Agarose Gel Electrophoresis***

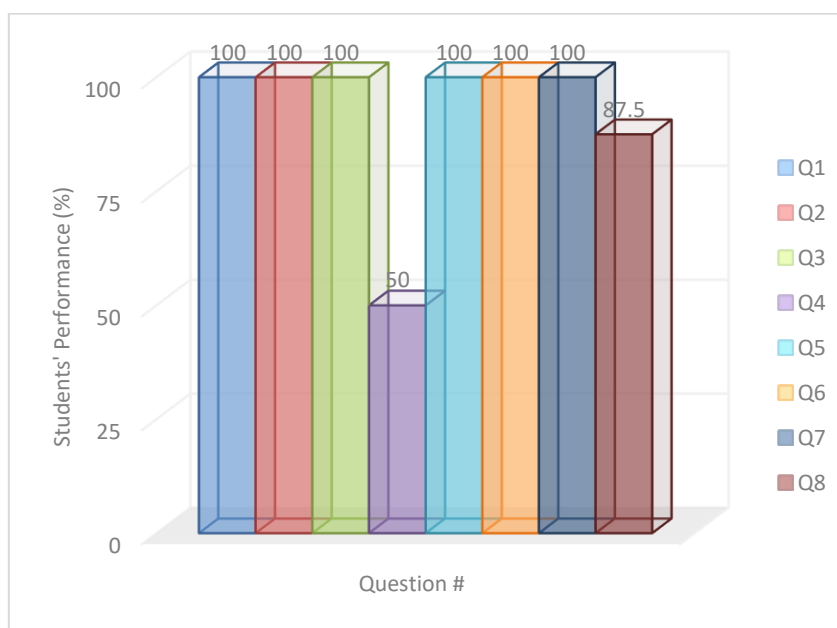
In the final activity of this student-oriented learning approach, students pretended to be a Crime Scene Investigator who is given the task to analyze a set of crime evidence to determine the correct culprit of a murder case. They collaborated in a group to conduct this activity and they need to answer analysis questions based on it.

Item	Question Description
Q1	Determine the crime suspect based on the DNA evidence.
Q2	Identify whether smaller or larger DNA fragments migrate faster on the 'paper' agarose gel.
Q3	Explain how DNA moves through agarose gel.
Q4	Explain what DNA electrophoresis is based on.
Q5	Determine whether a restriction enzyme is an endonuclease or exonuclease.
Q6	State the function of a restriction enzyme.

<b>Q7</b>	Describe some characteristics of an enzyme.
<b>Q8</b>	State other applications of DNA electrophoresis beside in forensic science.

**Table 2:** Questions Posed to Students in Exercise 4

Based on Figure 3, all groups were able to identify the real culprit for the murder case (Q1). They also managed to correctly answer Question 2, 3, 5, 6 and 7. According to Table 2, these questions revolve around the basic concept of gel electrophoresis. Nevertheless, only 50% the groups were able to give the right answer for Question 4 while 12.5% of the groups were unable to answer Question 8 correctly. One of the possible reasons is probably because some of the groups were not be able to decipher what the question really wants as English is a second language among the students.



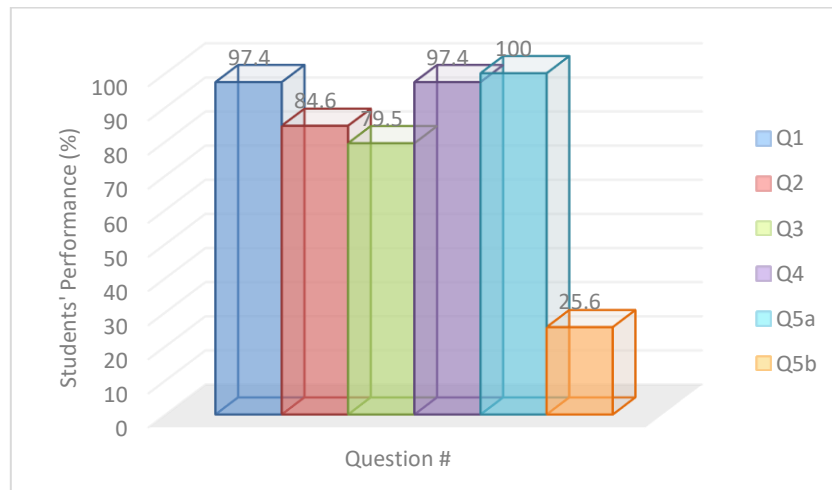
**Figure 3:** Students' Performance in Paper Simulation of Agarose Gel Electrophoresis

### ***Students' Performance in Post-Assessment Questions***

A set of post-assessment questions were given to all students after all four exercises in the student-centered learning approach were completed. The set consists of five subjective questions (see Table 3) and their performance can be seen in Figure 4.

<b>Item</b>	<b>Question Description</b>
<b>Q1</b>	Define DNA fingerprinting.
<b>Q2</b>	Explain the function of gel electrophoresis.
<b>Q3</b>	Describe the application/uses of gel electrophoresis.
<b>Q4</b>	State the function of restriction enzyme.
<b>Q5a</b>	Determine whether smaller or larger fragment travel faster through agarose gel and
<b>Q5b</b>	Explain the answer in Q5a

**Table 3:** Questions Posed to Students in the Post-Assessment



**Figure 4:** Students' Performance in the Given Post-assessment

The performance result shown in Figure 4 portrays that more than 80% of the students were able to answer Question 1, 2, 3, 4 and 5a correctly. This shows that they do understand the basic concept of gel electrophoresis and DNA fingerprinting. Nevertheless, only 25.6% of them managed to give the right answer to Question 5b suggesting that most students are still having difficulty in explaining the mechanism of gel electrophoresis. Therefore, further improvement such as more exercises and activities that are oriented towards critical thinking and logical reasoning have to be added to the implemented student-centered learning approach. Besides that, the utilization of digital flashcards via Quizlet.com should also be evaluated by using a credible assessment to support its effectiveness in learning new terminology.

### Conclusion

Student-centered learning approach has been initiated and implemented in many classrooms because one-sided lecture session can be mundane and ineffective. It has been recommended that a combination of interactive multimedia and hands-on activity can significantly enhance the learning experience. In this paper, the implemented approach to teach gel electrophoresis comprises a variety of different activities to make the learning process more interesting to the students. It includes digital flashcards that can gamified, animation videos to explain the procedures and the concept behind them, online interactive/virtual simple lab on creating a DNA fingerprint, hands-on assembly of a real gel apparatus unit and the simulation of gel electrophoresis using papers to solve a murder case. The performance of the students suggests that the students have good understanding on how gel electrophoresis and DNA fingerprinting work. Nonetheless, students found it challenging to apply the knowledge in providing logical reasoning to tackle questions that is based on critical thinking. Thus, improvement on the implemented exercises and means of assessments need to further improve to achieve better comprehension on gel electrophoresis.

### References

- Alberts, B., Bray, D., Lewis, J., Raff, M., Roberts, K., & Watson, J. D. (2002). *Molecular biology of the cell* 2<sup>nd</sup> edition. New York, USA: Garland Science
- Baxter, S., & Gray, C. (2001). The application of student-centered learning approaches to clinical education. *International Journal of Language & Communication Disorders*:



- Supplement, 36, 396-400. Retrieved from  
<https://www.ncbi.nlm.nih.gov/pubmed/11340819>
- Bryson, D. (2012). Using flashcards to support your learning. *Journal of Visual Communication in Medicine*, 35(1), 25-29. doi: 10.3109/17453054.2012.655720
- Clarke, D. P., & Pazdernik, N. J. (2016). Forensic molecular biology. In *Biotechnology (Second Edition) Applying the Genetic Revolution* (pp. 721-745). California, USA: Academic Cell
- Estes, C. A. (2004). Promoting Student-Centered Learning in Experiential Education. *Journal of Experiential Education*, 27(2), 141–160. doi: 10.1177/105382590402700203
- Gelamdin, R., Alias, N., & Dewitt, D. (2017). Penerapan pendidikan bioteknologi dalam kalangan guru biologi sekolah menengah: kajian kebolehlaksanaan. *JuKu: Jurnal Kurikulum & Pengajaran Asia Pasifik*, 2(1), 54-60. Retrieved from <https://juku.um.edu.my/article/view/8064>
- Hearns, M. K., Miller, B. K., & Nelson, D. L. (2010). Hands-On Learning versus Learning by Demonstration at Three Recall Points in University Students. *OTJR: Occupation, Participation and Health*, 30(4), 169–171. <https://doi.org/10.3928/15394492-20090825-01>
- Ismailova, Kh., Gleason, K., Provotorova, P., Matukhin, P.(2017). The use of online Quizlet.com resource tools to support native english speaking students of engineering and medical departments in accelerated RFL teaching and learning. *Mechanics, Materials Science & Engineering Journal, Magnolithe*, 7. doi: 10.2412/mmse.05.805.901
- Knight, J.K., Wood, W.B. (2005). Teaching more by lecturing less. *Cell Biology Education*, 4(4), 298-310. doi: 10.1187/05-06-0082
- McClellan, P., Johnson, C., Rogers, R., Daniels, L., Reber, J., Brian, M. Slator, B.M., Jeff Terpstra, J., & White, A. (2005). Molecular and cellular biology animations: Development and impact on student learning. *Cell Biology Education*, 4(2), 169-179. doi: 10.1187/cbe.04-07-0047
- Ministry of Education Malaysia. (2013). Curriculum Specifications Form 5 Biology. Retrieved from <https://www.moe.gov.my>
- Ministry of Education Malaysia. (2013). Curriculum Specifications Form 5 Science. Retrieved from <https://www.moe.gov.my>
- Ministry of Education Malaysia. (2013). Curriculum Specifications Form 4 Biology. Retrieved from <https://www.moe.gov.my>
- Ministry of Education Malaysia. (2013). Curriculum Specifications Form 4 Science. Retrieved from <https://www.moe.gov.my>
- Nature. (2019). Biotechnology. Retrieved from <https://www.nature.com/subjects/biotechnology>
- Phillips, A. R., Robertson, A. L., Batzli, J., Harris, M., & Miller, S. (2008). Aligning goals, assessments, and activities: an approach to teaching PCR and gel electrophoresis. *CBE life sciences education*, 7(1), 96–106. doi:10.1187/cbe.07-07-0052
- Powell, K. (2003). Spare me the lecture. *Nature*, 425, 234-236. doi: 10.1038/425234a
- Regan, M., & Sheppard, S., (1996). Interactive multimedia courseware and the hands-on learning experience: An assessment study. *Journal of Engineering Education*, 85(2), 123-131. doi: 10.1002/j.2168-9830.1996.tb00221.x
- Susan M. DiBartolomeis, S. M., & Moné, J. P. (2003). Apoptosis: A Four-Week Laboratory Investigation for Advanced Molecular and Cellular Biology Students. *Cell Biology Education*, 2(4), 195-295. doi: <https://doi.org/10.1187/cbe.03-06-0027>



*3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Cophorne Hotel, Cameron Highland, Malaysia  
29<sup>th</sup>-30<sup>th</sup> June 2019*

Wright, G. B. (2011). Student-centered learning in higher education. *International Journal of Teaching and Learning in Higher Education*, 23(1), 92-97. Retrieved from <https://eric.ed.gov/?id=EJ938583>



## MEMBINA KEUPAYAAN MURID BERINTERAKSI DENGAN MENGUNAKAN RUTIN BERFIKIR 3-2-1 BINA TITIAN

Muliana Binte Mohammad<sup>1</sup>

<sup>1</sup>Guru, Sekolah Rendah Jiemin dan Pusat Bahasa Melayu Singapura, Singapura, (E-mel: [muliana\\_mohammad@moe.edu.sg](mailto:muliana_mohammad@moe.edu.sg))

---

**Abstrak:** Murid Darjah 5 (Tahun 5) 2018 merupakan kohort kedua yang bakal menduduki peperiksaan lisan yang baharu berdasarkan format PSLE 2017. Justeru, mereka perlu dilengkapkan dengan pengetahuan menyampaikan idea dan pandangan dengan sebaik mungkin untuk menyokong kemahiran bertutur mereka. Kajian ini dijalankan untuk melihat sejauh mana murid-murid Darjah 5 dapat menggunakan rutin berfikir 3-2-1 Bina Titian berdasarkan pendekatan Making Thinking Visible dalam memberikan respons berdasarkan video dalam peperiksaan lisan. Subjek kajian terdiri daripada 16 murid Darjah 5 yang mempunyai pelbagai aras keupayaan, iaitu 12 orang mengambil mata pelajaran Bahasa Melayu Standard dan 4 Bahasa Melayu Asas. Kajian ini menggunakan kaedah transkripsi video. Melalui rakaman video yang dibuat melalui iPad, respons murid dianalisis secara mendalam oleh guru. Sebuah lembaran kerja bagi rutin berfikir ini turut digunakan untuk mengkaji respons dan komen murid-murid. Borang penilaian sendiri kemudiannya digunakan bagi meninjau persepsi murid-murid terhadap keberkesanan rutin berfikir 3-2-1 Bina Titian. Rutin berfikir 3-2-1 Bina Titian dipilih kerana ia dapat menggalak murid-murid untuk berfikir secara berstruktur. Berdasarkan dapatan kajian, 81.3% murid mampu menggunakan rutin berfikir tersebut untuk memberikan respons peribadi dengan baik. Berdasarkan borang penilaian sendiri, dapatan menunjukkan 100% murid menyatakan mereka boleh memahami rutin berfikir 3-2-1 Bina Titian dengan baik. Kesemua murid turut mampu menggunakan rutin tersebut untuk menjana idea tentang tema video. Rutin berfikir 3-2-1 Bina Titian ini amat berkesan dalam membantu murid menjana isi dan meningkatkan kebolehan mereka menjana idea untuk kemahiran interaksi lisan.

**Kata Kunci:** Rutin Berfikir, Budaya Berfikir, Kemahiran Bertutur

---

### Pengenalan

Kemahiran bertutur merupakan salah satu komponen yang penting dalam kurikulum Bahasa Melayu (BM). Bertutur ialah proses interaktif bagi pembinaan maksud yang melibatkan penghasilan, penerimaan dan pemprosesan maklumat. Yahya Don (2005) berpendapat bahawa kemahiran bertutur merangkumi keupayaan murid untuk menyampaikan maklumat, pendapat dan perasaan serta idea yang kritis dan kreatif secara lisan dengan sebutan dan intonasi yang betul dan secara sopan. Siti Hajar Abdul Aziz (2009) pula menyatakan bahawa kemahiran bertutur merupakan kemahiran penting yang perlu dikuasai oleh semua orang.

Kemahiran bertutur merupakan komponen yang penting kerana pemberatannya dalam peperiksaan e-lisan secara keseluruhan adalah sebanyak 25% bagi BM Standard dan 55% bagi BM Asas. Daripada peratusan tersebut, 15% (30 markah) bagi BM Standard dan 40% (40 markah) bagi BM Asas merupakan bahagian perbualan berdasarkan rangsangan video. Kohort ini merupakan kohort kedua yang akan menduduki peperiksaan e-lisan format PSLE 2017. Format ini lebih menekankan kemahiran berfikir secara kritikal, kreatif, logikal dan reflektif. Ini merupakan satu cabaran bagi guru-guru. Justeru, pengkaji telah menjurus kepada komponen



lisan dan memilih pendekatan Menjadikan Pemikiran Jelas atau *Making Visible Thinking* dengan penggunaan rutin berfikir 3-2-1 Bina Titian.

Rutin berfikir 3-2-1 Bina Titian sesuai digunakan untuk menyokong penerokaan dan penjanaan idea. Ia dapat mengaktifkan pengetahuan sedia ada murid, membimbing murid berfikir, dapat membantu murid membezakan sesuatu dan membuat pentafsiran melalui perlambangan. Rutin berfikir ini terbukti berkesan apabila murid-murid mampu mengaktifkan pengetahuan sedia ada tentang sesuatu tema atau topik dan berpotensi untuk diluaskan penggunaannya.

### **Pernyataan Masalah**

Format baharu peperiksaan e-lisan PSLE mempunyai pemberatan sebanyak 15% bagi BM Standard dan 40% bagi BM Asas dalam bahagian perbualan berdasarkan rangsangan video. Berdasarkan analisis keputusan kohort pertama, murid-murid kohort pertama tidak dapat menyampaikan respons mereka dengan baik. Mereka memberi respons mengikut kehendak dan pemikiran mereka sendiri. Hal-hal ini merupakan satu cabaran bagi guru-guru. Atas sebab-sebab inilah, guru-guru berpendapat bahawa pengajaran kemahiran bertutur harus disesuaikan dengan menerapkan kemahiran berfikir dalam pengajaran dan pembelajaran. Satu struktur diperlukan untuk menghasilkan cara pertuturan yang standard dalam kalangan murid-murid. Oleh itu, pengkaji memilih rutin berfikir 3-2-1 Bina Titian untuk mengatasi masalah ini. Melalui kajian ini, pengkaji berharap untuk menyediakan satu struktur yang dapat membimbing cara murid-murid memberi respons mereka dalam aktiviti lisan.

### **Tujuan Kajian**

Tujuan kajian ini adalah seperti yang berikut:

1. penggunaan rutin berfikir 3-2-1 Bina Titian dalam pembelajaran kemahiran bertutur murid; dan
2. keberkesanan rutin berfikir 3-2-1 Bina Titian dalam menyokong pembelajaran kemahiran bertutur.

### **Kajian Lepas**

#### **Kemahiran Bertutur & Interaksi Sosial**

Siti Hajar Abdul Aziz (2009) menyatakan bahawa kemahiran bertutur merupakan kemahiran penting yang perlu dikuasai oleh semua orang. Usaha untuk melengkapkan murid dengan kemahiran dan kecekapan lisan merupakan satu cabaran. Oleh itu, pengajaran lisan tidak seharusnya sekadar menunjukkan dan menekankan proses pertuturan yang baik sahaja tetapi merupakan proses yang memerlukan struktur standard yang dapat membimbing murid untuk bertutur dengan teratur dan padat

#### **Interaksi Sosial**

Hurst, Wallace, dan Nixon (2013) dalam Jurnal *Reading Horizons* mendefinisikan interaksi sosial sebagai satu dialog yang bermakna antara murid. Murid yang memiliki kemahiran interaksi sosial ialah murid yang terlibat (Vacca et al., 2011). Routman (2005) menyokong dengan mengatakan bahawa murid akan terlibat dalam pembelajaran apabila mereka bertutur antara satu sama lain dan melibatkan diri secara aktif (p.207). Kesimpulannya, interaksi sosial penting dalam proses pembelajaran.



### **Rutin Berfikir**

Dapatan kajian yang dijalankan oleh Angela K. Salmon (2008), telah menunjukkan penggunaan rutin berfikir dapat membangunkan dan meningkatkan budaya berfikir dalam kalangan murid. Ini disebabkan rutin berfikir dapat menjana hasil yang berbeza. Antaranya adalah:

1. menasarkankan pada satu-satu jenis rutin berfikir;
2. mengandungi hanya beberapa langkah yang mudah diikuti;
3. mudah diajar dan dipelajari; dan
4. dapat digunakan individu dan kumpulan.

Dapatan kajian Ritchhart dan Perkins (2005) di dalam *Project Zero* telah menunjukkan penggunaan rutin berfikir mampu menggalakkan murid melibatkan diri secara aktif di dalam bilik darjah. Penggunaan lebih daripada 30 strategi rutin berfikir di dalam bilik darjah jelas menggambarkan budaya berfikir wujud dalam pengajaran dan pembelajaran dalam kalangan murid. Berdasarkan kajian yang dijalankan dalam *Project Zero*, guru-guru terlibat dalam menerokai apa yang difikirkan oleh murid melalui pemantauan di bilik darjah, hasil-hasil kerja murid, pelibatan murid semasa menjalani rutin berfikir dan juga melalui perbincangan guru. Justeru, apabila guru dapat meneroka dan memahami hasil kerja murid, maka guru dapat membentuk cara pembelajaran yang sesuai dengan para murid di dalam bilik darjah. Berkaitan dengan ini, rutin ini dapat membina keterampilan murid bertutur.

### **Pengajaran Secara Eksplisit**

Menurut Rosenshine (1997), pengajaran secara eksplisit merupakan strategi pengajaran yang berstruktur, sistematik dan melibatkan pengajaran yang menekankan kepada penguasaan kemahiran dan pengetahuan bahasa melalui penyertaan aktif dalam proses pembelajaran. Tambahnya lagi, salah satu teori kajian memproses informasi atau *Information Processing Research* menyebut bahawa kita hanya mampu memproses tujuh perkara dalam satu masa di dalam *working memory*. Informasi yang berlebihan boleh mengakibatkan memori kita terganggu dan menimbulkan kekeliruan. Oleh yang demikian, apabila guru ingin mula mengajar sesuatu yang baharu, guru harus mengajar bahagian demi bahagian dan mengaturnya untuk murid-murid berlatih agar ia dapat diterima dalam *working memory* mereka. Berdasarkan kajian ini, pengkaji fikir perlu untuk menerapkan pengajaran secara eksplisit untuk mengajarkan rutin berfikir ini kepada murid-murid.

### **Kaedah Kajian**

Kajian ini khusus melihat respons murid-murid secara lisan dan tulisan dalam melaksanakan rutin berfikir 3-2-1 Bina Titian. Bahan pengajaran direka oleh guru dan disesuaikan kepada tahap pembelajaran murid. Hasil daripada respons, lembaran kerja murid dan penilaian sendiri inilah yang diukur untuk memastikan keberkesanan rutin berfikir 3-2-1 Bina Titian yang dilaksanakan oleh guru.

### **Subjek Kajian**

Subjek kajian terdiri daripada 16 orang murid Darjah 5 yang mempunyai pelbagai aras keupayaan - 12 BM Standard dan 4 BM Asas. Murid-murid menjalani aktiviti rutin ini secara berpasangan dan jumlah pasangan itu seramai lapan orang kesemuanya. Tiada percampuran pasangan antara murid BM Asas dengan murid BM Standard. Murid-murid Darjah 5 dipilih



kerana mereka merupakan kohort kedua yang akan menjalani format baharu peperiksaan e-lisan PSLE 2017. Berdasarkan pengalaman mengajar dan menilai murid-murid kohort pertama yang menggunakan rutin berfikir yang sama, diharap kajian ini dapat menambah nilai pembelajaran murid-murid kohort kedua sekaligus meningkatkan kemahiran mereka untuk berfikir dan bertutur. Kumpulan sasaran ini secara serentak diajar oleh seorang guru yang telah menggunakan rutin berfikir 3-2-1 Bina Titian dalam pengajaran kemahiran bertutur.

### Instrumen Kajian

Kajian ini menggunakan kaedah transkripsi video. Tujuan utamanya adalah untuk mengumpulkan data respons jawapan murid. Melalui rakaman video yang dibuat melalui *iPad*, respons-respons murid dapat dianalisis secara berkali-kali. Di sinilah respons lisan murid, mimik wajah murid dapat dirakam dan ditonton berkali-kali.

Lembaran kerja bagi rutin berfikir ini juga digunakan oleh murid-murid untuk mengkaji respons dan komen mereka. Borang penilaian sendiri digunakan bagi meninjau persepsi murid-murid terhadap keberkesanan rutin berfikir 3-2-1 Bina Titian.

Tiga orang guru terlibat di dalam kajian ini. Mereka turut menjadi fasilitator kepada kumpulan-kumpulan murid khususnya murid-murid peringkat BM Asas. Guru-guru ditugaskan memantau sikap murid terhadap pengajaran serta meneliti respons luaran seperti keyakinan memberikan respons, raut wajah semasa memberikan respons serta tahap keyakinan yang dipamerkan murid semasa memberikan jawapan.

### Prosedur Kajian

Guru-guru pernah mengikuti kursus berkaitan Menjadikan Pemikiran Jelas atau *Making Thinking Visible* di Pusat Bahasa Melayu Singapura. Guru-guru pernah menggunakan rutin 3-2-1 Bina Titian bersama murid-murid. Para guru memberi cadangan dan sumbang saran pengaplikasian rutin berfikir tersebut dalam pengajaran kemahiran bertutur di bilik darjah. Para guru telah bersetuju untuk menggunakan rutin 3-2-1 Bina Titian yang telah diubahsuai (Rajah 1). Soalan-soalan rangsangan yang digunakan meminta murid untuk memberikan perkara-perkara yang berikut:

1. 3 perkara penting berkaitan dengan video;
2. 2 pendapat/saranan berkaitan dengan tema video. Contohnya:
  - Adakah sikap jujur itu penting? Mengapa?
  - Sarankan cara-cara sekolah boleh menggalakkan murid-murid bersikap jujur;
3. 1 pengalaman peribadi selain yang terpapar dalam video.

Pengubahsuaian ini dibuat berdasarkan pengalaman guru-guru yang telah menjalankan rutin tersebut di bilik darjah. Selain itu, aturan rutin berfikir 3-2-1 Bina Titian juga disesuaikan mengikut jenis soalan dalam peperiksaan lisan PSLE format 2017.

**Rajah 1:** Lembaran Kerja Bagi Rutin 3-2-1 Bina Titian

3 perkara penting yang berkaitan dengan video.	3 perkara penting yang berkaitan dengan video.
1.	1.
2.	2.
3.	3.

2 pendapat/saranan kamu yang berkaitan dengan tema video. 1. 2.	2 pendapat/saranan kamu yang berkaitan dengan tema video. 1. 2.
1 pengalaman peribadi selain yang terpapar dalam video.	1 pengalaman peribadi selain yang terpapar dalam video.

Pengajaran rutin berfikir 3-2-1 Bina Titian dijalankan di bilik darjah selama dua waktu (1 jam). Guru melakukan pengajaran secara eksplisit yang mengikuti Tahap Pengenalan, Tahap Penerangan, Tahap Modeling, Tahap Penilaian dan Tahap Penutup. Secara ringkas, guru menerangkan matlamat pembelajaran dan rutin berfikir 3-2-1 Bina Titian pada awal pengajaran lalu menayangkan klip video seminit. Selepas itu guru dan murid berbincang tentang tema klip video tersebut iaitu tema kejujuran. Guru memulakan pengajaran dengan menunjuk cara rutin berfikir itu digunakan bahagian demi bahagian sebelum murid-murid mencubanya. Untuk membantu murid-murid dalam bahagian kedua, guru telah menyediakan soalan-soalan rangsangan tambahan. Murid-murid mula merakam respons mereka pada saat mereka berinteraksi dan menjawab bahagian pertama sehingga selesai. Setelah selesai, murid-murid mengisi borang penilaian sendiri.

Rakaman-rakaman respons dan interaksi murid yang diperoleh ini telah ditranskripsi. Sebanyak 12 rakaman sahaja yang telah ditranskripsikan oleh dua orang pengkaji. Secara purata, setiap transkripsi mengambil masa sekitar 20 minit. Semasa meneliti rakaman tersebut, empat daripada 16 rakaman murid tidak dapat ditranskripsikan disebabkan masalah teknikal. Pengkaji mendengar rakaman secara berulang kali bagi mendapatkan data transkripsi dengan tepat. Kesemua respons yang diberikan oleh murid-murid dalam kajian ini dikumpul, direkod dan dihasilkan dalam bentuk transkripsi agar dapat difahami dengan lebih mendalam dan terperinci.

### Dapatan Kajian dan Perbincangan

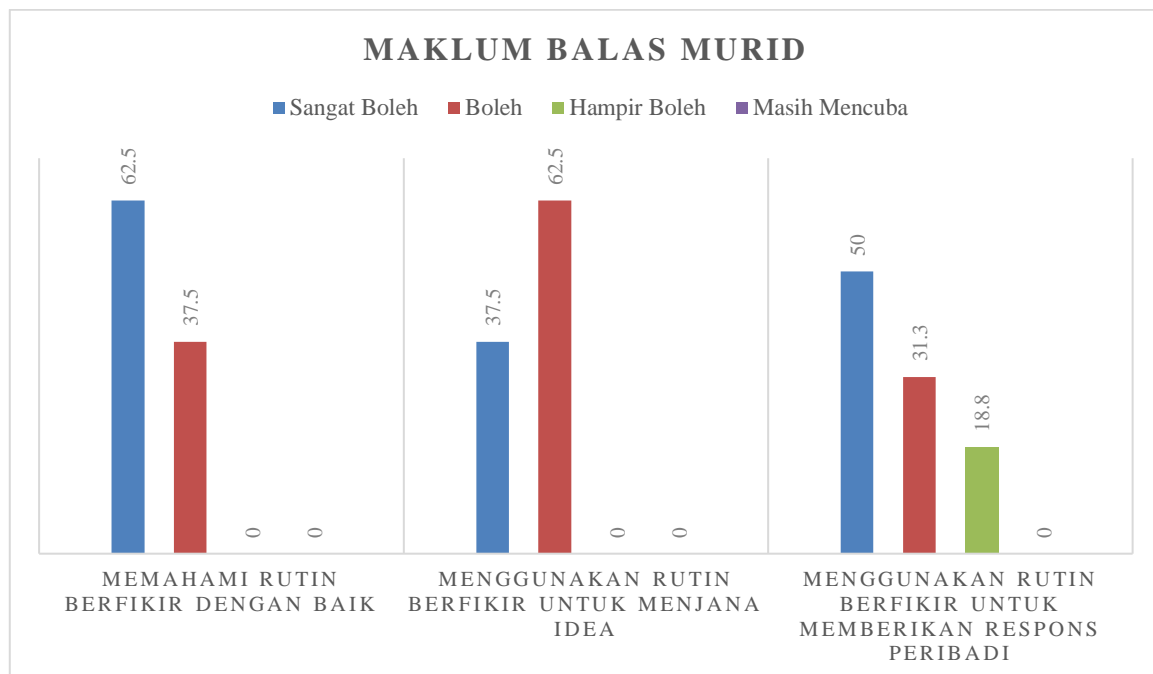
Analisis data dibuat secara kuantitatif dan kualitatif. Dalam kajian ini, tiga soalan utama diajukan kepada murid-murid. Setiap soalan itu perlu ditanya untuk mengenal pasti sejauh manakah tahap pemahaman dan penguasaan murid semasa bertutur. Data yang diperolehi telah dibanding beza antara satu pasangan dengan pasangan yang lain. Data daripada borang penilaian sendiri dianalisis dalam bentuk peratus dan diterjemahkan dalam bentuk jadual dan rajah.

Berdasarkan borang penilaian sendiri, dapatan menunjukkan 100% murid mengatakan mereka boleh memahami rutin berfikir 3-2-1 Bina Titian dengan baik dan 100% murid dapat menggunakan rutin tersebut untuk menjana idea tentang tema video. Namun, hanya 81.3 % murid dapat menggunakan rutin berfikir 3-2-1 Bina Titian untuk memberikan respons peribadi dengan baik. Rujuk Jadual 1 dan Rajah 2 di bawah ini.

**Jadual 1:** Respons Murid-murid Terhadap Rutin Berfikir 3-2-1 Bina Titian  
(Jumlah Responden = 16)

No	Item	Boleh (%)	Tidak Boleh (%)
1	Memahami rutin berfikir 3-2-1 Bina Titian 1 dengan baik.	100% (16)	0% (0)
2	Menggunakan rutin berfikir 3-2-1 Bina Titian untuk menjana idea tentang klip video.	100% (16)	0% (0)
3	Menggunakan rutin berfikir 3-2-1 Bina Titian untuk memberikan respons peribadi dengan baik.	81.3% (13)	18.8% (3)

Sumber: Dapatkan daripada Borang Penilaian Kendiri



**Rajah 2:** Maklum Balas Murid Menggunakan Lembaran Kerja Rutin Berfikir 3-2-1 Bina Titian

Sumber: Dapatkan daripada Borang Penilaian Kendiri

Murid-murid juga turut memberi maklum balas tentang perkara-perkara yang ingin mereka perbaiki iaitu dari segi kelancaran bertutur, cara memberi respons, struktur ayat dalam ucapan, idea-idea yang pelbagai, dan keyakinan serta penggunaan bahasa. Ada juga murid yang memerlukan lebih masa untuk menonton video. Data-data ini penting kerana ia membolehkan

guru untuk merancang pengajaran dengan mengambil kira perkara-perkara yang ditimbulkan oleh murid-murid.

Analisis data juga dibuat melalui respons bertulis individu murid-murid dalam lembaran kerja. Dapatan menunjukkan 100% murid boleh memberikan 3 perkara penting tentang klip video. 50% murid boleh memberikan satu saranan dan satu pendapat untuk item '2' manakala 100% murid boleh memberikan respons tentang pengalaman peribadi. Memandangkan data item '2' menunjukkan peratusan yang terendah, pengkaji akan menumpukannya dengan lebih teliti.

Rata-rata, untuk item '2', murid-murid boleh memberikan pendapat tetapi ada dalam kalangan murid yang mempunyai masalah dalam memberikan saranan. Saranan yang diberikan itu bukan berbentuk saranan tetapi lebih kepada akibat. Malah, ada juga murid yang tidak memberikan penerangan lanjut tentang saranannya itu dan pasangan pula tidak meminta penjelasan lanjut. Sila rujuk Jadual 2: Contoh Transkripsi.

#### Jadual 2: Contoh Transkripsi

- Murid A: *“Adakah sikap jujur itu penting? Mengapa?”*  
Murid B: *Sikap jujur itu penting kerana kalau kamu tidak jujur, tidak ... tiada orang ... tidak ada orang hendak percaya kamu.*  
Murid A: *Kedua, “Saranan cara-cara sekolah boleh menggalakkan murid-murid bersikap jujur.”*  
Murid B: *Sekolah boleh buat acara kejujuran.*  
Murid A: *Dah.*  
Murid B: *Ar... bagaimana... ar ... apakah pendapat kamu?*  
Murid A: *(Murid kelihatan bingung) Itulah. (Murid menunjuk ke arah soalan yang tertera di layar skrin)*  
Murid B: *Oh, “Adakah sikap jujur itu penting? Mengapa?”*  
Murid A: *Ya, jadi orang lain boleh percaya kamu.*  
Murid B: *Kedua, “Saranan cara-cara sekolah boleh menggalakkan murid-murid bersikap jujur.*  
Murid A: *Sekolah boleh buat ar... acara kejujuran. Kalau tak jujur kena bayar 10 sen.*  
*(Kedua-dua murid ketawa kecil)*

Contoh di atas ini menunjukkan satu interaksi sosial yang berlaku di antara dua orang murid. Malah interaksi ini juga turut berlaku untuk kesemua pasangan. Namun, interaksi ini akan lebih bermakna sekiranya murid-murid dilatih untuk melahirkan idea-idea yang lebih bernas dan menarik seperti yang dikatakan oleh Vacca et al.'s (2011) bahawa “apabila murid-murid bekerjasama dalam kumpulan secara kooperatif, mereka akan menghasilkan lebih banyak idea, mereka lebih terlibat dalam pembelajaran, dan berani mengambil risiko intelektual”.

Setelah meneliti kedua-dua dapatan, terdapat perbezaan dapatan di antara data penilaian sendiri dan respons yang diberikan oleh murid-murid. Murid-murid bersikap positif terhadap rutin berfikir 3-2-1 Bina Titian ini walaupun terdapat beberapa kekurangan yang berlaku dari segi respons. Berdasarkan respons murid, bagi bahagian dapatan kajian menunjukkan guru boleh mengenal pasti kekurangan tersebut dan membimbing murid-murid tentang cara-cara memberi respons yang lebih baik.



## Kesimpulan

Kajian pengajaran ini telah mencapai matlamat yang ingini. Pertama, murid-murid sudah tahu menggunakan rutin berfikir 3-2-1 Bina Titian. Kedua, dengan menggunakan rutin ini, murid-murid boleh menjana idea tentang sesuatu tema. Berdasarkan hasil data ini boleh dirumuskan bahawa murid-murid mampu mengikuti rutin ini dengan mudah dan menggalak interaksi berlaku secara aktif dalam kalangan mereka.

Sebagai cadangan, guru harus mengenal pasti keupayaan murid-murid di kelas dahulu sebelum memperkenalkan murid-murid kepada ketiga-tiga rutin berfikir. Sebelum masuk kepada rutin berfikir, guru-guru perlu menyediakan masa untuk membina pengetahuan sedia ada dan kosa kata murid berkaitan dengan tema yang akan diajarkan. Pengkaji juga menggalakkan para guru untuk membuat perancangan secukupnya untuk memahami rutin ini dijalankan secara bertahap-tahap. Dari segi interaksi, guru boleh menetapkan jangkaan seperti setiap murid harus bertanya soalan berdasarkan respons pasangan mereka. Rutin ini bukan sahaja menggalak murid berfikir malah membolehkan mereka untuk berinteraksi.

Kajian ini bukan sahaja dapat memberi manfaat kepada murid-murid, malah, guru-guru juga dapat menambah ilmu dengan memperbaiki pengajaran lisan khususnya kemahiran bertutur.

## Rujukan

- Hurst, B., Wallace, R., & Nixon, S. B. (2013, September). The Impact of Social Interaction on Student Learning. *Reading Horizons*, 52(4), 2013.
- Ritchart, R. C. (2011). *Making Thinking Visible: How to promote engagement, understanding, and independence for all learners*. San Francisco: Jossey-Bass.
- Rosenshine, B. (1997). The case for explicit, teacher-led, cognitive strategy instruction. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL. Retrieved from <http://www.formapex.com/telechargementpublic/rosenshine1997a.pdf>
- Routman, R. (2005). *Writing essentials: Raising expectations and results while simplifying teaching*. Portsmouth: Heinemann.
- Salmon, A. K. (2008). Promoting a culture of thinking in the young child. 457-461. *Early Childhood Education Journal*, 35(5), 457-461.
- Siti Hajar Abdul Aziz. (2009). *Siri Pendidikan Guru: Bahasa Melayu II*. Selangor Darul Ehsan: Laser Press Sdn Bhd.
- Vacca, R. V. (2011). *Content area reading: Literacy and learning across the curriculum (10th ed.)*. Boston: Pearson.
- Yahya Don. (2005). *Kepimpinan Pendidikan di Malaysia*. Wangsa Melawati: PTS Professional Publishing Sdn. Bhd. m.



## PEMAHAMAN WATAK DALAM CERITA UNTUK MENCUNGKIL KOSA KATA BERKAITAN NILAI

Hajjah Marzia<sup>1</sup>  
Nur Hasyimah<sup>2</sup>

<sup>1</sup>Sekolah Rendah Fuchun dan Pusat Bahasa Melayu Singapura, Singapura, (E-mel: hajjah\_marzia@moe.edu.sg)

<sup>2</sup>Sekolah Rendah Fuchun dan Pusat Bahasa Melayu Singapura, Singapura, (E-mel:

[nur\\_hasyimah\\_surnin@moe.edu.sg](mailto:nur_hasyimah_surnin@moe.edu.sg))

---

**Abstrak:** Penelitian pencapaian murid darjah 5 dalam ujian lisan menunjukkan bahawa murid tidak mampu mengembangkan idea semasa perbualan mereka kerana pengetahuan kosa kata mengenai nilai yang terbatas. Mereka tidak dapat mengaitkan sesuatu perbuatan itu dengan nilai-nilai moral yang dipelajari. Hal ini terjadi kerana murid kurang memahami sesuatu situasi dan sering mementingkan diri sendiri dalam membuat keputusan. Kajian yang dijalankan bertujuan untuk meningkatkan pemahaman murid mengenai watak dalam cerita agar mereka lebih prihatin dan memahami situasi yang dihadapi oleh watak tersebut. Murid memahami watak dalam cerpen dengan mencungkil kosa kata melalui perbuatan watak yang berkaitan dengan nilai. Melalui aktiviti yang dijalankan, tahap penaakulan murid dapat dipertingkatkan dan murid mampu bertutur dan menghubungkan sesuatu perbuatan dengan nilai moral yang hendak disampaikan. Hasil kajian menunjukkan bahawa terdapat peningkatan dalam penaakulan murid dan keputusan komponen perbualan murid.

**Kata Kunci:** Minat Membaca, Perwatakan, Memupuk Nilai, Sumbang Saran Kosa Kata

---

### Pengenalan

Penelitian pencapaian murid darjah 5 dalam ujian lisan menunjukkan bahawa murid tidak mampu meluaskan perbualan kerana pengetahuan mereka mengenai nilai-nilai moral terbatas. Murid juga didapati sering mendapatkan bantuan guru jika mempunyai masalah dengan rakan-rakan. Guru-guru berpendapat bahawa para murid sepatutnya cuba berusaha untuk menyelesaikan masalah tersebut sendiri dahulu.

Kajian dirancang untuk mencari strategi yang sesuai untuk membantu murid darjah 5 meningkatkan tahap penaakulan moral mereka agar dapat memahami situasi. Melalui cerpen, murid dapat memahami watak dan nilai moral. Dengan mencungkil kosa kata yang menunjukkan perbuatan watak, murid lebih memahami keadaan yang dihadapi watak dan menghubungkan perbuatan tersebut kepada nilai moral yang hendak disampaikan.

Penggunaan cerpen yang dipilih membantu murid menghubungkan masalah watak dengan masalah yang mereka hadapi. Beberapa aktiviti dan tugas telah disediakan untuk membantu murid memahami situasi yang dihadapi watak di dalam cerpen agar mereka lebih prihatin dan peka terhadap situasi dan perasaan seseorang.

### Tujuan Kajian

Tujuan kajian ini dijalankan adalah untuk:

1. memupuk penghayatan dan amalan nilai dalam diri murid melalui bahan sastera;
2. menarik minat murid untuk membaca bahan bacaan Bahasa Melayu; dan
3. membantu murid memahami watak dalam cerpen dengan mencungkil kosa kata yang berkaitan dengan nilai moral.



### **Pernyataan Masalah**

Pendidikan Perwatakan dan Kewarganegaraan (CCE) yang merupakan nadi sistem pembelajaran di Singapura telah bermula sejak tahun 2014. Matlamat CCE adalah untuk memupuk nilai dan meningkatkan kemahiran murid-murid agar menjadi insan yang baik dan rakyat yang berguna. (CCE, 2014) Nilai-nilai teras yang ingin diajarkan dalam sukatan CCE merupakan asas bagi seseorang untuk menjadi insan yang baik dan rakyat yang berguna. Nilai-nilai ini dapat membimbing murid dalam membezakan antara yang betul dengan yang salah. Oleh yang demikian, mereka dapat membuat pilihan yang bertanggungjawab dan lebih sedar akan peranan mereka dalam masyarakat.

Melalui kecekapan sosial dan emosi dalam Rangka Kecekapan Abad ke-21 dan Hasil Murid, murid perlu mahir dalam menguruskan emosi mereka, membuat keputusan yang bertanggungjawab dan bermoral serta beretika semasa berhubungan dengan orang lain dalam menangani situasi yang mencabar (CCE, 2014).

Namun, para murid yang datang dari pelbagai latar belakang keluarga serta tahap pengetahuan yang berbeza, menuntut guru-guru melakukan sesuatu untuk merapatkan jurang nilai antara murid. Murid juga didapati kurang mempunyai pengetahuan mengenai kaitan perbuatan dan sifat nilai murni. Melalui pemerhatian dan interaksi guru-guru dengan murid, didapati bahawa ada murid-murid yang lebih mementingkan diri sendiri dan tidak menghiraukan perasaan orang lain. Hal ini kerana terdapat ramai murid yang membuat aduan berkenaan hal-hal yang remeh setiap hari. Hal-hal tersebut merupakan perkara yang dapat diselesaikan oleh murid sendiri.

Pemerhatian menunjukkan murid didapati hanya tertarik untuk membaca buku-buku cerita bahasa Inggeris. Tinjauan menunjukkan seramai 78% murid lebih gemar membaca buku-buku bahasa Inggeris. Mereka menyatakan bahawa buku-buku bahasa Inggeris mempunyai nilai tarikan kerana ia mendebarkan dan ada unsur suspens. Guru-guru juga ingin murid menghayati cerita yang dikemukakan dalam buku-buku yang dibaca. Guru-guru ingin murid menghayati cerita-cerita yang dibaca dan fahami pengajaran yang hendak disampaikan kerana cerita-cerita yang terdapat dalam buku-buku bahasa Melayu mempunyai nilai moral yang tinggi. Diharapkan kajian dapat meningkatkan penguasaan bahasa Melayu murid kerana minat membaca bahan bahasa Melayu meningkat.

### **Kajian Lepas**

Terdapat beberapa teori yang menyokong pembelajaran CCE. Kohlberg (1981, 1983) mengkaji dan mempelajari penaakulan moral dengan memberikan dilema moral kepada peserta dan bertanyakan keputusan yang mereka akan ambil. Para peserta juga perlu menjelaskan sebab-sebab mengapa jalan tersebut diambil. Kohlberg telah membuktikan melalui beberapa kajian bahawa penaakulan moral seseorang adalah bertahap. Beliau telah menghasilkan tiga aras penaakulan iaitu 'Prakonvensional', 'Konvensional' dan 'Pascakonvensional'. Setiap aras terbahagi kepada dua tahap yang menerangkan pemikiran seseorang semasa membuat pertimbangan dan penilaian dilema moral. Ketiga-tiga tahap dapat diterangkan melalui Jadual 1 di bawah:

**Jadual 1:** Tiga Tahap Penaakulan Kohlberg (1981, 1983)

Aras	Usia	Tahap	Penaakulan Moral
1 Pra Konvensional	1-5 tahun	1 Menurut perintah / mengelakkan denda	Kanak-kanak melakukan perkara yang betul kerana mahu mendengar kata dan tidak mahu didenda

	5-10 tahun	2 Mendapat ganjaran	Kanak-kanak akan melakukan perkara yang betul jika ia menguntungkan
2 Konvensional	8-16 tahun	3 Menjadi individu yang 'Baik'	Mereka dalam peringkat usia ini beralih daripada menyenangkan diri sendiri kepada menyenangkan diri orang-orang penting dalam hidup mereka.
	16 tahun ke atas	4 Undang-undang dan peraturan	Mereka dalam peringkat usia ini rasa perlu untuk mengikut peraturan kerana telah ditetapkan oleh pihak berkuasa
3 Pasca Konvensional	Dewasa	5 Keadilan melalui demokrasi	Individu melakukan yang terbaik untuk masyarakat. Mereka mengikut peraturan yang mereka anggap munasabah.
		6 Prinsip moral universal	Individu tidak mengikut sahaja kepentingan dan pendapat orang lain. Mereka berpegang kuat pada nilai walaupun bertentangan dengan undang-undang.

Sumber: Moral Stages: A Current Formulation And A Response To Critics

Menurut Kohlberg (1981, 1983) lagi, seseorang itu tidak akan melangkaui daripada satu tahap ke tahap yang lebih tinggi dan bukan semua orang akan sampai ke tahap yang tertinggi. Seseorang murid akan berada di tahap yang sama jika tidak dibantu untuk mencapai tahap yang lebih tinggi.

'Dilema Heinz' digunakan dalam praujian untuk menentukan tahap penaakulan moral murid. Kohlberg (1981, 1983) menggunakan cerita ringkas di mana seseorang itu perlu membuat keputusan moral. Murid ditanya apa yang akan dilakukan seseorang jika berada dalam situasi yang diberikan. Jawapan yang diberikan dibandingkan dengan aras dan tahap penaakulan moral yang diterangkan dalam jadual.

Maich dan Kean (2003) telah menekankan kepentingan pemilihan buku cerita yang sesuai dengan tahap sosio emosi murid. Sebelum pelajaran diajarkan, para guru perlu mengenal pasti masalah yang dihadapi oleh murid. Guru perlu menjalankan pelajaran dengan menghubungkaitkan pengalaman murid dengan masalah yang dihadapi dalam cerita yang telah dipilih. Setelah mendapatkan penyelesaian masalah melalui cerita, murid dapat mengaplikasikan strategi penyelesaian tersebut kepada masalah yang dihadapi mereka.

Berdasarkan tinjauan yang dilakukan Dr Hadijah Rahmat (2006), perkembangan sastera Melayu amatlah perlahan dan lembap dari segi bilangan. Sebanyak 621 cerpen telah diterbitkan dalam pelbagai bentuk antara 1901-1982. Oleh sebab ini juga, pelajar dapati bahawa bahan yang dihasilkan tidak dapat memenuhi kehendak perkembangan mereka.

Dapatan kajian akan dikongsi dengan guru-guru Bahasa Melayu lain di sekolah yang sama untuk mendapatkan kerjasama mereka dalam meningkatkan kosa kata pelajar dan memberi kesan nilai murni dalam diri pelajar. Secara tidak langsung, ia juga dapat meningkatkan minat membaca bahan Bahasa Melayu dalam kalangan pelajar di seluruh sekolah. Kajian lanjutan akan dijalankan dengan kumpulan pelajar yang berbeza untuk membandingkan dapatan. Dapatan tersebut diharapkan dapat mengukuhkan keberkesanan



pengajaran dan strategi yang digunakan agar dapat dimanfaatkan oleh guru-guru Bahasa Melayu yang lain.

### **Kaedah Kajian**

Kajian dijalankan dengan murid darjah 5 seramai 38 orang. Murid-murid terdiri daripada yang tinggi tahap pencapaian bahasa. Kumpulan murid ini dipilih kerana sesuai mengikuti pelajaran berfokuskan penghayatan dan amalan nilai yang terdapat dalam cerpen yang digunakan. Pengkaji tidak mahu kemahiran bahasa menjadi penghalang terhadap pemahaman murid dalam meneliti watak-watak dalam cerpen yang digunakan. Murid diajar oleh guru mata pelajaran Perwatakan dan Kewarganegaraan (CCE). Hal ini adalah kerana murid akan lebih selesa jika guru yang mengajar ialah guru yang sudah mempunyai hubungan yang rapat untuk membolehkan murid berasa selesa berkongsi pengalaman mereka. Guru tersebut dilengkapi dengan rancangan pengajaran dan bahan-bahan yang diperlukan untuk menjalankan pengajaran. Pemantauan dijalankan oleh guru lain yang terlibat dan rakaman video dilakukan untuk membantu menganalisis pelajaran dalam kelas.

Kajian yang dijalankan berbentuk tindakan dan '*within participant*'. Murid diberi senario dilema semasa praujian sebelum pengajaran dijalankan. Pada akhir pengajaran, murid diberikan senario dilema yang berbeza untuk melihat keberkesanan strategi yang diajar.

Respons murid mengenai 'Dilema Heinz' dicatatkan pada awal kajian sebagai praujian untuk melihat keberkesanan penggunaan cerpen dalam meningkatkan nilai murni dalam diri murid. Respons murid mengenai senario dilema yang dikemukakan pada akhir kajian dicatat sebagai pascapujian untuk dijadikan perbandingan. Melalui aktiviti-aktiviti yang dijalankan, murid dapat juga meningkatkan kosa kata berkaitan nilai dan dengan pengetahuan ini, mereka dapat mengaplikasikan pengetahuan dalam ujian lisan mereka.

Pelajaran pertama dimulakan dengan tontonan video 'Dilema Heinz'. Setelah murid menonton video, murid diberikan masa untuk melakukan renungan tentang 'Dilema Heinz'. Murid kemudiannya mencatatkan jawapan mereka pada lembaran kerja yang diberikan. Keputusan menunjukkan bahawa 69.4% daripada murid memberikan jawapan yang menunjukkan bahawa mereka berada pada tahap 'Prakonvensional'. Seramai 22.2% murid berada pada tahap 'Konvensional' dan terdapat 8.4% murid memberikan jawapan pada tahap 'Pascakonvensional'.

Pelajaran diteruskan dengan perbincangan tentang cerpen 'Denda' tulisan Nazel Hashim Mohamad daripada buku cerpen 'Meraih Kasihmu'. Murid telah pun diminta untuk membaca cerpen tersebut pada hari sebelumnya dan perkataan-perkataan yang baharu bagi mereka telah diterangkan. Guru memberikan fokus kepada jalan cerita dan watak-watak yang terdapat dalam cerpen kerana ia membantu murid memahami pelajaran seterusnya. Guru juga menceritakan tentang pengalaman yang serupa yang pernah dialaminya. Penceritaan menarik minat murid dan memberikan pengalaman yang berbeza kerana ia dikongsi oleh guru mereka. Murid dapat pengalaman daripada perspektif yang lain.

Pelajaran kedua melibatkan murid memahami dengan lebih mendalam mengenai watak dalam cerpen iaitu Ayah Ramli dan Cikgu Hamzah. Penghayatan watak dalam cerpen dapat menimbulkan pemikiran yang lebih mendalam dan perasaan yang berbeza. Untuk merancah dan memudahkan pemahaman murid mengenai tujuan pelajaran, guru telah menunjukkan gambar dua watak iaitu gambar seorang ayah dan seorang guru. Murid telah diminta untuk memberikan pendapat mereka mengenai watak dalam gambar yang ditunjukkan. Murid telah memberikan maklumat sifat-sifat seorang ayah dan guru yang mereka ketahui. Murid juga diminta memberikan bukti yang menyokong sifat yang mereka kemukakan. Gambaran dapat

meningkatkan pengalaman membaca murid dan memudahkan pemahaman. Fang (1996) menyenaraikan enam peranan gambar dalam cerita. Menurut beliau, gambar membantu dalam (a)memantapkan sekitaran, (b)mengembangkan watak, (c)meluaskan plot, (d)menyediakan sudut pandangan yang berbeza, (e)menyumbang kepada kepaduan teks dan (f)memperkuh pemahaman teks.

Pelajaran diteruskan dengan murid berbincang dalam kumpulan dan mencatatkan nota dalam lembaran kerja 'Perspektif Watak' mengenai kedua-dua watak yang dipilih. Semasa pemantauan, guru-guru mendapati bahawa murid merujuk kepada teks untuk mendapatkan jawapan dan mencari bukti untuk pernyataan mereka. Ini dilihat sebagai suatu pengukuhan pengajaran yang diajarkan kepada murid. Murid telah diajar mencari bukti dalam memberikan jawapan kefahaman. Tindakan murid melakukan perkara yang sama dalam situasi yang berbeza ini menunjukkan bahawa murid dapat mengaplikasi pengajaran dan pengalaman dalam pelajaran lainnya untuk situasi yang serupa. Murid kemudiannya berkongsi dengan kumpulan yang lain. Kerja kumpulan membantu murid membina dan mengembangkan kemahiran kerana mereka dapat mempelajari daripada antara satu sama lain (Caruso & Woolley, 2008; Mannix & Neale, 2005).

Murid kemudiannya dibantu dengan perancah agar dapat memahami lembaran kerja 'Bagaimana dan mengapa watak berubah' sebelum murid berbincang dan menuliskan jawapan mereka. Untuk memudahkan pemahaman, guru menceritakan pengalaman sendiri mengenai perubahan pendapat dan sikap tentang sesuatu perkara. Penceritaan guru didapati amat menarik minat murid. Sesuatu nilai itu dipelajari secara tidak langsung oleh murid-murid apabila mereka melihat nilai berkenaan diamalkan dalam pengalaman yang berbeza-beza, bermula daripada orang-orang dewasa yang penting dalam hidup mereka contohnya ibu bapa dan guru, dan kemudian diamalkan dalam hidup mereka sendiri (CCE, 2014).

Murid tekun mendengar cerita guru dan hal ini membuatkan guru-guru ingin memasukkan idea penceritaan ke dalam pelajaran seterusnya. Pada akhir pelajaran, guru memberitahu murid bahawa sikap dan pendapat seseorang boleh berubah berdasarkan situasi atau pengalaman yang mereka hadapi. Lebih banyak pengalaman seseorang adalah lebih baik kerana pengalaman membawa pengajaran. Hal ini merupakan tujuan utama kajian dijalankan kerana pengkaji hendak menyediakan murid dengan pelbagai pengalaman yang dapat digunakan dalam situasi yang dihadapi mereka. Sebagai aktiviti lanjutan di rumah, murid diminta mengisi borang renungan mengenai pengalaman yang mereka pernah lalui untuk pelajaran seterusnya.

Semasa pelajaran ketiga, murid berkongsi pengalaman mereka melalui aktiviti 'Kerusi Panas' di mana murid ke hadapan kelas untuk duduk di kerusi 'Pengaroh'. Murid tersebut akan menceritakan pengalaman mereka berdasarkan borang renungan yang mereka isikan pada pelajaran sebelumnya. Murid yang lain mendengar dengan teliti dan pada akhir penceritaan, mereka dapat bertanyakan soalan atau memberikan pendapat atau cadangan terhadap cerita yang dikongsi. Aktiviti ini dipilih kerana minat murid dalam mendengar pengalaman guru semasa pelajaran sebelumnya. Semasa aktiviti ini, murid juga dilihat tekun mendengar cerita rakan kerana cerita yang nyata dan dialami sendiri oleh rakan mereka. Bersesuaian dengan prinsip yang dijadikan panduan dalam CCE (2014), murid akan dapat mengekalkan kemahiran dan nilai murni yang diajarkan jika pengetahuan tersebut dalam konteks yang tidak asing bagi murid. Amatlah penting bagi murid memahami dan mengetahui bagaimana nilai-nilai murni, kecekapan sosial dan emosi dapat diamalkan agar mereka dapat menjadikannya contoh apabila menghadapi cabaran seterusnya.



Pada akhir pelajaran ini, guru mengingatkan murid sekali lagi bahawa sikap atau pendapat seseorang boleh berubah berdasarkan situasi atau pengalaman yang dihadapi. Lebih banyak pengalaman seseorang adalah lebih baik kerana pengalaman memberikan pengajaran yang bermakna. Pengalaman juga dapat diraih melalui beberapa cara, antaranya, situasi yang dihadapi, mendengar pengalaman orang lain, rancangan yang ditonton atau melalui cerpen yang dibaca. Sebagai rancangan pelajaran seterusnya, murid diminta membaca cerpen ‘Meraih Kasihmu’ oleh Nazel Hashim Mohamad.

Pelajaran keempat merupakan pelajaran menggunakan cerpen yang berbeza. Setelah memastikan murid memahami kosa kata yang baharu bagi mereka dan jalan cerita, guru melanjutkan pelajaran dengan memberitahu tujuan pelajaran iaitu mengenali sifat watak ‘Karim’ dalam cerpen. Guru menerangkan kepada murid bahawa sifat watak dalam cerpen dapat dipelajari dan dilihat melalui soalan seperti: bagaimana rupa watak; apa yang watak katakan dan fikirkan; apa yang watak lakukan; apa yang watak rasakan dan apa yang watak lain katakan dan fikirkan tentang watak tersebut. Setelah dirancah, murid mengisikan lembaran kerja ‘Memahami Watak’ dalam kumpulan.

Setelah mengisikan lembaran kerja, murid berkongsi catatan sesama kumpulan secara ‘World Café’. Pelajaran diteruskan dengan memberikan fokus terhadap petikan pada halaman 124 dalam cerpen. Watak Karim telah menyatakan pendapatnya kepada sidang lembaga. Murid diminta menuliskan ‘Nota Karim’ yang diucapkan semasa sidang lembaga untuk menyatakan kekesalannya melakukan perkara-perkara yang melanggar undang-undang sekolah. Karim menyatakan pendapatnya agar denda yang bakal diterimanya dapat diringkankan. Aktiviti ini melibatkan murid secara aktif kerana murid dapat menggunakan pengalaman mereka untuk mengutarakan rasa kesal.

Setelah menuliskan ‘Nota Karim’ secara individu, murid berkongsi pendapat mereka dalam kumpulan. Pada akhir pelajaran, murid diberitahu bahawa seseorang boleh bertindak secara positif atau negatif dalam setiap situasi. Murid diberitahu bahawa mereka perlu berfikir dengan lebih mendalam sebelum bertindak dalam apa jua situasi kerana sesal dahulu pendapatan, sesal kemudian tiada gunanya. Guru kemudiannya menceritakan pengalaman yang serupa yang pernah dialami.

Semasa pelajaran terakhir, murid diberitahu tentang perkara yang betul dan yang salah yang dilakukan Karim. Namun, Karim telah memilih untuk bertindak negatif. Akhirnya, Karim menyesal dan ingin berubah. Murid diminta untuk menuliskan atau melukiskan kata-kata perangsang kepada Karim agar Karim tidak berputus asa dalam usahanya untuk berubah kepada kebaikan. Murid-murid juga boleh menyarankan perkara-perkara yang dapat Karim lakukan agar berjaya dalam usahanya. Murid juga dapat melibatkan secara aktif kerana mereka menggunakan pengalaman yang mereka lalui semasa menuliskan kata-kata perangsang. Murid juga dapat menggunakan situasi mereka sendiri yang menghadapi masalah dan perlukan kata-kata perangsang.

Setelah menyelesaikan tugas, murid diminta untuk mengisi renungan yang berupa senario dua dilema. Murid diminta untuk menuliskan jawapan mereka berdasarkan situasi yang diberikan. Pada akhir pelajaran, guru memberitahu murid bahawa buku-buku cerita banyak mengandungi pelajaran yang dapat mengajar pembaca tentang kehidupan. Murid dapat menggunakan pengalaman membaca dalam mengharungi cabaran kehidupan mereka. Peluang pengalaman yang diberikan kepada murid melalui pembacaan dapat membantu mereka dalam mengatasi masalah. Menurut Smith-D’Arezzo dan Thompson (2006), terdapat pelbagai buku di pasaran yang menggambarkan situasi kehidupan yang berbeza. Melalui pembacaan ini,

murid yang tidak mempunyai cabaran juga dapat didedahkan kepada pengalaman hidup yang dapat meningkatkan pemahaman mereka tentang nilai-nilai.

Semasa murid meningkatkan nilai moral melalui pembacaan cerpen, aktiviti-aktiviti lembaran kerja diberikan agar murid dapat mencungkil kosa kata baharu yang menunjukkan sifat seseorang. Murid telah dapat mengenal pasti perbuatan watak dalam cerita dan menghubungkaitkan perbuatan tersebut sebagai bukti sesuatu sifat. Murid juga dirancah untuk menyenaraikan perbuatan lain yang dapat menunjukkan nilai yang dipelajari.

### Dapatan Kajian Dan Perbincangan

Dapatan kajian menunjukkan bahawa murid berupaya mengenal pasti penggunaan kata Adjektif dalam cerpen-cerpen yang dibaca. Murid juga telah menunjukkan usaha memahami makna dan mengenal pasti kata Adjektif yang sesuai ketika mengaitkan dengan isu-isu berkenaan nilai dan juga sifat watak dalam cerpen. Jadual 2 memperlihatkan antara contoh-contoh kata Adjektif yang dikenal pasti daripada cerpen-cerpen yang dibaca dan digunakan oleh murid dalam jawapan mereka:

**Jadual 2:** Senarai Kata Adjektif dari Cerpen

Cerpen: Denda	adil, berani, berdedikasi, cekal, nakal, panas baran, pembohong, penyabar, penyayang, taat setia, tenang
Cerpen: Meraih Kasihmu	bersyukur, berani mengakui kesalahan diri, berjasa kepada sekolah dan masyarakat, disiplin, hormat-menghormati, ikhlas, jujur, kepimpinan, mengenang budi, prihatin, tanggungjawab, yakin dengan kebolehan diri

**Sumber:** Meraih Kasihmu

Sebagai kayu ukur, respons yang dicatatkan murid dalam Renungan Dilema yang diberikan dianalisis mengikut tahap 1 hingga 6 Tahap Penaakulan Moral Kohlberg. Namun, oleh sebab praujian ‘Dilema Heinz’ yang dijalankan menggunakan tiga tahap, maka kayu ukur kajian ini diubah suai mengikut tahap yang serupa. Tahap ‘Prakonvensional’ dibahagikan kepada dua, iaitu Tahap 1A yang merupakan tahap di mana murid menyatakan bahawa mereka mematuhi undang-undang kerana takut akan didenda. Kenyataan yang ada kaitan dengan respons menerima denda akan dikategorikan ke dalam tahap ini. Tahap 1B pula menyatakan kelakuan murid yang diambil kerana kepentingan diri mereka. Murid yang berada pada tahap ini akan melakukan perkara yang betul jika ia menjanjikan ganjaran.

Kenyataan yang dikategorikan dalam tahap ‘Konvensional’ pula dibahagi kepada Tahap 2A yang merupakan kenyataan murid mengambil keputusan kerana ingin dilihat sebagai seseorang yang baik. Jika murid menyatakan bahawa mereka meminta maaf dan ingin berubah sikap, mereka akan dikategorikan ke dalam tahap ini. Tahap 2B pula merupakan tindakan yang diambil kerana murid menghormati undang-undang dan pihak berkuasa. Tindakan demikian menunjukkan bahawa murid bertanggungjawab ke atas penerimaan masyarakat.

Tahap ‘Pascakonvensional’ pula terdiri daripada Tahap 3A yang memberi gambaran bahawa murid melakukan sesuatu kerana ia merupakan perkara yang betul dilakukan. Murid akan menghormati undang-undang selagi mereka menganggap undang-undang itu adil untuk semua. Murid yang menunjukkan pencapaian Tahap 3B pula ialah murid yang berpegang kepada prinsip mereka walaupun dikatakan lain daripada yang lain. Mereka sanggup menyanggah peraturan kerana prinsip yang dipegang. Tahap ini ialah tahap yang tertinggi



dalam penaaakulan moral Kohlberg kerana seseorang yang berada pada tahap ini memegang prinsip moral yang universal dan hanya dapat dilihat dalam diri seseorang dewasa.

Respons murid seperti, 'harus hentikan latihan bola' dan 'tidak boleh meniru kerja rakan' merupakan jawapan yang merujuk kepada tahap 1A kerana murid takut didenda dan melakukan perkara yang dikehendaki sahaja iaitu meningkatkan keputusan peperiksaan. Murid yang memberikan respons 'mahu mendapatkan pertolongan sama ada daripada ibu dan bapa atau guru dan rakan' dan 'melakukan ulang kaji' menunjukkan murid berada di tahap 1B di mana mereka melakukan perkara tersebut untuk kepentingan mereka sendiri. Mereka hanya akan belajar jika mendapat pertolongan tetap tetap mahu meneruskan latihan bola mereka.

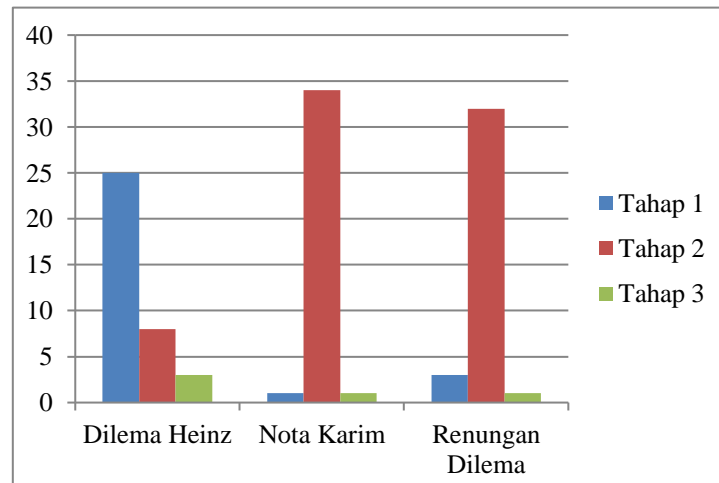
Murid berada pada tahap 2A memberikan respons seperti, 'harus melakukan kerjanya sendiri walaupun mendapat jawapan yang salah' dan 'berusaha agar dapat mengikuti pelajaran dan latihan bola'. Murid pada tahap ini mahu menunjukkan bahawa mereka berusaha untuk menjadi seseorang yang baik. Mereka tahu yang mana perkara yang patut dan tidak patut dilakukan. Murid yang berada pada tahap 2B pula memberikan respons seperti, 'pergi ke perpustakaan untuk belajar'. Murid tahu bahawa untuk dibenarkan pergi ke latihan bola, murid harus meningkatkan kedua-dua usaha dalam pelajaran dan kegiatan sukan kerana kedua-duanya memberikan manfaat kepada murid.

Respons murid 'hendak membuat jadual masa' menunjukkan murid berada di tahap 'Pascakonvensional' kerana murid menghormati undang-undang dan berusaha mencari jalan penyelesaian untuk mendapatkan apa yang dimahukan. Hanya seorang murid sahaja yang memberikan jawapan seperti ini.

Penelitian jawapan murid dalam 'Nota Karim' menunjukkan bahawa tahap penaaakulan moral kebanyakan murid telah meningkat berbanding dengan praujian yang dijalankan pada awal pelajaran. Terdapat 94.4% murid yang menuliskan jawapan pada tahap 'Konvensional'. Hal ini adalah kenaikan sebanyak 72.2% yang menunjukkan tahap moral yang lebih tinggi.

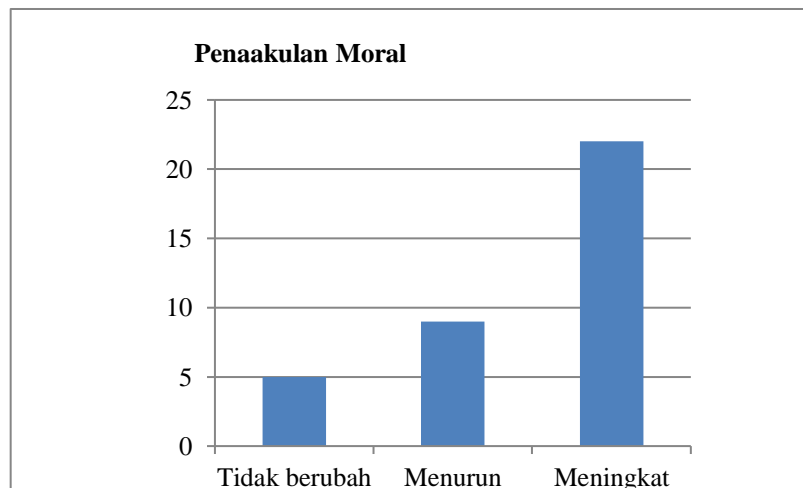
Penelitian jawapan murid dalam 'Renungan Dilema' pula menunjukkan seramai 88.8% murid berada pada tahap 'Konvensional'. Walaupun terdapat penurunan 2 orang murid, secara amnya, murid tetap berada pada tahap penaaakulan moral yang diinginkan iaitu tahap 'Konvensional'.

Penelitian selanjutnya menunjukkan bahawa terdapat 61.2% murid mencatatkan peningkatan penaaakulan moral dalam diri mereka sementara 13.8% murid masih berada pada tahap yang sama. Terdapat 25% yang mencatatkan penurunan dalam penaaakulan moral mereka. Menurut Kohlberg, ini tidak mungkin berlaku, seseorang tidak akan berubah daripada tahap yang atas ke tahap yang rendah.



**Rajah 1: Respons Murid**

**Rajah 2: Penaakulan Moral**



Bukan sahaja murid dapat dilihat meningkatkan diri dalam mempamerkan nilai murni, murid juga telah dapat menjawab soalan lisan dengan lebih yakin. Murid mampu menghubungkan perbuatan yang dilihat dalam video dengan sifat watak dan memberikan contoh-contoh lain yang berkaitan sifat tersebut. Dapatan ujian lisan menunjukkan terdapat seramai 70% murid meraih peningkatan markah terutama dalam komponen perbualan.

### **Kesimpulan**

Dengan pengetahuan yang diperolehi daripada kajian ini, pengkaji dapat menggunakan dapatan untuk menarik perhatian guru-guru dari sekolah yang sama untuk menggunakan strategi pembelajaran yang digunakan dalam kajian ini. Hal ini adalah kerana murid menyatakan bahawa mereka lebih berminat untuk meneliti cerita-cerita dalam buku-buku yang dibaca.

Dapatan juga menunjukkan bahawa terdapat peningkatan penaakulan moral yang amat ketara dalam kalangan para murid. Boleh dikatakan bahawa kajian ini telah berjaya membuktikan bahawa cerpen dapat memainkan peranannya dalam meningkatkan nilai murni dalam diri murid.

Walaupun terdapat keputusan yang bercanggah dengan dapatan Kohlberg, hal ini tidak bermakna bahawa kajian ini tidak berjaya. Pelbagai keterbatasan telah dikenal pasti.



Antaranya, pada awal pelajaran, pelajaran tidak dapat dijalankan mengikut jadual kerana murid menghadiri acara sekolah yang lain. Oleh yang demikian, ada beberapa orang murid yang tidak hadir semasa kelas dijalankan. Hal ini menghambat penghayatan murid kerana mereka yang tidak hadir tidak menjalani pelajaran sepenuhnya.

Pengkaji juga mendapati agak sukar untuk menyampaikan maksud pelajaran kerana pengkaji tidak mengajar kumpulan murid yang dikaji. Guru yang mengajar CCE telah menjalankan pelajaran yang dirancang. Namun, dengan cara ini, pengkaji dapat memantau pengajaran dan melihat dengan lebih teliti tingkah laku murid semasa pembelajaran.

Guru yang menjalankan pelajaran juga menyatakan bahawa beliau dapat lihat bahawa murid lebih aktif dan melibatkan diri dalam aktiviti-aktiviti yang dirancang. Murid dilihat berbual antara rakan-rakan mengenai masalah-masalah mereka. Mereka kini cuba menyelesaikan dahulu masalah-masalah kecil yang dihadapi dan tidak langsung membuat aduan kepada guru.

### **Rujukan**

2014. *Syllabus: Character and Citizenship Education, Primary*. (2014). Singapore: Student Development Curriculum Division, Ministry of Education.
- Caruso, H.M., & Wooley, A.W. (2008) *Harnessing the power of emergent interdependence to promote diverse team collaboration*. *Diversity and Groups*. 11:245-266.
- Fang, Z. (1996). *Illustrations, text, and the child reader. What are pictures in children's storybooks for? Read. Horizons* 37: 130–142.
- Galen, N. & Johns, J. (1979). *Children in Conflict Books that Heal*. Northern Illinois University.
- Hadijah Rahmat. (2006). *Peranan dan Perkembangan Sastera Kanak-kanak*. Kuala Lumpur, Dewan Bahasa dan Pustaka.
- Kohlberg, L. (1981). *Essays on Moral Development, Vol1: The Philosophy of Moral Development*. San Francisco, CA: Harper & Row.
- Kohlberg, L., Levine, C. & Hower, A. (1983). *Moral Stages: A current formulation and a response to critics*. Basel, NY: Karger.
- Maich, K. & Kean, S. (2004) *Read Two Books and Write Me in the Morning! Bibliotherapy for social emotional intervention*. *Teaching Exceptional Children Plus*. Volume 1. Issue 2.
- Smith-D'Arezzo, W.M., Thompson, S. (2006) *Topics of Stress and Abuse in Picture Books for Children. Children's Literature in Education*. Springer Science and Business Media. 37:335-347.
- Tovani, C. (2000). *I read it, but I don't get it: Comprehension strategies for adolescent readers*. Portland, ME: Steinhouse.



## PERBANDINGAN KESAN MEMORI JANGKA PENDEK DENGAN MEMORI JANGKA PANJANG MELALUI KOSWER PENCERITAAN DIGITAL BAGI MATAPELAJARAN SEJARAH

Noor Fatasya Idla Binti Abdullah<sup>1</sup>  
Maizatul Hayati Mohamad Yatim<sup>2</sup>

<sup>1</sup> Fakulti Seni, Komputeran dan Industri Kreatif, Universiti Pendidikan Sultan Idris (UPSI), Malaysia. (E-mail: [sya\\_syashi@yahoo.com](mailto:sya_syashi@yahoo.com))

<sup>2</sup> Fakulti Seni, Komputeran dan Industri Kreatif, Universiti Pendidikan Sultan Idris (UPSI), Malaysia. (E-mail: [maizatul@fskik.upsi.edu.my](mailto:maizatul@fskik.upsi.edu.my))

---

**Abstrak:** *Penceritaan (Storytelling) merupakan pengalaman manusia yang sangat berharga dan unik dari aspek emosional dalam menjayakan sesuatu penyampaian atau penceritaan yang dibangunkan. Penggunaan media dalam proses pendidikan mampu melonjakkan tahap penumpuan dan pemahaman serta mewujudkan kepelbagaian semasa proses pengajaran dan pembelajaran. Kajian ini berlandaskan kepada masalah penggunaan penceritaan digital sebagai bahan bantu mengajar dalam matapelajaran Sejarah yang sangat rendah berbanding dengan penyediaan bahan pengajaran dan pembelajaran yang lain. Oleh hal demikian, kajian ini bertujuan untuk membangunkan koswer (perisian kursus) penceritaan digital sebagai bahan bantu mengajar dalam mempelajari matapelajaran Sejarah. Koswer penceritaan digital bersandarkan Model ADDIE digunakan sebagai bahan intervensi bagi mengkaji teknik penceritaan digital terhadap tahap penumpuan dan pemahaman pelajar berdasarkan memori jangka masa panjang dan pendek. Model reka bentuk melibatkan lima fasa pembangunan yang merangkumi fasa analisis, reka bentuk, pembangunan, pelaksanaan dan penilaian berasaskan elemen penceritaan digital. Pemilihan sampel kajian untuk kajian rintis berdasarkan persampelan rawak mudah yang terdiri daripada 30 orang pelajar tingkatan dua yang mengambil matapelajaran Sejarah di kawasan pinggir bandar di Daerah Kinta Utara, Perak. Pemilihan sampel rawak mudah dibuat berdasarkan pencapaian dan prestasi pelajar yang melibatkan kumpulan rawatan 1 dan juga kumpulan rawatan 2. Kajian ini menggunakan reka bentuk bertumpu selari yang menggabungkan data kuantitatif dan kualitatif. Instrumen yang digunakan adalah borang soal selidik dan set ujian bertulis sebelum dan selepas intervensi koswer penceritaan digital. Manakala, kaedah tinjauan akan digunakan untuk mendapatkan maklumat dengan mengadakan sesi temubual berstruktur. Kajian ini menggunakan empat pembolehubah iaitu motivasi, rekabentuk antaramuka, membantu mempelajari sejarah serta keselesaan dan kesenangan kepenggunaan. Dapatan kajian rintis untuk pembolehubah motivasi, rekabentuk antaramuka serta keselesaan dan kesenangan kepenggunaan berada pada tahap lemah namun pembolehubah bagi aspek membantu mempelajari sejarah melepasi tahap kebolehppercayaan yang baik. Tuntasnya, pembangunan koswer penceritaan digital mempunyai perkaitan positif antara memori jangka masa panjang dan pendek dengan pencapaian pelajar dalam mata pelajaran Sejarah.*

**Kata kunci:** *Penceritaan, Koswer Penceritaan Digital, Memori Jangka Masa Panjang Dan Memori Jangka Pendek.*

---

### Pengenalan



Bagi memenuhi gaya pembelajaran pada abad ke-21, kaedah pembelajaran menggunakan penceritaan digital merupakan penyelesaian yang paling efisien bagi menyokong pelajar menjalani pembelajaran berpusatkan pelajar (PBP). Perlaksanaan kaedah PBP, merupakan salah satu pelan pembangunan pendidikan Malaysia (PPPM) 2015-2025 di mana KPM berhasrat untuk memanfaatkan penggunaan ICT untuk pembelajaran. Menurut kajian daripada Institut Multimedia Pendidikan di Jepun, membuktikan bahawa pendedahan integrasi ICT mempunyai kesan yang signifikan dan positif terhadap prestasi pelajar. Ianya melibatkan hal berkaitan dengan pemahaman dan pengetahuan.

Mata pelajaran sejarah melibatkan amalan penceritaan di dalam setiap situasi sejarah lampau. Penceritaan (Storytelling) merupakan pengalaman manusia yang sangat berharga dan unik yang tidak akan mempunyai persamaan di antara satu dengan yang lain. Ia bertambah unik berikutan adanya aspek emosional dalam setiap penceritaan yang dibangunkan. Penggunaan aspek emosional merupakan salah satu kekuatan cerita yang harus ada bagi pendidik mengakui nilai penceritaan dan menggambarkannya pada keadaan sebenar di dalam kehidupan pelajar semasa proses pengajaran dan pembelajaran (Beatty, 2000; Lambert, 2013). Secara kolektifnya, PBP menyediakan konteks persekitaran yang terbuka di mana pendidik dan pelajar itu sendiri yang menentukan matlamat pembelajaran, cara pembelajaran, atau kedua-duanya (Hannafin et al., 2014).

Penceritaan yang berbentuk sejarah, falsafah ataupun saintifik, memerlukan penggunaan penceritaan secara kreatif dan memberikan kesan yang mendalam terhadap pelajar. Kekuatan penceritaan ini amatlah perlu bagi memudahkan pelajar memahami setiap fakta dan cerita berkaitan sejarah dengan lebih berkesan. Penceritaan juga merupakan tunjang utama bagi menjayakan sesuatu penyampaian berkaitan peristiwa yang lalu. (Witherell, 1990; K Hyland, 2015). Penceritaan digital (DST) menggunakan teknologi digital peribadi untuk menggabungkan sejumlah media menjadi narasi yang akan bersangkut paut antara satu sama lain (Ohler, 2013). Penggunaan penceritaan digital (DST) berpotensi besar akan berkembang pesat kerana digital merupakan satu alat yang menjadi keutamaan pada perkembangan teknologi maklumat masa kini (Prensky, 2011 ; Shelton et al., 2017). Penceritaan digital akan menarik minat pelajar-pelajar belajar dan membolehkan mereka untuk mengekspresikan pemahaman kandungan dengan lebih mendalam.

Menurut Ismail Md. Zain (2014), reka bentuk dapat membantu meningkatkan pencapaian pelajar lantas membantu menjadikan proses pengajaran lebih tersusun dan objektif pengajaran dan pembelajaran dapat dicapai mengikut kehendak guru. Proses reka bentuk strategi pengajaran adalah mustahak kerana ianya melibatkan perancangan yang perlu digubal sebelum pelaksanaan aktiviti pengajaran dan pembelajaran. Reka bentuk mesej juga akan dimasukkan di dalam pembangunan penceritaan digital (DST) yang mana secara umumnya penekanan utama adalah kepada cara seseorang pendidik menyampaikan maklumat melalui mesej berbentuk audio visual yang mana mampu menarik perhatian murid dalam proses pengajaran dan pembelajaran.

Di dalam Kurikulum Bersepadu Sekolah Menengah mata pelajaran Sejarah merupakan pelajaran wajib dipelajari oleh semua pelajar yang mana ianya merupakan subjek teras pada peringkat Menengah. Dalam pada usaha bagi melahirkan generasi yang memenuhi matlamat dan aspirasi negara, pendekatan pengajaran dan pembelajaran bagi Mata Pelajaran Sejarah haruslah lebih menjurus kepada pemupukan kemahiran berfikir dan kemahiran pemikiran sejarah di kalangan pelajar. Selain itu, pemupukan nilai-nilai murni serta semangat patriotik juga tidak harus dilupakan berikutan fokus utama kurikulum sejarah adalah bertujuan untuk memupuk nilai-nilai murni dikalangan pelajar. Walau bagaimanapun, pendidik yang kreatif



dan inovatif sentiasa mencari pendekatan baharu bagi mengajar subjek supaya ia dapat memotivasi dan meningkatkan kefahaman pelajar dalam mata pelajaran sejarah.

### **Persoalan Kajian**

Terdapat empat persoalan kajian yang dibangkitkan dalam kajian ini.

- i. Apakah perbezaan penggunaan DST terhadap memori jangka pendek & jangka panjang melalui DST?
- ii. Adakah prinsip HCI bersesuaian dengan memori pengguna melalui DST?
- iii. Apakah faktor yang dapat mengenalpasti memori jangka pendek & jangka panjang terhadap DST?
- iv. Adakah wujud perhubungan di antara memori jangka pendek & jangka panjang melalui DST?

### **Hipotesis Kajian**

Kajian akan menjawab ke semua persoalan kajian yang digariskan seperti berikut:

- i. Tidak terdapat perbezaan antara prinsip HCI dengan memori pengguna.
- ii. Tidak terdapat perbezaan antara prinsip HCI dengan menggunakan DST.
- iii. Tidak terdapat perbezaan hubungan di antara memori jangka pendek dengan DST terhadap pelajar tingkatan dua.
- iv. Tidak terdapat perbezaan hubungan di antara memori jangka panjang dengan DST terhadap pelajar tingkatan dua

### **Kajian Literatur**

#### **Teori Bebanan Kognitif Mayer**

Konstruktivisme adalah salah satu pendekatan pendidikan yang memberi penekanan kepada pembelajaran adalah melalui penggunaan kandungan dan kepentingan dimensi sosial pembelajaran. Wilson mentakrifkan ia sebagai "tempat di mana pelajar boleh bekerja bersama-sama dan menyokong antara satu sama lain kerana mereka menggunakan pelbagai alat dan sumber maklumat dalam usaha mereka berpandukan matlamat pembelajaran dan penyelesaian masalah" (Wilson, 1996; Najat et al., 2014).

Ciri-ciri pembelajaran dalam konstruktivisme ialah pelajar boleh membina tafsiran mereka sendiri di dunia, bergantung kepada pengalaman dan interaksi, dan yang akan menjana pemahaman yang baru melalui kutipan pengetahuan dari pelbagai sumber (Duffy et al. 2012). Najat et al, 2014 mentakrifkan pembelajaran sebagai pemerolehan pengetahuan atau kemahiran melalui pengalaman, amalan, atau belajar, atau pelajaran yang diajar. Pembelajaran pelajar yang dipimpin ialah proses maklumat di mana pelajar bertanya soalan bagi sebahagian yang lain belajar, sedang mereka membantu satu sama lain sebagai rakan-rakan dalam membincangkan kaedah yang digunakan untuk memperolehi jawapan bagi soalan.

Pembelajaran yang dibimbing oleh guru sebagai pemegang semua maklumat dan perkongsian dengan pelajar dari masa ke masa. Zon Perkembangan Proksimal (ZPD), yang dibangunkan oleh Vygotsky (Wells, 1999 ; Najat, 2014), ditakrifkan sebagai jarak antara apa yang pelajar boleh lakukan dengan atau tanpa bantuan (Vygotsky et al. 1978, Najat et al., 2014). Fokus utama ZPD adalah untuk memastikan pelajar terlibat secara aktif dalam pembelajaran yang akan menjadikan mereka sendiri, pelajar sepanjang hayat dalam jangka masa panjang. Pengajaran menjadi proses pembinaan pengetahuan antara pelajar dan guru secara tidak langsung memudahkan lagi transformasi ilmu yang menjadi pengetahuan pelajar secara individu (Verenikina 2008; Dakich 2014; Najat et al., 2014).



Teori bebanan kognitif Mayer menyatakan bahawa memori jangka pendek atau memori kerja mempunyai kapasiti yang terhad serta berpotensi meningkatkan bebanan yang lebih kepada pelajar (Dwyer, Hogan & Stewart, 2013; Fenesi et al., 2015). Teori bebanan kognitif menjelaskan struktur kognitif pemrosen maklumat dalam pembelajaran melibatkan memori jangka panjang di mana pengetahuan dan kemahiran disimpan secara kekal dan memori kerja yang melaksanakan tugas berkaitan secara aktif (Chandler & Sweller, 1991; Lee & Kalyuga, 2014; Sweller, 1994). Memori kerja sangat terhad, baik dari segi tempoh mahupun kapasiti, terutamanya tempoh pemprosesan maklumat baru (Mayer, 2014). Menurut Fenesi et al., (2015), maklumat hanya boleh disimpan dalam memori jangka masa panjang selepas melalui memori kerja. Ketika beberapa elemen maklumat berinteraksi, ia perlu dipersembahkan secara serentak dan ini berpotensi menyebabkan bebanan kognitif bertambah di mana ia akan memberi kesan terhadap proses pembelajaran pelajar (Post et al., Wilson & Cole, 1996). Matlamatnya adalah untuk memudahkan proses berhubung di antara memori jangka panjang dengan memori kerja serta mengurangkan keperluan seperti gangguan audio dan reka bentuk antaramuka pengguna yang bermasalah.

### **Penceritaan Digital (Digital Storytelling)**

Penceritaan digital merupakan penyampaian cerita menerusi alatan multimedia dan juga peralatan komputer yang mampu menarik minat pelajar dalam bidang pengajaran dan pembelajaran. Cerita merupakan elemen utama dalam pemikiran dan komunikasi manusia dalam menggabungkan antara penceritaan digital serta kurikulum yang mana adalah teknik belajar kreatif yang dapat meningkatkan aras membaca, menulis, bertutur dan mendengar pelajar. Penceritaan digital telah digunakan di dalam kelas untuk pelbagai keperluan, seperti mengajar fakta kepada pelajar, memberi para pelajar membuat penyelidikan yang aktif, mengajar menulis, bertujuan untuk memenuhi “International Society for Technology in Education” (ISTE), iaitu standard teknologi, (Banaszewski, 2002; Weiss Benmayor, et al. 2002; Gutschmidt, 2013). Menurut dapatan kajian Dogan dan Robin (2005), menunjukkan bahawa hampir semua persepsi guru mengenai penggunaan penceritaan digital di dalam kelas sangat positif dan menyatakan penceritaan digital adalah alat yang efektif untuk menyampaikan mesej yang dikehendaki serta mempunyai kesan positif pada pelajar dan prestasi mereka.

### **Pendidikan Penceritaan Digital (Educational Digital storytelling -EDS)**

Pusat Digital Storytelling menekankan kepentingan kualiti dalam suara dan imej dan lagu yang bermakna, serta keperluan untuk memberi perhatian kepada tatabahasa yang baik dan penggunaan bahasa dalam proses pembangunan cerita yang baik. Robin (2012) mencadangkan agar pelajar perlu memberi perhatian kepada siapa cerita mereka ditujukan, apa yang mereka mahu penonton fahami, kepentingan termasuk titik peribadi pandangan; dan, di sisi lain, untuk aspek pendidikan di mana pelajar perlu memberi maklum balas menyokong dan sedar akan isu-isu hak cipta dan adil pendidikan digunakan. EDS telah digunakan dalam konteks yang berbeza dan dengan mata pelajaran yang berbeza sebagai alat yang menggalakkan ekspresi diri dan sudut pandangan peribadi dan boleh digunakan untuk melaksanakan teknologi baru dalam kurikulum untuk kedua-dua guru dan pelajar. Penceritaan digital dalam pengajaran dan pembelajaran merupakan alatan yang mampu memberikan tiga faedah utama meliputi penglibatan pelajar melalui pengalaman hidup mereka, peluang untuk berkembang bagi membina kemahiran dengan penekanan kepada keperluan digital abad ke-21, media, literasi maklumat; dan penambahan saluran baru dalam pembangunan suara melalui pengarang multimedia, serta tugas esei (Benick, 2011; Clarke & Adam, 2011; Oppermann, 2008; Carmen, 2014).



### **Penceritaan Digital Dengan Pendekatan Sosio Pendidikan Kepada Proses Pembelajaran**

ICT harus digunakan dengan tujuan untuk menggalakkan pembelajaran koperatif dan ciptaan, menggalakkan pembangunan produk sosio pendidikan (produk dengan sosial utiliti), menggalakkan penciptaan atau transformasi kehidupan dan konteks budaya dan menjana tindakan budaya kritikal (Ibañez-Herran, 2011 & Carmen, 2014). Penceritaan digital adalah berdasarkan kepada prinsip bahawa setiap kisah adalah cerita peribadi yang merangkumi bukan sahaja pandangan peribadi penulis tetapi juga suaranya sendiri. Di EDS, kedua-dua guru dan pelajar menjadi matlamat utama yang terlibat dalam pembikinan cerita dan terpaksa memberi perspektif mereka sendiri (Taub-Pervizpour, 2009; Carmen, 2014) semasa fasa penciptaan dan pada akhirnya, selepas menamatkan cerita itu. Pergerakan sosio-pendidikan menggerakkan orang, kumpulan dan organisasi, supaya mereka boleh menyatakan dengan jelas kekuatannya, dari matlamat dan kepentingan bersama, yang memihak kepada kolektif kebajikan. Penceritaan digital digunakan dalam pendidikan untuk menangani isu-isu sosial seperti kelas sosial, bangsa, kuasa, budaya, belia atau masyarakat untuk mencapai persefahaman di kalangan ahli-ahlinya, membuat perspektif yang berbeza kepada orang ramai (Taub-Pervizpour, 2009; Carmen, 2014). Dalam konteks ini penceritaan digital boleh membantu meningkatkan kesedaran mengenai realiti sosial di sekitar sekolah dengan membiarkan pelajar dan penonton untuk mentafsir realiti dari pelbagai perspektif.

### **Penceritaan Digital: Satu Pendekatan Konstruktivis Kepada Pembelajaran**

Penceritaan digital merupakan alat pendidikan yang menggabungkan media digital dengan pengajaran dan pembelajaran amalan inovatif. Penceritaan digital meningkatkan motivasi pelajar dan membantu guru dalam pembangunan persekitaran pembelajaran konstruktivis yang menggalakkan penyelesaian masalah secara kreatif berdasarkan kerjasama dan komunikasi antara rakan sebaya. Di samping itu, penceritaan digital boleh digunakan untuk memudahkan pendekatan bersepadu untuk pembangunan kurikulum, dan melibatkan diri pelajar dalam berfikir aras tinggi dalam pembelajaran (Dakich 2008, Najat et al., 2014). Oleh itu, penceritaan digital adalah model pembelajaran konstruktivis untuk mewujudkan persekitaran e-learning. Kajian ini dibentangkan rangka kerja yang baru e-Pembelajaran Digital Storytelling (eLDiSt) untuk dapat menggunakan penceritaan digital sebagai model pedagogi pembelajaran konstruktivis. E-Pembelajaran Digital Storytelling rangka kerja (eLDiSt) turut menerangkan dengan jelas bagaimana bercerita boleh digunakan pada tahap yang berbeza pendidikan. Rangka kerja eLDiSt direka terutamanya sebagai alat untuk membantu pencipta cerita dalam menghasilkan cerita digital yang menarik. Dengan bantuan rangka kerja eLDiSt ini, penceritaan digital boleh digunakan sebagai alat pembelajaran yang cekap dan berkesan di pelbagai peringkat pendidikan.

### **Penceritaan Digital dan Kapasiti Visual Memori (Visual Memory Capacity-VMC)**

Memori adalah proses mengekalkan dan mengingati peristiwa dan pengalaman yang lalu. (Hudmon, 2006, p. 12). Memori mempunyai banyak fungsi dan telah diklasifikasikan dalam pelbagai cara (ingatan deria contohnya, ingatan kerja, jangka panjang memori, memori visual, visual memori jangka pendek, ruang ingatan jangka pendek, memori ikonik, memori fotografi, memori episod dan ingatan semantik) (Solso, Maclin, & Maclin, 2007; Terry, 2009). Memori visual adalah keupayaan untuk mengingat kembali atau ingat imej, adegan, kata-kata atau maklumat lain yang dikemukakan visual (Binder, Hirokawa, & Windhorst, 2009). Dalam konteks pendidikan, ia diperlukan agar pelajar dapat menggambarkan rangsangan dalam



fikirannya tanpa menerima bantu. Pemeliharaan dan proses mengingat maklumat dalam ingatan boleh ditingkatkan melalui pelbagai cara termasuklah, dengan penggunaan alat memori (Solso et al., 2007). Cerita juga mempengaruhi memori, dan proses bercerita memudahkan perubahan kognitif (Schank & Abelson, 1995; Hatice & Yasemin, 2016). Gallets, 2005; Hatice & Yasemin, 2016) mendapati bahawa pelajar-pelajar dalam kumpulan yang mana cerita diberitahu lebih terlibat dalam proses itu, pemikiran dan kemahiran imaginatif lebih maju dan proses mental mereka lebih aktif. Semua ini adalah hasil daripada peningkatan keupayaan mereka untuk mengingat dan kesan tahap peningkatan ingatan ke atas mereka. Menurut pandangan (Aina, 1999; Hatice & Yasemin, 2016), penceritaan digital memerlukan lebih imaginasi berbanding membaca cerita. Lantaran itu, proses penceritaan digital di mana visual yang dicipta, lukisan itu dilaksanakan, individu yang aktif mungkin berkesan dalam kapasiti memori visual.

## **Metodologi**

### **Tujuan Kajian**

Kajian ini bertujuan mengkaji perbezaan memori jangka panjang dan memori jangka pendek dalam kalangan pelajar yang mempelajari mata pelajaran sejarah Tingkatan Dua yang menggunakan teknik penceritaan digital. Selain itu, kajian ini bertujuan untuk melihat sejauh mana kebolehan mengingat seseorang pelajar itu menggunakan memori jangka pendek dan juga memori jangka masa panjang.

### **Sampel Kajian**

Sampel kajian adalah terdiri daripada pelajar Sekolah Menengah di terletak lebih kurang 20 kilometer dari bandar Ipoh dan berada di Zon Kinta Utara, Perak yang dikategorikan sebagai sekolah luar bandar. Kaedah persampelan rawak mudah digunakan untuk memilih sampel kajian bagi dua buah kelas tingkatan dua yang berasingan. Pemilihan sekolah ditentukan berdasarkan sekolah yang pernah menggunakan komputer di dalam proses pengajaran dan pembelajaran.

### **Rekabentuk Kajian**

Kajian ini menggunakan reka bentuk deskriptif dengan menggunakan borang kajian ke atas responden yang terlibat. Set ujian akan diberikan kepada semua kumpulan responden dari kumpulan rawatan 1 dan semua responden dari kumpulan rawatan 2 yang terdiri dari kelas yang berasingan bagi mengetahui tahap penerimaan maklumat yang disampaikan sebelum dan selepas melihat antaramuka koswer penceritaan digital (DST). Pembangunan koswer penceritaan digital melibatkan beberapa fasa dalam menjalankan kajian ini.

#### **1. Fasa Analisa**

Peringkat analisa merupakan peringkat tinjauan di mana penyelidik menentukan keperluan pengguna termasuklah persekitaran pembelajaran, menentukan matlamat pembangunan, kaedah pembelajaran dan menganalisa keperluan perkakasan dan perisian yang diperlukan bagi membangunkan bahan.

#### **2. Fasa Reka Bentuk**

Fasa kedua melibatkan fasa penyediaan alat-alat yang membantu kepada pembangunan dan pengujian koswer DST. Di dalam kajian ini penyelidik akan menyediakan reka bentuk yang berkaitan huraian sukatan Pelajaran Sejarah Sekolah Menengah Rendah yang melibatkan carta alir pembangunan DST, papan cerita, skrip penceritaan dan carta alir DST.

### 3. Fasa Pembangunan

Semasa fasa pembangunan proses mengarang dan menghasilkan bahan pengajaran dilakukan mengikut spesifikasi keperluan berbantuan oleh alat-alat yang dibina dalam fasa reka bentuk. Proses pengujian akan dilakukan menggunakan kaedah peer review yang melibatkan empat orang pelajar yang juga merupakan pelajar peringkat PHD di Universiti Pendidikan Sultan Idris, Perak untuk mengumpul maklum balas keseluruhan berkaiatan video termasuklah imej, audio dan narasi yang dihasilkan.

### 4. Fasa Pelaksanaan

Fasa pelaksanaan melibatkan penggunaan koswer penceritaan terhadap pelajar tingkatan dua untuk mengenal pasti kesan penggunaan DST terhadap ingatan pelajar. Pemurnian dan penilaian formatif akan bagi menghasilkan koswer DST yang lebih baik.

### 5. Fasa Penilaian

Fasa ini merupakan proses mengenal pasti impak pengajaran berasaskan teknik DST yang akan dipilih menggunakan penilaian formatif dan sumatif. Penyelidik akan menyediakan dua set ujian yang melibatkan ujian pra dan post kepada dua kumpulan yang berbeza iaitu kumpulan rawatan satu dan kumpulan rawatan dua untuk melihat maklum balas mereka.

### Dapatan dan Perbincangan

Kajian rintis telah dilakukan oleh penyelidik di sekolah selain sekolah kajian. Sebanyak 30 orang responden telah dipilih sebagai sampel. Jadual 1 menunjukkan nilai kajian rintis yang telah dilakukan.

**Jadual 1:** Nilai Kajian Rintis

Pembolehubah	Index alpha
Motivasi (s2, s6, s14, s16)	0.583
Rekabentuk Antaramuka (s7, s8, s9, s10)	0.561
Membantu mempelajari sejarah (s3, s4, s5, s13)	0.774
Keselesaan dan kesenangan kepenggunaan (s1, s11, s12)	0.450
Jumlah	0.848

Terdapat empat pembolehubah yang digunakan dalam kajian ini iaitu motivasi, rekabentuk antaramuka, membantu mempelajari sejarah dan keselesaan dan kesenangan kepenggunaan.

**Jadual 2:** Pekali saiz Cronbach's Alpha (Peraturan Umum)

Julat Alpha Coefficient	Kekuatan hubungan
< 0.6	Lemah
0.6 < 0.7	Sederhana
0.7 < 0.8	Baik

0.8 < 0.9	Sangat Baik
0.9	Terbaik

Sumber: Hair (2003; Ros Ayu, 2013)

Jadual 2 memberi garis panduan mengenai nilai Cronbach Alpha yang menerangkan kekuatan hubungan setelah ujian kebolehpercayaan ke atas data dibuat motivasi, rekabentuk antaramuka dan keselesaan dan kesenangan kepenggunaan.

Ujian kebolehpercayaan ke atas data motivasi ialah 0.583, rekabentuk antaramuka ialah 0.561 dan keselesaan dan kesenangan 0.450 jelas menunjukkan kekuatan hubungan berada pada tahap lemah. Namun begitu, ini tidak menjejaskan kebolehpercayaan data kerana jumlah keseluruhan ialah 0.848 dan berada pada tahap sangat baik. Manakala pembolehubah bagi aspek membantu mempelajari sejarah berada pada 0.774 dan melepasi tahap kebolehpercayaan yang baik.

Item	Skala				
	1(%) ATS	2(%) TS	3(%) SS	4(%) S	5(%) AS
1. Digital Storytelling (DST) tersebut senang digunakan.	-	-	4	14	12
2. Saya seronok menggunakan Digital Storytelling (DST) tersebut	-	-	5	9	16
3. Digital Storytelling (DST) tersebut membantu saya untuk mempelajari sejarah.	-	-	6	3	21
4. Digital Storytelling (DST) tersebut membantu saya untuk mempelajari sejarah penubuhan Kellie Castle.	-	-	2	15	13
5. Maklumat pembelajaran di dalam Digital Storytelling (DST) tersebut dapat menarik minat saya.	-	1	2	13	14
6. Digital Storytelling (DST) tersebut menggunakan warna latar belakang yang sesuai.	-	1	8	8	13
7. Tulisan yang terdapat di dalam Digital Storytelling (DST) tersebut jelas dan mudah dibaca.	-	2	5	11	11
8. Saya suka muzik yang digunakan ke atas butang utama di dalam Digital Storytelling (DST) tersebut.	-	1	6	14	9
9. Saya suka animasi yang digunakan di dalam Digital Storytelling (DST) tersebut.	-	-	4	12	14
10. Saya tidak menghadapi masalah seperti kesesatan semasa meneroka Digital Storytelling (DST) tersebut.	-	1	6	14	9

11. Saya boleh keluar dari Digital Storytelling (DST) tersebut pada bila-bila masa yang saya kehendaki.	-	1	8	11	10
12. Setelah menggunakan Digital Storytelling (DST) tersebut saya dapat mempelajari sejarah dengan mudah dan cepat.	-	2	4	10	14
13. Digital Storytelling (DST) merupakan alat bantu mengajar yang tidak membosankan.	-	2	3	6	18
14. Sekiranya diberi peluang, saya ingin menggunakan Digital Storytelling (DST) tersebut lagi	-	1	0	13	16

**Jadual 3:** Skala Bagi Setiap Item

Jadual 3 menunjukkan skala bagi setiap item soalan soal selidik. Pada setiap item diletakkan nilai skala yang bermula dari amat tidak setuju, tidak setuju, sangat setuju, setuju dan juga amat setuju. Data diambil daripada kajian rintis yang dilakukan terhadap 30 orang responden dari sekolah selain sekolah kajian.

Untuk item soalan soal selidik, seramai 30 responden sangat setuju, setuju dan amat setuju dengan item 1 (Digital Storytelling (DST) tersebut senang digunakan), item 2 (Saya seronok menggunakan Digital Storytelling (DST) tersebut, item 3 (Digital Storytelling (DST) tersebut membantu saya untuk mempelajari sejarah) dan item 4 (Digital Storytelling (DST) tersebut membantu saya untuk mempelajari sejarah penubuhan Kellie Castle).

Manakala, untuk item 6 (penggunaan warna latar belakang yang sesuai), item 7 (maklumat pembelajaran menarik minat), item 8 (suka pada muzik yang digunakan ke atas butang utama), item 10 (tidak menghadapi masalah dalam penerokaan DST), item 11 (boleh keluar dari DST pada bila-bila masa yang saya kehendaki) dan item 14 (ingin menggunakan DST lagi) seramai 29 responden bersetuju manakala hanya 1 responden tidak setuju dengan setiap item tersebut.

Namun begitu, seramai 2 responden masing-masing memilih bahawa penggunaan Digital Storytelling (DST) tersebut tidak membantu mempelajari sejarah dengan mudah dan cepat serta merupakan alat bantu mengajar yang membosankan. 2 responden juga turut berpendapat bahawa tulisan yang terdapat di dalam Digital Storytelling (DST) tersebut tidak jelas dan tidak mudah dibaca.

### **Kesimpulan**

Dapatan menunjukkan keseluruhan ujian kebolehpercayaan untuk item motivasi, rekabentuk antaramuka, membantu mempelajari sejarah dan keselesaan dan kesenangan kepenggunaan berada pada tahap sangat baik dan melepasi tahap kebolehpercayaan yang sangat baik. Dapatan borang soal selidik berkenaan antaramuka koswer Digital Storytelling (DST) turut menunjukkan sambutan yang memberangsangkan dalam kalangan pelajar.

Secara tidak langsung, penggunaan koswer penceritaan digital dalam mata pelajaran Sejarah jelas menunjukkan impak positif di antara memori jangka panjang dan memori jangka pendek dalam kalangan pelajar yang menggunakan teknik penceritaan digital. Tuntasnya, koswer Digital Storytelling (DST) membantu pelajar untuk memahami apa yang diajar oleh guru dengan lebih mudah dan secara keseluruhannya, terutamanya di dalam mata pelajaran sejarah yang memerlukan pembacaan serta tumpuan yang lebih.



## **Rujukan**

- Bp Gutschmidth. (2013). One Laptop Per Child In Rural Kenya, Student Perceptions about Computers, School and Self Efficacy After One Year With Xo Laptop and Constructionist Learning.
- Chandler, P., & Sweller, J. (1991). Cognitive load theory and the format of instruction. *Cognition and instruction*, 8, 293-332.
- Hatice Ç.ral. Sar.ca , Yasemin Koçak Usluel (2015). The effect of digital storytelling on visual memory and writing skills.
- Hatice, Ç., & Usluel, Y. K. (2016). *Computers & Education The Effect of Digital Storytelling on Visual Memory And Writing Skills*, 94, 298–309.
- Huraian Sukatan Pelajaran Kurikulum Bersepadu Sekolah Menengah Sejarah Tingkatan Empat. 1992 dan 2002. Kuala Lumpur. Pusat Perkembangan Kurikulum.
- Ismail Md. Zain. (1994). *Keberkesanan Reka Bentuk Pengajaran Bersistem Di Kalangan Pelajar-Pelajar Sekolah Menengah*. Tesis kedoktoran, USM
- Joe Lambert (2013). *Digital Storytelling, Caputuring Lives, Creating Community*. 4th edition.
- Ken Hyland. (2015). *Teaching And Researching Writing By Ken Hyland Third Edition, Applies Linguistics In Action*.
- Lembaga Peperiksaan Malaysia. 2003. *Laporan Prestasi Peperiksaan Sijil Peperiksaan Malaysia*. Kuala Lumpur. Kementerian Pendidikan Malaysia.
- Mayer, R.E. (2001). *Multimedia learning*. Cambridge, UK: Cambridge University Press.
- Ohler, J. (2004). *Digital Storytelling [PowerPoint presentation]*. Juneau, AK: Brinton.
- Ohler, J. (2008). *Digital Storytelling in The Classroom-New Media Pathways To Literacy, Learning and Creativity*. London: Sage Publications.
- Robin, B. R. (2008). Digital storytelling: A powerful technology tool for the 21st century classroom. *Theory Into Practice*, 47, 220-228.
- Robin, B., & Pierson, M. (2005). A multilevel approach to using digital storytelling in the classroom. *Digital Storytelling Workshop, SITE 2005*, University of Houston. <http://www.coe.uh.edu/digital-storytelling/course/SITE2005>. Retrieved 12 February 2007.
- Shelton, C. C., Archambault, L. M., & Hale, E. E. (2017). *Bringing Digital Storytelling to the Elementary Classroom: Video Production for Preservice Teachers*.



## PENGGUNAAN RUTIN BERFIKIR TUMPUAN UNTUK PENGAJARAN KATA NAMA

Rosela Hashim<sup>1</sup>  
Nuradilah Abdul Wahid<sup>2</sup>

<sup>1</sup>Sekolah Rendah Fengshan, Singapura dan Pusat Bahasa Melayu Singapura, Singapura (E-mel: rosela\_hashim@moe.edu.sg)

<sup>2</sup>Sekolah Rendah Fengshan, Singapura dan Pusat Bahasa Melayu Singapura, Singapura (E-mel: nuradilah\_abdul\_wahid@moe.edu.sg)

---

**Abstrak:** Pembelajaran kata nama merupakan salah satu aspek yang penting dalam mata pelajaran Bahasa Melayu. Pembelajaran kata nama ini menjadi mencabar apabila murid mempunyai penguasaan kosa kata yang terhad. Kajian ini dilakukan untuk meningkatkan pengetahuan murid-murid mengenai ciri-ciri kata nama. Kajian ini juga menggunakan pendekatan rutin berfikir Tumpuan supaya murid-murid dapat meningkatkan kemahiran berfikir untuk memberikan kata nama yang lebih tepat. Subjek kajian terdiri daripada dua puluh lima orang murid Darjah 2. Dapatan kajian menunjukkan 100% murid dapat menjawab kesemua soalan dengan tepat. Dapatan ini menunjukkan guru boleh menggunakan pendekatan yang lebih sistematik untuk membantu murid mempelajari kata nama dengan lebih efektif.

---

**Kata Kunci:** kata nama, rutin berfikir, kemahiran berfikir, sistematik, kosa kata terhad

---

### Pengenalan

Rutin berfikir merupakan suatu alat berfikir yang menggalakkan murid-murid untuk berfikir secara kritis dengan bimbingan guru. Pendekatan ini menggalakkan murid-murid supaya berfikir dengan lebih mendalam mengenai sesuatu perkara. Namun, mereka dibenarkan untuk mengubah catatan pendapat mereka semasa pembelajaran dijalankan apabila informasi baharu diperkenalkan dan meneliti informasi tersebut sebelum membuat rumusan.

### Sorotan Literatur

*Visible Thinking* oleh *Project Zero* menekankan bahawa kemahiran dan keupayaan seseorang itu boleh terus dikembangkan dalam pembelajaran. Malah, ia boleh dicapai jika seseorang itu terus bersikap positif dalam setiap situasi yang memerlukannya untuk berfikir secara kritis. Seringkali, guru mendapati bahawa murid-murid tidak berupaya untuk berfikir dengan mendalam. Hal ini sekali gus menghambat pembelajaran mereka. Justeru, penggunaan rutin berfikir dalam pembelajaran melibatkan ketiga-tiga aspek penting, iaitu kemahiran, sikap positif dan kepekaan dalam membentuk pemikiran kritis perlu diterapkan.

Menurut Jen Griffith (2014), seorang guru di sebuah sekolah antarabangsa Harding University Partnership School menyatakan bahawa rutin berfikir Tumpuan membantu murid-murid untuk mendapatkan gambaran yang lebih baik mengenai apa yang dipaparkan. Mengikut rutin yang diamalkannya, beliau membenarkan murid-murid mengubah hipotesis mereka dan berfikir dengan mendalam sebelum membuat keputusan akhir. Hal ini membuktikan bahawa rutin ini membimbing murid-murid untuk lebih berdikari dalam membuat keputusan.

### Pernyataan Masalah



Dalam proses pembelajaran kata nama, guru-guru sering berhadapan dengan cabaran untuk mengenalkan konsep kata nama kepada murid-murid. Hal ini berlaku kerana kosa kata murid-murid terhad. Walaupun murid-murid telah diajar tentang konsep kata nama sejak Darjah 1, pemahaman mereka masih belum kukuh. Berdasarkan dapatan tersebut, satu usaha telah dilakukan untuk menggunakan rutin berfikir Tumpuan bagi membantu murid mengatasi masalah ini. Pendekatan ini juga bertujuan untuk menjadikan pembelajaran lebih menarik dan menggalakkan murid berfikir secara lebih kritis.

### **Tujuan Kajian**

Tujuan kajian ini adalah untuk:

1. meningkatkan keupayaan murid mengenal pasti penggunaan kata nama yang tepat;
2. menilai keberkesanan penggunaan rutin berfikir Tumpuan dalam pengajaran kata nama; dan
3. mewujudkan budaya berfikir dalam kelas.

### **Kajian Lepas**

Nelson Goodman, seorang ahli falsafah di *Harvard Graduate School of Education*, memelopori Projek Zero pada tahun 1967. Projek Zero mengkaji tentang *Visible Thinking*, suatu pendekatan menjadikan pemikiran jelas dan nyata. Pada tahun 2011, Ritchhart bersama rakan-rakannya Mark Church dan Karin Morrison telah menerbitkan buku *Making Thinking Visible* yang memuatkan lebih daripada 20 rutin berfikir. Rutin-rutin berfikir digunakan untuk membimbing murid-murid mencatat hasil pemikiran mereka dengan jelas. Kajian ini menunjukkan bahawa penggunaan rutin berfikir amat berkesan dalam pembelajaran dalam bilik darjah. Di Singapura terdapat kajian yang telah dijalankan dalam pengajaran Bahasa Melayu. Antaranya adalah kajian yang dijalankan oleh Farhati Kamsani dan Nur Ain Mohamed Amin (2016). Kajian mereka menerapkan penggunaan rutin berfikir Lihat-Fikir-Tanya bagi pengajaran interaksi lisan berdasarkan gambar. Dapatan kajian mereka menunjukkan penggunaan rutin berfikir Lihat-Fikir-Tanya telah dapat membantu murid-murid mereka berfikir secara kritis dan kreatif.

Capuano, E. (2013) pula telah menggunakan rutin berfikir Tumpuan dalam kelasnya. Beliau memperkenalkan rutin ini dalam pembelajaran seni lukisan. Murid-murid beliau berfikir secara terbuka dan fleksibel apabila diberikan informasi yang terhad. Mereka memainkan peranan sebagai penyiasat dan mentafsir imejan yang ditunjukkan sebelum membuat rumusan secara individu dan berkumpulan.

### **Subjek Kajian**

Dalam kajian ini, subjek kajian terdiri daripada murid-murid Darjah 2 Bahasa Melayu yang berada pada praaras kebolehan. Jumlah keseluruhan murid-murid yang terlibat ialah 25 orang. Kumpulan ini dipilih sebagai subjek kajian untuk meningkatkan kemahiran berfikir murid dalam mengenal pasti kata nama tertentu berdasarkan gambar.

### **Instrumen Kajian**

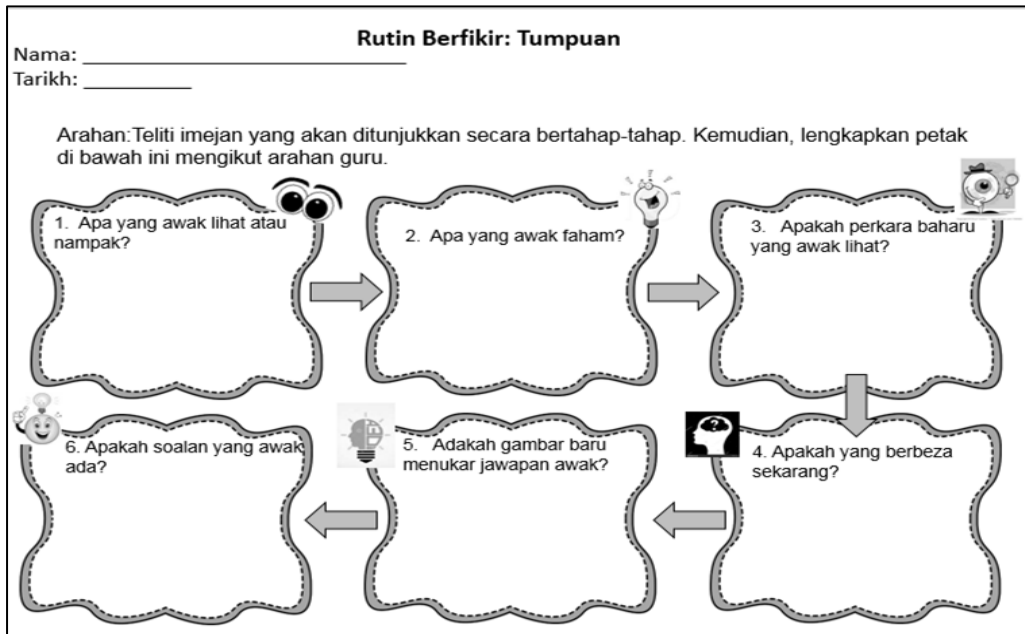
Instrumen kajian merupakan rutin berfikir Tumpuan. Rutin ini diharapkan dapat membantu mereka berfikir dengan lebih kritis dan sistematik berdasarkan imejan yang didedahkan. Keupayaan murid dinilai melalui jawapan-jawapan yang diberikan berdasarkan soalan-soalan yang tertera dalam templat rutin berfikir Tumpuan tersebut. Kemudian, tugas kerja

berkumpulan diberikan untuk memberi peluang kepada murid menggunakan kemahiran berfikir yang dipelajari. Kertas penilaian diberikan kepada murid-murid pada akhir pengajaran.

**Rutin Berfikir: Tumpuan**

Nama: \_\_\_\_\_  
Tarikh: \_\_\_\_\_

Arahan: Teliti imejan yang akan ditunjukkan secara bertahap-tahap. Kemudian, lengkapkan petak di bawah ini mengikut arahan guru.



1. Apa yang awak lihat atau nampak?
2. Apa yang awak faham?
3. Apakah perkara baharu yang awak lihat?
4. Apakah yang berbeza sekarang?
5. Adakah gambar baru menukar jawapan awak?
6. Apakah soalan yang awak ada?

**Rajah 1:** Contoh Templat Rutin Berfikir Tumpuan

### Prosedur Kajian

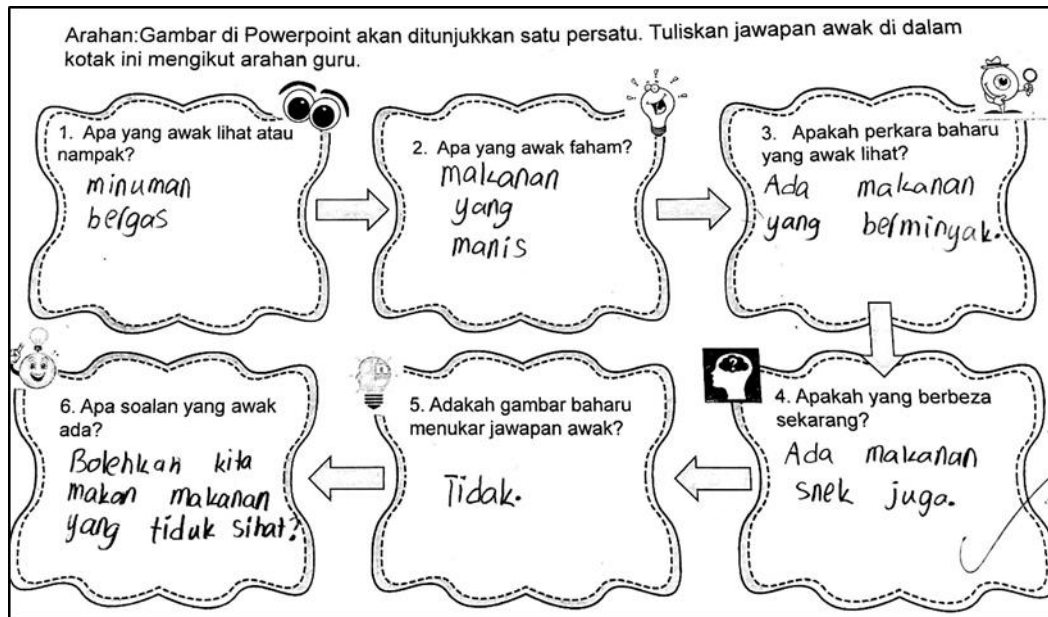
Kajian ini dijalankan secara berperingkat. Tiga sesi intensif telah dijalankan untuk memastikan murid-murid dapat menyesuaikan diri dengan penggunaan rutin berfikir Tumpuan. Sepanjang sesi tersebut, murid-murid dilatih menggunakan rutin berfikir tumpuan berdasarkan beberapa imejan. Dengan menggunakan rutin ini, murid-murid dapat mengaplikasikan kemahiran berfikir mereka dengan lebih baik. Murid-murid dibimbing melengkapkan tugasan dengan bantuan soalan-soalan tertentu.

Peringkat seterusnya merupakan tugasan berkumpulan. Murid-murid dikehendaki memilih gambar yang berkaitan dengan tema dan menuliskan kata nama yang bertepatan dengan gambar-gambar tersebut. Hal ini bukan sahaja menilai keupayaan murid-murid untuk memilih kata nama yang tepat berdasarkan tema, namun memberi peluang kepada murid-murid untuk berfikir secara kritis dalam pemilihan kata nama yang tepat.

Peringkat terakhir merupakan aktiviti pengukuhan agar murid-murid dapat mengaplikasikan kemahiran berfikir mereka dengan memilih kata nama yang tepat. Murid dikehendaki melengkapkan kertas latihan secara sendiri.

### Dapatan Kajian Dan Perbincangan

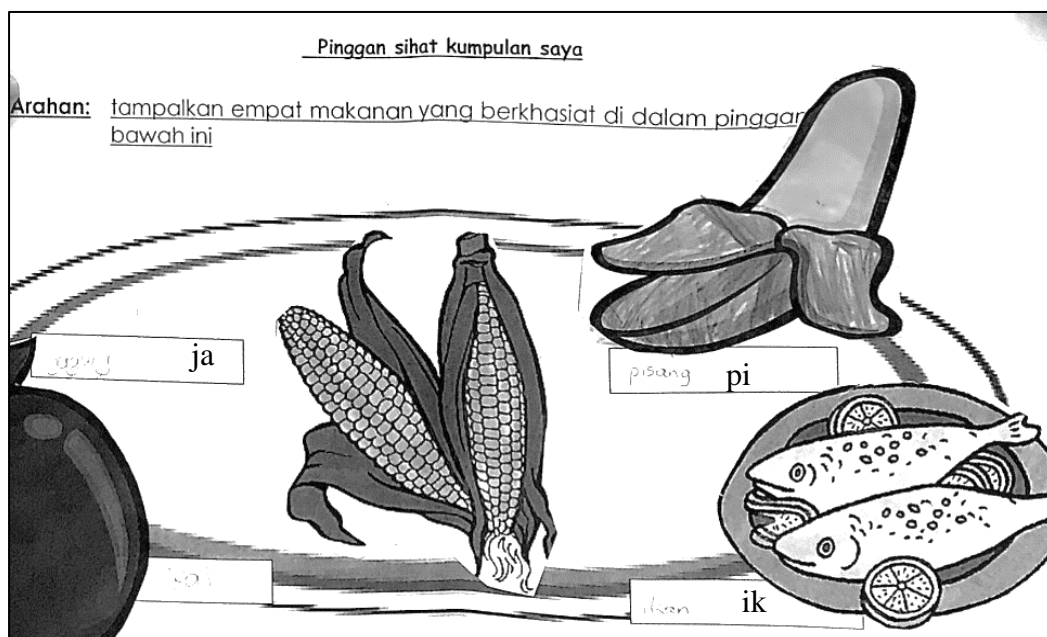
Dapatan kajian menunjukkan bahawa terdapat peningkatan yang signifikan terhadap keupayaan murid-murid mengenal pasti kata nama yang tepat. Kesemua 25 orang murid mampu memilih jawapan yang tepat selepas mengikuti proses pembelajaran yang disarankan. Rujuk Rajah 2



Rajah 2: Contoh 1 Hasil Kerja Murid

Hasil yang sama turut dapat diperhatikan dalam kerja berkumpulan. Kesemua murid dapat memilih memberikan kata nama tepat bagi makanan yang berkhasiat. Hal ini menunjukkan bahawa murid-murid dapat meneliti ciri-ciri objek yang diberikan sebelum memberikan jawapan. Rujuk Rajah 3.

Bagi latihan secara individu pula, kesemua murid dapat menjawab soalan dengan tepat. Selain meneliti gambar, mereka juga harus memadankan frasa pada ayat yang diberikan dengan kata nama tertentu.



Rajah 3: Contoh 2 Hasil Kerja Murid

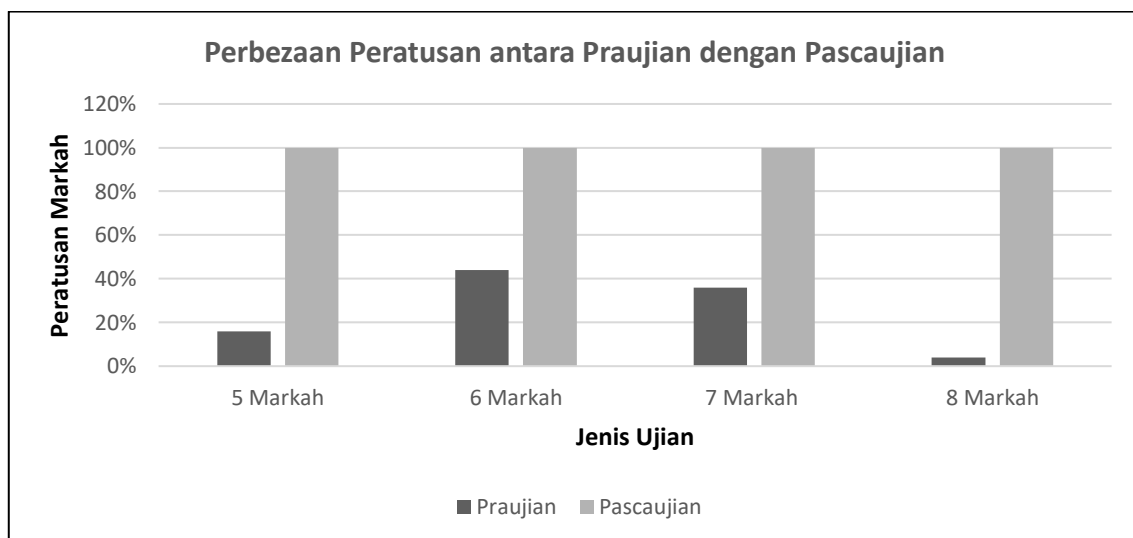
Berdasarkan latihan individu kesemua murid dapat menjawab soalan dengan tepat setelah melalui proses pembelajaran dengan menggunakan rutin berfikir Tumpuan untuk mengenal pasti kata nama. Contoh soalan bagi latihan praujian dapat dilihat seperti berikut:

Ibu menggunakan sebuah \_\_\_\_\_ untuk *menggoreng mi*. (kuali /periuk)

Guru mengharapkan agar murid-murid dapat mengenal pasti frasa ‘menggoreng mi’ sebagai pembayang dalam memilih jawapan kata nama ‘kuali’. Namun, murid-murid tidak dapat memberikan jawapan yang tepat. Malah, murid juga tidak dapat mengecam frasa yang boleh memberikan klu untuk mendapatkan jawapan. Hal ini didapati berbeza setelah murid-murid diajarkan kepentingan mengenal pasti ciri-ciri kata nama dalam ayat. Contoh soalan bagi latihan pascaujian dapat dilihat seperti berikut:

Ramai orang *suka minum* \_\_\_\_\_ yang berkhasiat. (jus oren /limau)

Murid-murid dapat memilih kata nama yang tepat, iaitu ‘jus oren’. Mereka dapat mengenal pasti frasa ‘suka minum’ sebagai pembayang. Mereka dapat berfikir secara kritis bahawa ‘limau’ bukanlah sesuatu untuk diminum berbanding dengan ‘jus oren’.



**Rajah 4:** Peratusan Perbezaan Markah antara Praujian dengan Pascaujian

Dapatan ini menunjukkan guru dapat membina cara murid membuat penelitian sebelum memilih kata nama yang tepat dengan menggunakan rutin berfikir Tumpuan.

### Kesimpulan

Guru harus bijak memilih dan menggunakan pendekatan yang sesuai dalam pembelajaran bagi mengasah kemahiran berfikir secara kritis dalam kelas. Ini dilakukan untuk memastikan pembelajaran menjadi lebih berkesan. Kesimpulannya, dengan adanya pendekatan rutin berfikir Tumpuan, guru dapat membantu murid berfikir secara kritis dalam membuat keputusan sendiri bagi memilih kata nama yang tepat. Bagi memastikan murid-murid dapat mengaplikasikan rutin ini dalam pembelajaran mereka, guru harus memberikan pendedahan



yang lebih kerap terutama sekali apabila sesuatu rutin itu pertama kali digunakan dalam pengajaran dan pembelajaran.

Guru yang turut terlibat dalam kajian ini:

1. Muhammad Faizal Sumono

### **Rujukan**

- Capuano, E. (2013). *Visible Thinking Zoom In Activity* . Diperolehi pada 22 Januari, 2018 dari Prezi: <https://prezi.com/wb6qdttr4img/visible-thinking-zoom-in-activity/>
- Farhati Kamsani, & Amin, N. A. (2016). Penggunaan rutin berfikir dan iMTL untuk menggalakkan pembelajaran sendiri . Dalam Prosiding Seminar Bahasa Melayu: Menjana Inovasi Memarak Inspirasi hlm. 429-440. Singapura: Pusat Bahasa Melayu Singapura.
- Griffith, J. (2014). *Zoom In: A Thinking Strategy*. Diperolehi pada 22 Januari, 2018 dari SBUnified's Digital Literacy Coach and Integrator Blog: <http://ilearn.sbunified.org/zoom-in-a-thinking-strategy/>
- Ritchhart R., Church M. & Morrison, K. (2011). *Making thinking visible: How to promote engagement, understanding, and independence for all learners*. San Francisco: Jossey-Bass.



## PENGGUNAAN APP CERITA RAKYAT NUSANTARA DALAM MEMBINA KEMAHIRAN INTERAKSI LISAN

Jumilah Ahmad<sup>1</sup>  
Sabrina Samsuri<sup>2</sup>

<sup>1</sup>Guru, Sekolah Menengah Zhenghua dan Pusat Bahasa Melayu Singapura, Singapura, (E-mel: jumilah\_ahmad@moe.edu.sg)

<sup>2</sup>Guru, Sekolah Menengah Zhenghua dan Pusat Bahasa Melayu Singapura, Singapura, (E-mel: sabrina\_samsuri@moe.edu.sg)

---

**Abstrak:** Menarik minat pribumi digital berinteraksi secara lisan menjadi satu cabaran kepada guru-guru. Tugas ini menjadi mencabar untuk mencari bahan yang relevan dan sesuai bagi menggalakkan pribumi digital ini bertutur secara tersusun. Kajian ini dilakukan untuk melihat sejauh mana penggunaan aplikasi atau app Cerita Rakyat Nusantara (CRN) dapat membantu membina kemahiran interaksi lisan dalam kalangan murid darjah rendah. Kaedah kajian yang digunakan ialah kaedah eklektik yang menggabungkan pendekatan naratif, kualitatif dan kuantitatif. Subjek kajian terdiri daripada 23 murid Darjah 2. Mereka terdiri daripada murid-murid yang mempunyai penguasaan bahasa dan kosa kata yang baik (kelas Arif). Kajian dimulakan dengan membuat tinjauan kaji selidik murid diikuti dengan penilaian interaksi lisan sebelum murid-murid diperkenalkan kepada app Cerita Rakyat Nusantara. Pada peringkat akhir kajian, murid-murid mengisi borang renungan. Enam orang murid turut diwawancara melalui rakaman video. Sesuai dengan proses menyediakan murid dengan kemahiran literasi era digital, pengkaji mengambil kira bidang kemahiran Teknologi Maklumat dan Komunikasi (ICT) yang perlu dikuasai oleh murid sekolah rendah supaya mereka dapat menggunakan bahasa dan maklumat dengan tepat dan secara kreatif. Dapatan kajian menunjukkan kecenderungan murid terhadap app yang diketengahkan. Berdasarkan enam rakaman video hasil daripada wawancara dengan murid, mereka didapati lebih yakin untuk berinteraksi selepas menggunakan CRN bagi mengumpulkan idea. Hal ini secara tidak langsung melatih membina kemahiran mendengar murid dan proses integrasi antara kemahiran mendengar dan membaca secara tidak langsung membantu kemahiran bertutur murid seperti yang dapat kita lihat daripada pascakajian.

---

**Kata Kunci:** Pribumi Digital, App CRN, Interaksi Lisan, Darjah Rendah

---

### Pengenalan

Merelevankan bahan bacaan kepada pribumi digital merupakan satu cabaran bagi guru-guru bahasa Melayu. Bahan bacaan yang dipilih perlu mempunyai kemampuan untuk dipelbagaikan penggunaannya. Bahan bacaan yang dipilih perlu dijadikan sebagai satu wahana interaktif agar proses bacaan itu menjadi lebih bermakna dan dapat membangkitkan keseronokan dalam pembelajaran.

Penggunaan bahan bacaan berbentuk ICT mampu mewujudkan satu pengalaman pembelajaran yang bersifat interaktif. Sekiranya bahan itu sesuai, guru dapat menggunakannya bukan hanya sebagai satu bahan bacaan semata-mata malah dapat dijadikan sebagai satu wahana yang dapat membina keterampilan murid dalam mempertingkatkan kemahiran interaksi lisan.



Penggunaan app dalam pengajaran dan pembelajaran bahasa Melayu perlu diperluas. Ini disebabkan murid-murid darjah rendah yang merupakan pribumi digital telah terdedah dengan penggunaan app dalam kehidupan mereka sehari-hari. Membaca perlu dijadikan budaya di samping menjadikan bahan-bahan bacaan sebagai bahan interaktif. Pengajaran dan pembelajaran bahasa Melayu perlu dipelbagaikan dan direlevankan agar murid-murid di sekolah berasa seronok mempelajari bahasa ibunda mereka sendiri.

### **Pernyataan Masalah**

Berdasarkan pemerhatian guru-guru di sekolah, murid-murid P2 didapati tidak mampu berinteraksi secara jelas dan lancar semasa menggunakan bahasa Melayu dalam kehidupan seharian mereka. Masalah ini juga menyebabkan ramai murid tidak dapat meraih markah yang baik dalam ujian lisan walaupun mereka merupakan murid yang cemerlang. Perkara inilah yang menjadi kebimbangan guru-guru.

Bagi menarik minat murid-murid ini, wahana ICT perlu digunakan agar pembelajaran dapat direlevankan. Untuk mencapai tujuan ini, app *Cerita Rakyat Nusantara* terbitan MLCS telah dipilih sebagai wahana kajian. Ini disebabkan app ini mempunyai fungsi-fungsi yang bersifat interaktif dan dapat membantu menambah nilai sekali gus membina kemahiran interaksi lisan murid.

### **Tujuan Kajian**

Tujuan kajian ini adalah seperti yang berikut:

1. mengkaji sejauh mana app *Cerita Rakyat Nusantara* mampu meningkatkan kemahiran interaksi lisan murid; dan
2. menggunakan bahan ICT dalam mewujudkan keseronokan dalam pembelajaran bahasa Melayu.

### **Kajian Lepas**

Liu, Moore, Graham dan Lee (2002) berpendapat, penting untuk melihat bagaimana teknologi telah digunakan sebagai satu wahana yang berkesan dalam bidang pendidikan pada masa ini. Malah, potensi teknologi komputer dan penggunaannya dalam bidang-bidang tertentu semakin meluas, terdapat alat perisian yang digunakan di kawasan-kawasan tertentu kemahiran bahasa. Malah murid akan menjadi peserta yang lebih aktif dalam proses pembelajaran.

Menurut Wang, Teng, dan Chen (2015), ICT mempunyai kesan yang besar kepada proses pengajaran dan pembelajaran pada abad ke-21. ICT boleh mempengaruhi cara murid belajar dan kelakonan mereka berdasarkan penyediaan akses yang lebih luas dan interaksi yang berbeza pada isi kandungan pembelajaran tersebut. Dapatan kajian ini juga menyatakan bahawa penggunaan *iPad* menunjukkan kemajuan yang ketara dalam pemerolehan perbendaharaan kata bahasa Inggeris dalam kalangan pelajar.

Selanjutnya, penggunaan ICT dalam pengajaran di bilik darjah telah menghasilkan kesan positif pada pembelajaran Bahasa Inggeris dan memberi pelajar motivasi. Pelajar juga lebih aktif dalam pembelajaran perbendaharaan kata. Sikap pelajar terhadap Bahasa Inggeris telah bertukar. Lebih ramai pelajar mahu belajar bahasa Inggeris. Akhir sekali, penggunaan *iPad* dalam pengajaran telah menghasilkan persekitaran pembelajaran yang menyeronokkan.

### **Kaedah Kajian**

Kaedah kajian yang digunakan ialah kaedah eklektik yang menggabungkan pendekatan naratif, kualitatif dan kuantitatif.

### Subjek Kajian

Bagi melaksanakan kajian ini, seramai 23 orang murid darjah dua telah dilibatkan. Mereka terdiri daripada murid-murid yang mempunyai penguasaan bahasa dan kosa kata yang baik (kelas Arif).

### Instrumen Kajian

Instrumen yang digunakan dalam kajian ini ialah app *Cerita Rakyat Nusantara* terbitan MLCS. Bagi aplikasi ini, ianya merupakan peranti yang digunakan secara langsung oleh guru untuk mengajar dan memperkenalkan murid beberapa strategi pembelajaran kosa kata dan bacaan. Instrumen kajian ini telah dimuat turun dalam iPad sekolah tersebut.

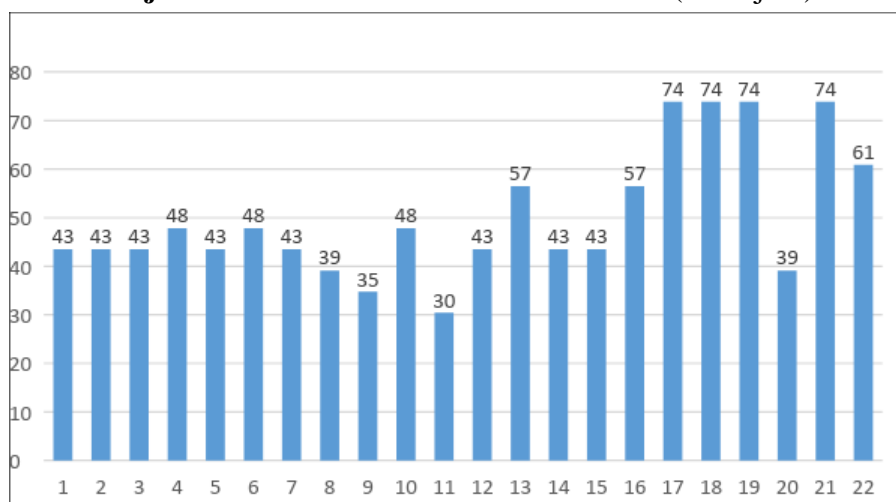
### Prosedur Kajian

Kajian dimulakan dengan tinjauan kaji selidik murid diikuti dengan penilaian interaktif lisan sebelum murid-murid diperkenalkan pada app *Cerita Rakyat Nusantara*. Selanjutnya di akhir kajian, murid-murid mengisi borang renungan dan enam orang murid (HAMALA) diwawancara melalui rakaman video. Selain itu, murid diuji sekali lagi dengan penilaian interaktif lisan untuk melihat keberkesanan penggunaan app CRN dalam membantu membina kemahiran interaksi lisan. Pengkaji juga telah mewawancara seorang guru bahasa Melayu yang pernah menjalankan pengajaran dengan menggunakan app CRN, guru bahasa Melayu yang menjalankan pengajaran CRN dalam kajian ini, guru pakar dari MLCS yang menerajui pembinaan app CRN dan juga pengarah MLCS.



### Dapatan Kajian Dan Perbincangan

Sebelum kajian ini dijalankan, murid-murid yang terlibat telah diuji dalam bahagian interaksi lisan di mana mereka dikehendaki menonton video yang singkat kemudian menceritakan semula apa yang telah mereka tonton dengan penggunaan ayat yang lengkap dan bahasa Melayu baku. Mereka juga perlu memberikan respon yang berkaitan dengan pengalaman mereka. Berdasarkan jadual di atas ini, secara purata tiada murid yang mencapai 85% iaitu peratusan bagi Band 1. Peratusan yang tertinggi hanya mencapai 74% peratus sahaja. Peratusan terendah pula ialah 30%. Ujian ini dijalankan pada minggu 2, Penggal 1.

**Rajah 1:** Peratusan Markah Interaksi Lisan (Prakajian)

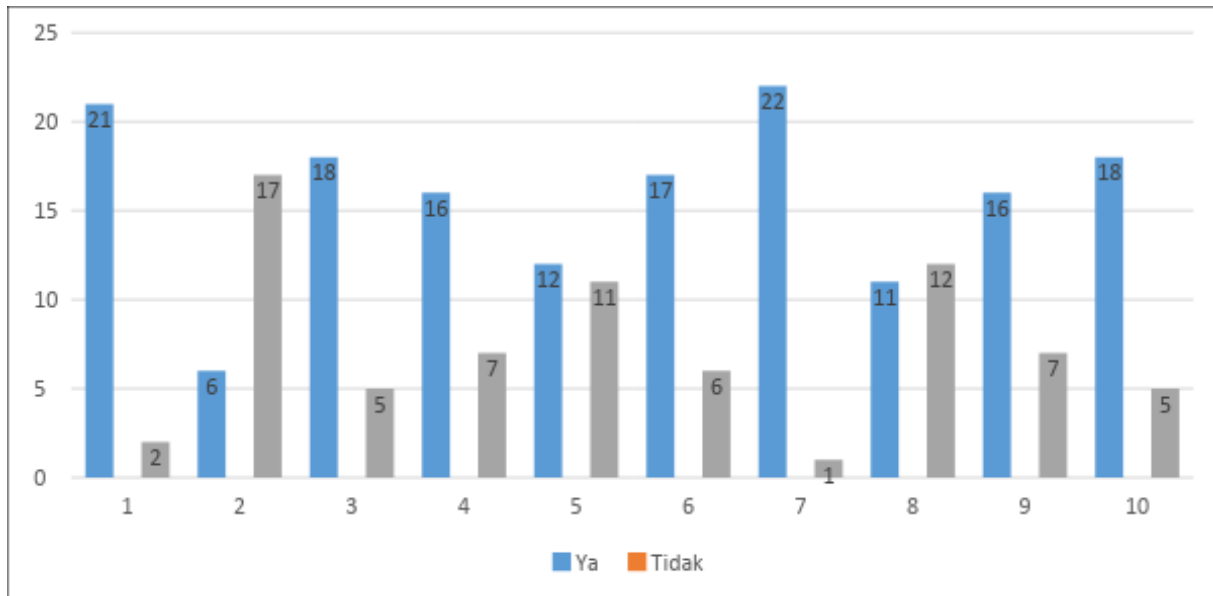


Tandakan (✓)

		YA 	TIDAK 
1	Saya suka membaca buku cerita Melayu. <i>I like / love to read ML storybook.</i>	21	2
2	Saya membaca buku cerita Melayu setiap hari. <i>I read Malay storybook everyday.</i>	6	17
3	Saya membaca buku cerita Melayu sekali dalam seminggu. <i>I read Malay storybooks once a week.</i>	18	5
4	Saya suka membaca bersama ahli keluarga / ibu / ayah. <i>I like / love to read with my family members / mother / father.</i>	16	7
5	Saya meminjam buku dari perpustakaan setiap bulan. <i>I borrow books from the library every month.</i>	12	11
6	Saya belajar membaca di rumah. <i>I learnt to read at home.</i>	17	6
7	Saya belajar membaca di sekolah. <i>I learnt to read in school.</i>	22	1
8	Saya selalu bertutur dalam Bahasa Melayu di rumah. <i>I always speaks Malay language at home.</i>	11	12
9	Saya selalu bertutur dalam Bahasa Melayu dengan kawan-kawan di sekolah semasa waktu rehat, selepas / sebelum sekolah. <i>I speak in Malay language with my friends during recess time, before / after school.</i>	16	17
10	Saya bertutur dalam Bahasa Melayu dan Inggeris dengan kawan-kawan di sekolah semasa waktu rehat, selepas / sebelum sekolah. <i>I speak in both Malay language and English with my friends during recess time, before / after school.</i>	18	5

**Jadual 1:** Tinjauan Kaji Selidik (Murid) – Darjah 2 (Arif) Pascakajian

**Rajah 2: Tinjauan Kaji Selidik**



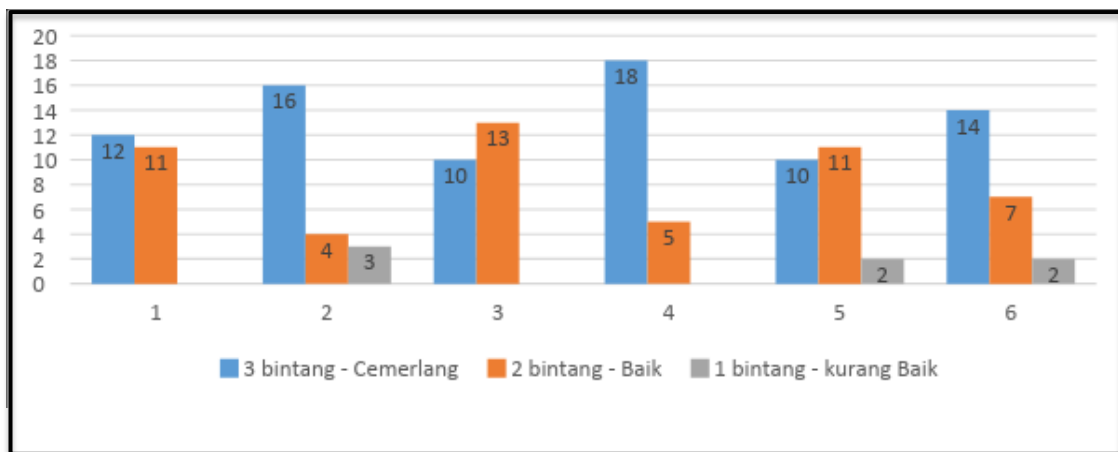
Berdasarkan data interaksi lisan pascakajian itu, pengkaji menjalankan tinjauan kaji selidik seperti yang tertera di atas ini untuk mengetahui latar murid-murid ini. 22 daripada 23 orang murid membaca di rumah. 21 daripada 23 orang murid suka membaca buku cerita Melayu manakala hanya 6 murid sahaja yang membaca buku cerita Melayu setiap hari dan hanya 11 daripada 23 orang murid yang bertutur bahasa Melayu di rumah. 16 orang murid bertutur dalam bahasa Melayu dengan kawan-kawan di sekolah semasa waktu rehat, selepas / sebelum sekolah.

Dapat diandaikan mereka gemar berbual dalam keadaan yang tidak formal. 18 daripada 23 orang murid pula bertutur dalam bahasa Melayu dan Inggeris dengan kawan-kawan di sekolah semasa waktu rehat, selepas atau sebelum sekolah. Ini merupakan tren yang membimbangkan dan sememangnya punca utama sukarnya murid bertutur dalam bahasa Melayu baku oleh kerana kelaziman mereka berbahasa campuran seperti ini.

**Jadual 2: Borang Renungan Murid–Darjah 2 (Arif) Pascakajian**

Bil	Perkara	★	★	★
	Perkara Saya dapat ... <i>I can ...</i>	★ ★ ★	★ ★	★
1.	membaca cerita rakyat Nusantara dengan sebutan yang betul <i>read the story in Cerita Rakyat Nusantara (CRN) with the correct pronunciation</i>	12	11	0
2.	membaca dengan lancar <i>read fluently</i>	16	4	3
3.	membaca pantun dengan intonasi yang sesuai	10	13	0

	<i>read poetry with the correct intonation</i>			
4.	memahami makna kosa kata yang dipelajari <i>understand the meaning of the vocabularies that I have learnt</i>	18	5	0
5.	menggunakan kosa kata yang dipelajari dalam pertuturan <i>apply the words learnt when I am speaking</i>	10	11	2
6.	menjawab soalan kefahaman dengan betul <i>answer the comprehension questions correctly</i>	14	7	2



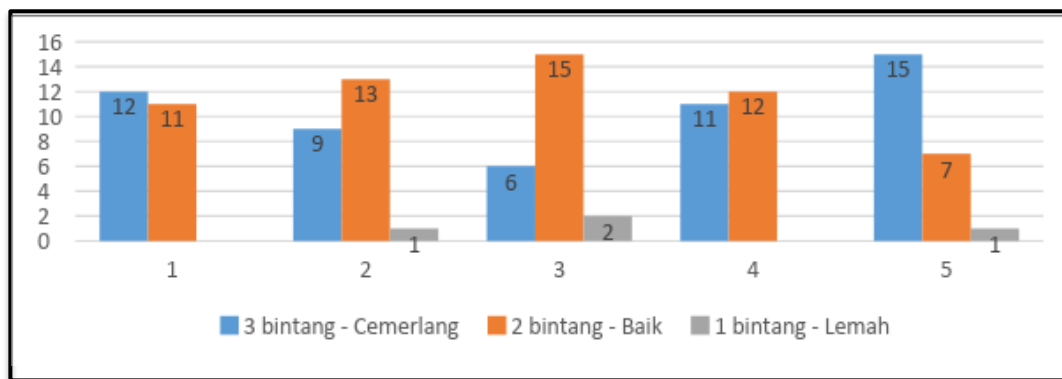
**Rajah 3:** Borang Renungan Murid

Berdasarkan jadual Borang Renungan Murid ini, pengkaji dapat melihat secara keseluruhan sama ada penggunaan app Cerita-cerita Rakyat Nusantara membantu membina kemahiran bahasa murid-murid darjah 2 ini. Setelah membaca empat cerita daripada app CRN, 50% murid dapat membaca cerita rakyat Nusantara dengan sebutan yang betul sementara 55% dapat membaca dengan lancar walaupun ada segelintir sahaja yang lemah. Ada usaha untuk membaca pantun dengan intonasi yang sesuai manakala 18 daripada 23 orang murid dapat memahami makna kosa kata yang dipelajari dan 50% orang murid boleh menggunakan kosa kata yang dipelajari dalam pertuturan dan pada masa yang sama 14 daripada 23 orang murid dapat menjawab soalan kefahaman dengan betul.

**Jadual 2:** Penilaian Interaksi Lisan - Darjah 2 (Arif) Pascakajian

Bil	Perkara			
	Murid dapat ...			
1.	menceritakan semula video yang telah ditonton	12	11	0
2.	bertutur dengan ayat yang lengkap	9	13	1

3.	menggunakan kosa kata yang pelbagai	6	15	2
4.	mengaitkan dengan pengalaman peribadi semasa bertutur	11	12	0
5.	bertutur dengan yakin secara keseluruhan	15	7	1



**Rajah 4:** Penilaian Interaksi Lisan

Natijahnya, setelah melakukan aktiviti-aktiviti yang berkaitan dengan pertuturan sebelum dan sesudah penggunaan app CRN, secara keseluruhan, 65% (15) orang murid menggunakan kosa kata yang pelbagai dalam pertuturan dengan baik. 65% (15) orang murid dapat bertutur dengan yakin secara keseluruhan dengan cemerlang. 57% (13) orang murid bertutur dengan ayat yang lengkap dengan baik sementara 52% (12) orang murid dapat menceritakan semula video yang telah ditonton dengan cemerlang dan 52% (12) orang murid dapat mengaitkan dengan pengalaman peribadi semasa bertutur dengan baik. Inilah kesan hasil kajian ini. Oleh itu boleh dikatakan penggunaan app Cerita-cerita Rakyat Nusantara membantu membina kemahiran interaksi lisan dalam kalangan murid darjah dua ini.

### Kesimpulan

Secara keseluruhan, dapatan kajian merumuskan bahawa murid suka akan app CRN atau e-buku ini. Berdasarkan enam rakaman video hasil dari wawancara murid, boleh dikatakan murid lebih yakin untuk membaca berulang-ulang, memberi motivasi kepada murid untuk membaca dengan nada dan intonasi yang betul. Berdasarkan pemerhatian guru, bahagian 'Bacakan Saya' membantu murid HA membaca mengikut intonasi, bagi murid MA bahagian ini membantu membaca dengan lancar dan bagi murid LA, dengan mengikut membaca, murid itu tidak terasa terancam dan dapat belajar membaca dengan lebih mudah. Ini semua secara tidak langsung melatih tubi kemahiran mendengar murid dan proses integrasi antara kemahiran mendengar dan membaca secara tidak langsung membantu kemahiran bertutur murid seperti yang dapat kita lihat dari dapatan interaksi lisan pascakajian.

Namun, terdapat hambatan seperti masalah teknikal iaitu e-buku bahagian kefahaman selalu 'hang' dan mengeruhkan lagi keadaan apabila tiada butang 'back' maka tiada jalan pintas selain mematikan iPad dan menghidupkan semula iPad itu untuk menyelesaikan masalah



'hang' itu. Fon kepala yang sesuai tidak ada untuk digunakan bagi merakam di iPad. Semasa sesi kajian lapangan iPad kurang, perakam video dihantar lambat oleh pembantu teknikal sekolah dan masa minggu-minggu akhir sekolah ada banyak program lain yang berjalan secara serentak. Akhir sekali, jangka masa yang terlalu singkat untuk mendapat dapatan yang lebih meluas.

Walaupun begitu, ini semua sedikit pun tidak menghalang murid dari meraih faedah dengan menggunakan app CRN ini. Nilai dalam cerita membantu membina watak murid supaya menjadi insan yang berbudi bahasa dan bersopan-santun. Murid berasa seronok bermain permainan kosa kata tanpa berasa bahawa mereka sebenarnya sedang melatih tubi diri mereka secara sendiri untuk ejaan. Murid gembira apabila mendapat jawapan yang betul bagi kefahaman kerana ganjaran bintang yang akan berkelap-kelip apabila mereka berjaya menjawab kesemua soalan-soalan kefahaman di bahagian itu.

Secara fitrah kanak-kanak memang suka keseronokan maka app CRN ini telah berjaya menarik minat murid darjah 2 ini kerana animasi gambar yang berwarna-warni, grafik yang menarik dan audio yang berintonasi yang sesuai bagi setiap bahagian. Berdasarkan klip video Pewarta Watak juga dapat dilihat murid berusaha dan dapat berkomunikasi dengan bahasa Melayu yang baik dan dapat mengaitkan dengan pengalaman peribadi mereka serta berfikir dan bertutur di luar konteks cerita.

Kesimpulannya, penggunaan app Cerita-cerita Rakyat Nusantara membantu membina kemahiran interaksi lisan dalam kalangan murid darjah rendah. Ini berdasarkan kajian kritis yang telah dijalankan. Sememangnya App Cerita-cerita Rakyat Nusantara berpotensi membina semua kemahiran bahasa dan pendidikan nilai (CCE) serta watak murid.

## Rujukan

- B. T. Wang, C. W. (2015). Using iPad to facilitate English vocabulary learning. *International Journal of Information and Education Technology*, 5(2), 100-104.
- Curriculum Planning and Development Division, M. o. (2014). *Ministry of Education*. Retrieved from Malay Language Teaching and Learning Syllabus, Primary One to Six: Implementation starting with 2015 Primary One Cohort: <https://www.moe.gov.sg/docs/default-source/document/education/syllabuses/mother-tongue-languages/files/malay-primary-2015.pdf>
- Liao, G. (2009). Improvement of speaking ability through interrelated skills. *English Language Teaching*, 2(3), 11-14.
- Liu, M. M. (2002). A look at the research on computer-based technology use in second language learning: a review of the literature from 1990-2000. *Journal of Research on Technology in Education*, 3, 250-273.
- Preece, A. D. (2015). Community of inquiry method and language skills acquisition: Empirical evidence. *Journal of Education and Practice*, 6(27), 89-93.
- Smith, C. B. (2003, August). *Skills students use when speaking and listening: ERIC topical bibliography and commentary*. Retrieved from Eric: Institute of Education Sciences: <https://files.eric.ed.gov/fulltext/ED480895.pdf>
- Therrien, W. J. (2004, July 1). Fluency and comprehension gains as a result of repeated reading: a meta-analysis. *Remedial and Special Education*, 25(4), 252-261.



## KEBERKESANAN *NEARPOD* DALAM MERANGSANG MINAT PELAJAR MEMPELAJARI KATA GANDA

Nurain Binte Tajudeen<sup>1</sup>  
Nur Umaira Mohamad Zulkifli<sup>2</sup>

<sup>1</sup>Sekolah Menengah Changkat Changi dan Pusat Bahasa Melayu Singapura, Singapura (E-mel: nurain\_tajudeen@moe.edu.sg)

<sup>2</sup>Sekolah Menengah Changkat Changi dan Pusat Bahasa Melayu Singapura, Singapura, (E-mel: nur\_umaira\_mohamad\_zulkifli@moe.edu.sg)

---

**Abstrak:** Dengan kosa kata yang terhad, pelajar sering menghadapi kesukaran untuk memahami maksud kata ganda berentak. Tambahan lagi, dengan profil pelajar Normal Teknikal yang lebih cenderung kepada pembelajaran interaktif, kata ganda tidak dapat difahami secara berkesan sekiranya dijelaskan guru secara lisan sahaja. Justeru, kajian ini berusaha melihat keberkesanan aplikasi 'Nearpod' dalam meningkatkan pemahaman dan minat pelajar Normal Teknikal terhadap pembelajaran kata ganda berentak. Keupayaan aplikasi 'Nearpod' untuk menyelitkan gambar dan bahan pandang dengar membantu pelajar mendalami makna kata ganda berentak yang dipelajari. Tambahan lagi, aplikasi tersebut berupaya menyelitkan kuiz berbentuk berbilang pilihan (MCQ) dan soalan terbuka yang dapat dimanfaatkan guru untuk meningkatkan minat dan pelibatan pelajar. Hasil kajian menunjukkan bahawa aplikasi 'Nearpod' mampu membantu pelajar memahami dan menguasai kata ganda yang pada awalnya mengelirukan bagi mereka.

**Kata kunci:** 'Nearpod', Merangsang Minat, Normal Teknikal, Kata Ganda Berentak

---

### Pengenalan

Menurut Abbas (2006), guru bahasa Melayu menghadapi cabaran yang besar untuk memastikan penggunaan bahasa Melayu dalam ruang lingkup kehidupan yang semakin beragam. Guru bahasa Melayu harus menyesuaikan pengajaran bahasa menurut trend dan keperluan semasa yang memerlukan mereka menggunakan bahan-bahan teknologi maklumat. Di samping itu, guru juga perlu bijak menggunakan pendekatan, kaedah dan teknik yang mutakhir untuk menjadikan pembelajaran bahasa sesuatu yang diminati pelajar.

Pada abad ke-21 ini, kepentingan dan kelebihan menggunakan Teknologi Maklumat dan Komunikasi (ICT) tidak dapat dinafikan. Pemilihan alat ICT dan perisian yang bersesuaian dapat menarik minat para pelajar zaman ini yang merupakan peribumi digital. Salah satu aplikasi yang popular ialah Nearpod. Nearpod merupakan aplikasi percuma untuk peranti iPad. Guru boleh menggunakan aplikasi ini untuk mencipta bahan pembentangan yang bersifat interaktif. Para pelajar pula boleh melihat slaid pembentangan melalui peranti iPad mereka sendiri. Namun, guru mempunyai pilihan untuk mengendalikan slaid pembentangan dan pada masa yang sama mampu mengumpulkan maklum balas secara langsung sewaktu mengendalikan pengajaran tertentu.

Kertas kajian ini akan mengupas keberkesanan penggunaan Nearpod dalam meningkatkan tahap pelibatan pelajar dalam pembelajaran tatabahasa. Turut dibincangkan ialah keberkesanan



Nearpod dalam membantu pengajaran kata ganda berentak dalam kalangan para pelajar Normal Teknikal (NT).

### **Tujuan Kajian**

Tujuan kajian ini adalah untuk:

1. meningkatkan pemahaman pelajar terhadap maksud beberapa kata ganda berentak; dan
2. meningkatkan minat dan tahap pelibatan pelajar NT dalam pembelajaran bahasa Melayu.

### **Pernyataan Masalah**

Dalam kajian ini, subjek kajian merupakan pelajar Menengah 3 NT. Guru-guru mendapati kumpulan pelajar ini mempunyai daya tumpuan yang singkat dan lebih cenderung kepada pembelajaran yang bersifat interaktif. Hal ini sejajar dengan sistem persekolahan di Singapura di mana, aliran NT telah diperkenalkan pada tahun 1994 untuk menyediakan aliran bagi menampung pelajar yang kurang berkebolehan dari segi akademik dan lebih cenderung terhadap pembelajaran yang bersifat teknikal dan vokasional (Uma Natarajan dan Margery Osborne, 2006). Selain itu, pelajar sering hilang tumpuan atau tidak fokus semasa pengajaran guru. Hal ini menjejaskan pembelajaran dan pemahaman pelajar terhadap apa yang sedang diajarkan.

Pada masa yang sama, guru mendapati bahawa para pelajar ini menghadapi kesukaran untuk memahami maksud kata ganda berentak yang jarang digunakan dalam perbualan seharian seperti 'compang-camping' dan 'serba-serbi'. Hal ini juga bersangkutan dengan masalah para pelajar yang mempunyai kosa kata yang terhad.

Oleh yang demikian, Unit Bahasa Melayu Sekolah Menengah Changkat Changi terdorong untuk mengkaji keberkesanan penggunaan ICT sebagai satu cara untuk menarik dan meningkatkan minat serta tahap pelibatan pelajar NT. Penggunaan peranti iPad dan aplikasi Nearpod secara khususnya telah menjadi pilihan agar pembelajaran interaktif dapat membantu pelajar memahami aspek tatabahasa, khususnya kata ganda berentak, dengan lebih baik.

### **Kajian Lepas**

Fredricks dan McColskey (2012) mengkategorikan pelibatan pelajar kepada tiga dimensi iaitu pelibatan tingkah laku, penglibatan emosi dan penglibatan kognitif. Pelibatan tingkah laku merujuk pada pelibatan pelajar dari segi tingkah laku seperti menghadiri kelas, mengambil bahagian dalam perbincangan, menyelesaikan tugas dan menunjukkan sikap yang positif terhadap aktiviti pembelajaran di sekolah. Pelibatan tingkah laku juga mengambil kira perbuatan yang menggambarkan usaha, ketekunan, konsentrasi, rasa hormat terhadap peraturan yang ditetapkan dan ketiadaan sikap-sikap yang mengganggu pengajaran dan pembelajaran.

Pelibatan emosi pula melihat pada aspek perasaan yang positif terhadap guru, rakan dan sekolah secara umumnya yang kemudian melahirkan semangat untuk bersekolah. Akhir sekali, pelibatan kognitif merujuk pada keinginan pelajar untuk berfikir demi memahami idea yang kompleks atau kerelaan pelajar untuk berusaha menguasai sesuatu kemahiran yang sukar.

Menurut Perry dan Steck (2015), pelibatan pelajar dalam mempelajari sesuatu bahan akademik dipengaruhi oleh tahap self-efficacy atau kecekapan sendiri mereka, iaitu, kepercayaan terhadap kebolehan diri mereka untuk menyelesaikan sesuatu tugas. Oleh itu, tahap pelibatan pelajar boleh ditingkatkan jika guru memilih alat dan bahan bantu pengajaran yang bersesuaian.



Khawlah Ahmed dan Omaima Nasser (2015) mengatakan terdapat kajian terkini yang menunjukkan bahawa penggunaan teknologi dapat memudahkan pengajaran dan meningkatkan beberapa elemen kritikal dalam proses pembelajaran. Salah satu elemen ini ialah pelibatan pelajar. Alat yang telah pun digunakan dan diuji untuk membuat pengajaran lebih efektif dan interaktif ialah iPad. Menurut kajian yang telah dijalankan oleh Uma Natarajan dan Osborne (2006) dalam penggunaan iPad semasa pelajaran geometri, mereka mendapati bahawa tahap pelibatan tingkah laku pelajar yang menggunakan iPad adalah lebih tinggi berbanding dengan pelajar yang tidak menggunakan iPad.

Sehubungan dengan itu, kami ingin mengkaji sama ada pelibatan tingkah laku para pelajar NT dalam kelas Bahasa Melayu dapat ditingkatkan dengan penggunaan aplikasi *Nearpod*.

### **Kaedah Kajian**

Pengkaji telah menggunakan gabungan pendekatan kuantitatif dan kualitatif bagi mengkaji kesan *Nearpod* terhadap tahap pelibatan tingkah laku serta pemahaman pengajaran kata ganda berentak.

### **Subjek Kajian**

Subjek kajian yang terlibat dalam kajian ini merupakan pelajar-pelajar Menengah 3 NT yang mengambil mata pelajaran Bahasa Melayu Asas. Jumlah keseluruhan subjek kajian yang terlibat ialah 15 orang yang mempunyai pelbagai tahap kemahiran.

### **Instrumen Kajian**

Para pengkaji telah menggunakan beberapa instrumen kajian seperti borang soal selidik prapengajaran, ujian diagnostik, ujian pascapengajaran dan borang maklum balas. Dapatan daripada borang soal selidik prakajian dimanfaatkan untuk mendapatkan data tentang tahap pelibatan pelajar di dalam kelas Bahasa Melayu secara umumnya. Ujian diagnostik digunakan untuk memilih senarai kata ganda berentak yang dianggap sukar oleh pelajar dan perlu diterangkan di dalam kelas. Di samping itu, ujian pascapengajaran yang dijalankan dapat menilai pemahaman pelajar terhadap kata ganda berentak. Borang maklum balas bertujuan untuk melihat sama ada penggunaan *Nearpod* dapat meningkatkan minat dan tahap penglibatan pelajar NT dalam pembelajaran Bahasa Melayu. Pemerhatian guru terhadap sikap dan penerimaan pelajar juga akan diambil kira dalam kajian ini.

### **Prosedur Kajian**

Langkah Pertama: Ujian Diagnostik dan Soal Selidik - Bagi pelajaran pertama, pengkaji memberikan borang soal selidik kepada para pelajar untuk meninjau tahap pelibatan tingkah laku mereka dalam kelas Bahasa Melayu secara umumnya sebelum penggunaan *Nearpod*. Di samping itu, guru juga menjalankan ujian diagnostik mengenai kata ganda berentak. Kata ganda berentak yang diuji merupakan kata ganda yang terdapat dalam buku aktiviti Jauhari 3B

(Normal Teknikal) serta beberapa kata ganda berentak lain yang menurut penelitian guru, sering kali tidak diketahui pelajar. Kata ganda yang diuji dapat dilihat melalui jadual di bawah ini.

**Jadual 1:** Senarai Kata Ganda Berentak bagi Ujian Diagnostik

1. Degap-degup	5. Ulang-alik	9. Lauk-pauk	13. Bengkang-bengkok
2. Keluh-kesah	6. Serba-serbi	10. Lambat-laun	14. Rempah-ratus
3. Ramah-tamah	7. Remuk-redam	11. Compang-camping	15. Remeh-temeh
4. Serta-merta	8. Saudara-mara	12. Kusut-masai	16. Gopoh-gapah

Setelah mengenal pasti kata ganda yang asing bagi para pelajar dan sukar difahami, guru seterusnya mengetengahkan kata ganda tersebut dalam pelajaran selanjutnya.

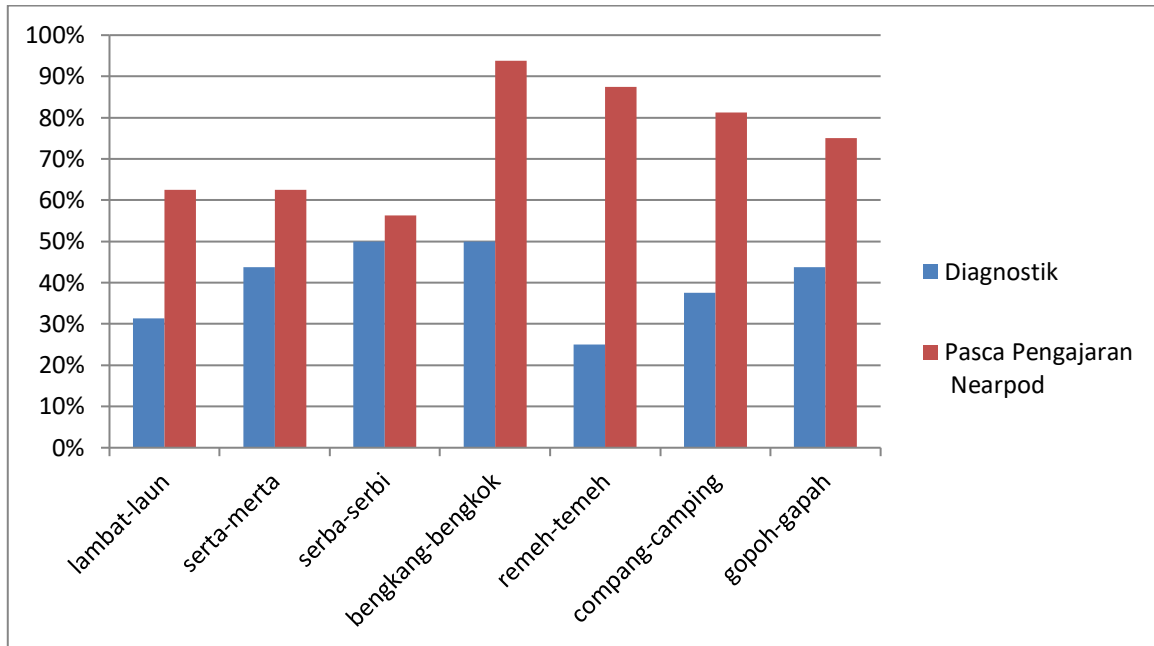
Langkah kedua: Pengajaran kata ganda menggunakan aplikasi *Nearpod*. Langkah ini melibatkan guru dan pelajar menggunakan aplikasi *Nearpod* melalui peranti *iPad*. Secara individu, pelajar menggunakan aplikasi *Nearpod* untuk memahami makna kata ganda berentak yang telah dikenal pasti sukar melalui ujian diagnostik. Pengkaji juga memanfaatkan aplikasi *Nearpod* dengan menayangkan rangsangan secara audio visual yang berkaitan dengan kata ganda yang dipelajari pelajar. Melalui cara ini, pelajar berupaya untuk memahami maksud kata ganda yang dipelajari dengan lebih jelas. Usaha tersebut juga disokong dengan kelebihan *Nearpod* yang mampu menyelitkan kuiz antara slaid-slaid setelah guru selesai melakukan penerangan terhadap kata ganda yang perlu dipelajari pelajar.

Dengan itu, guru dapat menilai pemahaman pelajar terhadap kata ganda yang dipelajari dan ini membantu guru untuk mengetengahkan kembali penerangan tentang kata ganda yang masih belum jelas difahami pelajar. Kemudian, guru memberi ruang dan peluang kepada pelajar untuk menggunakan aplikasi *Nearpod* untuk mengulang kaji atau menghafal makna kata ganda yang dipelajari sebelum melakukan tugas individu. Langkah tersebut amat penting dilakukan agar pengkaji dapat mengukur keberkesanan *Nearpod* dalam meningkatkan pemahaman pelajar serta prestasi mereka untuk melakukan tugas individu.

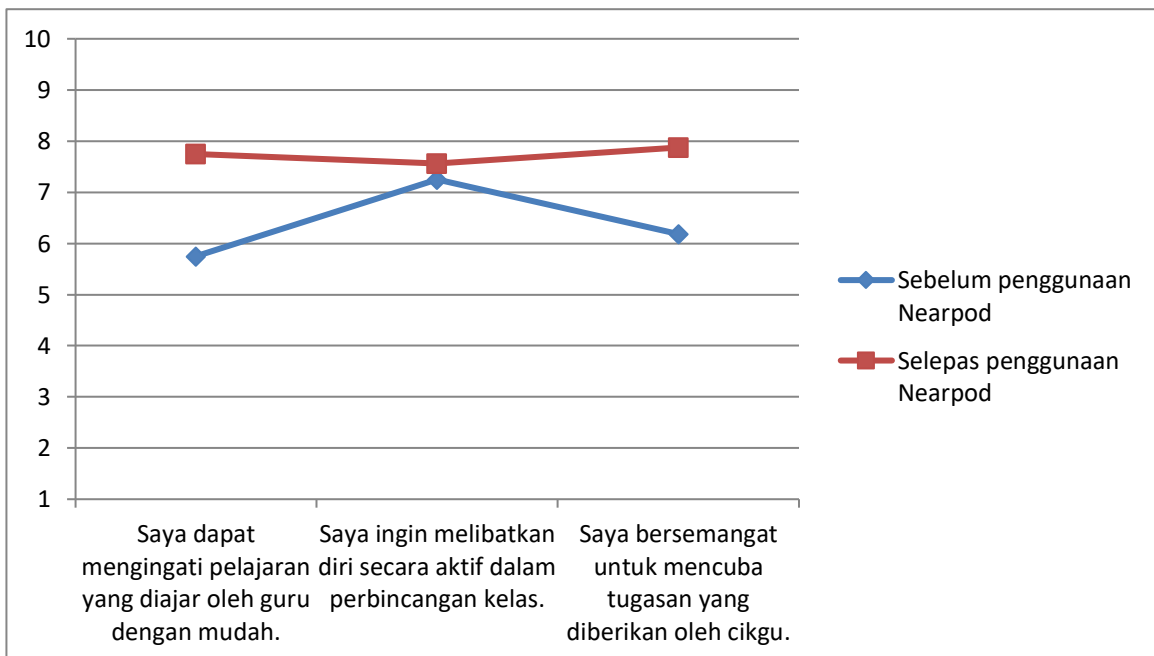
Langkah ketiga: Pascapengajaran - Setelah tamat pengajaran, para pelajar menduduki ujian pascapengajaran untuk menguji pemahaman mereka. Mereka juga mengisi borang maklum balas yang meninjau tahap penglibatan tingkah laku mereka sewaktu pengajaran yang menggunakan *Nearpod*.

### Dapatan Kajian Dan Perbincangan

Menurut penelitian data kuantitatif yang dikumpulkan daripada ujian diagnostik dan ujian pascapengajaran, penggunaan *Nearpod* dapat meningkatkan pemahaman pelajar terhadap maksud kata ganda berentak yang diajar. Seperti yang dipaparkan dalam Rajah 1, pelajar Menengah 3 NT menunjukkan peningkatan dalam kebolehan menjawab soalan kata ganda berentak dengan betul bagi kelapan-lapan kata ganda yang diajar menggunakan *Nearpod*. Rumusan ini juga disokong dengan dapatan daripada tinjauan yang dilakukan selepas pengajaran. 81.25% pelajar sangat setuju dan 18.75% pelajar setuju dengan pernyataan ‘Saya lebih memahami pelajaran Melayu yang dijalankan menggunakan *Nearpod*. Para pelajar juga memberi maklum balas bahawa mereka dapat mengingati pelajaran yang diajar dengan lebih mudah dengan penggunaan *Nearpod* berbanding sebelumnya. (Sila rujuk Rajah 1 dan 2)



**Rajah 1:** Peratusan Pelajar Yang Menjawab Soalan Dengan Betul



**Rajah 2:** Hasil Purata Borang Soal Selidik Berskala

Data kualitatif pula dikumpulkan melalui pemerhatian empat orang guru pengkaji yang terlibat sama dalam pengajaran yang dijalankan. Menurut pengamatan guru, suasana kelas menjadi lebih positif dengan penggunaan *Nearpod*. Apabila para pelajar melihat peranti *iPad* di dalam kelas, guru-guru dapat perhatikan bahawa mereka agak ghairah untuk memulakan pelajaran.

Sewaktu pengajaran dijalankan, tiada pelajar yang kelihatan mengantuk atau meletakkan kepala di atas meja dan tiada pelajar yang enggan mencuba latihan yang diberi oleh guru.

Apabila arahan diberikan untuk menjawab soalan-soalan yang disediakan dalam *Nearpod*, para pelajar menunjukkan keinginan untuk melakukan tugas tanpa memerlukan dorongan ataupun amaran. Kami dapati bahawa sikap dan semangat sebegini merupakan sesuatu yang amat positif bagi kelas NT yang berpotensi menimbulkan masalah disiplin sewaktu pengajaran dijalankan. Selain itu, penggunaan kuiz telah memberikan pelajar semangat untuk terus mencuba apabila melihat keputusan pada skrin *iPad* masing-masing sejurus setelah menjawab soalan. Hal ini telah membantu pelajar-pelajar yang sangat lemah untuk tidak berputus asa.

Dapatan daripada borang soal selidik prapengajaran dan pascapengajaran yang melibatkan *Nearpod*, yang disertakan dalam Rajah 2 juga menunjukkan bahawa minat dan tahap penglibatan pelajar meningkat dengan penggunaan *Nearpod*. Keberkesanan *Nearpod* dalam merangsang pelajar untuk lebih aktif dalam perbincangan kelas agak terbatas, dengan peningkatan yang sedikit sahaja daripada skala 7.25 kepada 7.56. Kemungkinan hal ini berlaku kerana pengajaran yang menggunakan *Nearpod* lebih cenderung kepada penggunaan media dan juga kuiz selingan dan kurang memberikan fokus kepada perbincangan. Kelebihan *Nearpod* lebih terserlah dari segi kemampuannya untuk merangsang minat pelajar terhadap tugas individu. Para pelajar telah memaklumkan bahawa mereka lebih bersemangat untuk mencuba tugas yang diberikan guru selepas penggunaan *Nearpod*, dengan kenaikan daripada skala 6.19 kepada 7.88.

Namun begitu, terdapat juga perkara-perkara yang menjejaskan pengajaran ketika menggunakan *Nearpod*. Contohnya, dalam proses menghasilkan bahan pengajaran *Nearpod*, kami telah menghadapi masalah kerana video yang dimuatnaikkan ke dalam perisian percuma *Nearpod* mesti kurang daripada 20MB. Di samping itu, kelancaran pengajaran juga terjejas beberapa kali atas sebab wi-fi yang kurang stabil. Secara keseluruhannya, para pelajar suka akan penggunaan *Nearpod* dalam pembelajaran. Menurut tinjauan pascapengajaran, kesemua 16 pelajar telah setuju dengan pernyataan 'Saya suka belajar Bahasa Melayu yang menggunakan *Nearpod*'.

### **Kesimpulan**

Setelah menjalankan kajian ini, guru-guru yang terlibat sebulat suara merasakan bahawa kajian ini telah berjaya memberikan keyakinan yang baharu untuk menggunakan peranti dan program ICT ini dalam pengajaran. Kami juga merasakan bahawa penggunaan *Nearpod* telah menjadikan pengajaran yang dijalankan lebih efektif dan sekali gus dapat menarik minat serta meningkatkan pemahaman pelajar terhadap sesuatu pengajaran aspek tatabahasa yang boleh dianggap membosankan oleh pelajar NT.

Seiring dengan perkembangan teknologi, guru-guru harus berani menggunakan wadah ICT. Bagi pelajar NT, banyak manfaat yang boleh diraih dengan mengintegrasikan ICT dalam pengajaran dan pembelajaran tatabahasa. Dengan kebijaksanaan guru menggunakan wadah ICT, banyak lagi usaha yang boleh dilakukan untuk membantu merangsang minat para pelajar NT dan mengekalkan fokus mereka terhadap pelajaran. Selain daripada hasil yang memuaskan apabila melihat pelajar bersemangat mempelajari Bahasa Melayu, usaha ini juga akan membantu para pelajar Bahasa Melayu memenuhi tuntutan kecekapan abad ke-21.

### **Rujukan**



- Abbas Mohd. Shariff (2006). *Strategi pengajaran dan pembelajaran bahasa*. Singapore: Alfa Media.
- Fredricks, J. A. & McColskey, W. (2012). The Measurement of Student Engagement: A Comparative Analysis of Various Methods and Student Self-report Instruments. Dalam Christenson, Sandra L., Reschly, Amy L., Wylie, Cathy (Eds.), *Handbook of Research on Student Engagement*. New York: Springer.
- Khawlah Ahmed & Oaima Nasser (2015). *Incorporating iPad Technology: Creating More Effective Language Classrooms*. TESOL Q, 6: 751–765. doi:10.1002/tesj.192
- Nik Safiah Karim (1997). *Tatabahasa Dewan*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Perry, D. R. & Steck, A. K. (2015). Increasing Student Engagement, Self-Efficacy, and Meta-Cognitive Self-Regulation in the High School Geometry Classroom: Do iPads Help?. *Computers in the Schools*, 32:2, 122-143. doi: 10.1080/07380569.2015.1036650
- Uma Natarajan & Osborne, M. (2006, April). *The experiences of Secondary one at-risk students' with technology in a CPA classroom*. Kertas dibentangkan di mesyuarat tahunan American Educational Research Association, San Francisco, California. Dipetik pada 3 Oktober, 2016 dari <http://hdl.handle.net/10497/3336>

Nota:

Guru yang turut terlibat dalam kajian yang dijalankan.

1. Abdul Matiin Kassim
2. Hezrina Johan Manikam
3. Izzalina Mohamad Ali
4. Siti Hidayah Mohamad Taha



3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Cophorne Hotel, Cameron Highland, Malaysia  
29<sup>th</sup>-30<sup>th</sup> June 2019

## CABARAN PEMBELAJARAN PELAJAR LEPASAN IJAZAH PENGAJIAN ISLAM DI MALAYSIA

Abdul Munir Ismail<sup>1</sup>

<sup>1</sup>Jabatan Pengajian Islam, Universiti Pendidikan Sultan Idris (Email: [abdmunir@fsk.upsi.edu.my](mailto:abdmunir@fsk.upsi.edu.my))

---

**Abstrak:** Kajian ini bertujuan untuk melihat cabaran Pembelajaran Sepanjang Hayat (PSH) dikalangan pelajar lepasan Ijazah Pengajian Islam di universiti awam. Program ini bermatlamat bagi meningkatkan tahap ilmu dan kemahiran secara berterusan ke peringkat lebih tinggi sama ada peringkat Sarjana atau Doktor Falsafah. Pelbagai masalah dihadapi oleh pelajar pasca siswazah. Antaranya pengurusan masa, kekangan keluarga, penguasaan bahasa Arab dan Inggeris, masalah kewangan dan kesesuaian tempat belajar. Objektif kajian ialah untuk mengenalpasti pelbagai masalah pelajar Pengajian Islam peringkat Sarjana dan Doktor Falsafah. Kajian ini menggunakan kaedah kualitatif menerusi kaedah temu bual separa berstruktur. Seramai 4 orang responden masing-masing 3 lelaki dan 1 wanita dipilih mewakili universiti awam terpilih yang menawarkan kursus Pengajian Islam. Instrumen kajian mengandungi elemen demografi responden, permasalahan semasa merangkumi kewangan, keluarga, masa, kesesuaian bidang pengajian dan kemampuan menguasai bahasa Arab dan Inggeris. Hasil kajian dianalisis menggunakan kaedah diskriptif. Hasil kajian ini mendapati masalah kewangan, kekangan menguruskan masa belajar dengan baik adalah permasalahan semasa pelajar siswazah Pengajian Islam. Kajian merumuskan masalah tersebut bersifat sementara dan para pelajar hendaklah berusaha mencari jalan keluar bagi menyelesaikan berdasarkan masing-masing masalah yang dihadapi.

**Kata kunci:** Pembelajaran Sepanjang Hayat, masalah, siswazah Pengajian Islam, IPTA.

---

### Pengenalan

Jika dirujuk kepada Falsafah Pendidikan Kebangsaan dalam Akta Pendidikan (1996), telah dinyatakan dengan jelas “Pendidikan di Malaysia adalah suatu usaha berterusan ke arah memperkembangkan potensi individu secara menyeluruh dan bersepadu untuk melahirkan insan yang seimbang dan harmonis dari segi intelek, rohani, emosi dan jasmani. Usaha ini adalah bertujuan untuk melahirkan rakyat Malaysia yang berilmu pengetahuan, beriman, berakhlak mulia, bertanggungjawab dan berkeupayaan mencapai kesejahteraan diri serta mampu memberikan sumbangan terhadap keharmonian dan kemakmuran keluarga, masyarakat dan Negara. Bagi mencapai negara Malaysia yang bertamadun dan maju dalam semua bidang, rakyat hendaklah berganding bahu bagi menyahut seruan Kerajaan itu. Kerajaan kini membangunkan negara harus dibina berasaskan keupayaan rakyat memiliki ilmu pengetahuan yang tinggi. Berdasarkan kenyataan ini Pembelajaran Sepanjang Hayat merupakan asas utama dalam pembangunan modal insan bagi melahirkan masyarakat berpengetahuan dan berkemahiran tinggi dalam pelbagai bidang.

Untuk mencapai matlamat tersebut, Kerajaan telah membentangkan usul Rancangan Malaysia ke Sepuluh pada 10 Jun 2010 di Dewan Rakyat, dengan mengambil kira Peningkatan Kompetensi Graduan kemampuan graduan dijadikan satu daripada KPI universiti. Penyediaan peruntukan kewangan kepada universiti lazimnya bergantung kepada kemampuan universiti mencapai KPI yang ditetapkan. Oleh yang demikian, universiti hendaklah berusaha bagi



memenuhi keperluan tersebut melalui pelbagai kaedah. Di samping itu, Kerajaan memberi autonomi kepada universiti secara berperingkat bagi mengukuhkan peranan dan prestasi universiti masing-masing. Universiti hendaklah berusaha menambah jumlah staf akademik berkelulusan PhD, iaitu 75 peratus bagi Universiti Penyelidikan atau Research University dan 60 peratus bagi universiti awam lain. Bagi mencapai sasaran ini, pelaksanaan program MyBrain15, iaitu program pembiayaan pengajian di peringkat ijazah kedoktoran dengan matlamat kerajaan bagi meningkatkan jumlah pemegang PhD kepada 18,000 orang pada tahun 2015, akan dipergiatkan dari semasa ke semasa. Peluang ini merupakan suatu dorongan kepada para pelajar yang berminat menyambung pengajian mereka sehingga selesai.

Selaras dengan hasrat kerajaan menjadikan Malaysia sebagai negara maju dalam pelbagai aspek yang setanding dengan negara-negara maju lain, maka pendidikan sepanjang hayat adalah salah satu mekanisma untuk tujuan tersebut. Bidang pendidikan adalah asas kemajuan untuk mencapai taraf negara maju. Adalah tidak bermakna negara memiliki sumber ekonomi yang baik tetapi tidak disokong oleh sumber tenaga manusia yang memiliki ilmu pengetahuan yang tinggi. Negara maju adalah diterajui oleh rakyat tempatan dan bukan bergantung kepada tenaga mahir yang diimport dari luar. Oleh itu, rakyat hendaklah berusaha untuk memenuhi negara maju menerusi pendidikan sepanjang hayat. Ini kerana pendidikan sepanjang hayat merupakan salah satu agenda yang sangat penting dalam menentukan hala tuju negara pada masa depan. Malah, Perdana Menteri, menyatakan pendidikan ialah penyumbang utama pembangunan modal sosial dan ekonomi negara (Kementerian Pendidikan Malaysia, 2012).

### **Pernyataan Masalah**

Pembelajaran sepanjang hayat memerlukan komitmen, pengurusan masa, persepsi negatif dari masyarakat dan kekangan kewangan yang tinggi kepada setiap pelajar. Jika dilihat dari aspek pengurusan masa terdapat isu yang sering ditimbulkan oleh pelajar iaitu masa bersama keluarga, masa untuk menyiapkan tugas di sekolah dan masa untuk menyiapkan tugas pengajian. Menurut Mohd Yusof Abdullah (2015), bekerja sambil belajar bukan satu perkara yang mudah. Cabarannya sangat besar kepada bakal pelajar yang sedang bekerja, kerap kali pelajar kurang mendapat bimbingan daripada pakar motivasi yang mencukupi untuk mengharungi cabaran ini. Rabiatal-Adawiah (2015) mendapati pelajar lepasan Ijazah Pengajian Islam di IPTA dilihat kurang pratikal membahagikan masa bekerja, belajar dan masa untuk bersama keluarga.

Masalah kemampuan dan penguasaan bahasa Arab dan Inggeris dalam kalangan pelajar lepasan ijazah Pengajian Islam sering dibincangkan oleh pensyarah universiti masa kini. Ini kerana kebanyakan sumber rujukan pengajian Islam adalah ditulis dalam bahasa Arab sebagai rujukan utama. Satu kajian oleh Jabatan Pengajian Tinggi, (2010) mendapati dalam menguasai serta merujuk kepada kitab Turath sebagai asas mencapai tahap ilmuan Islam iaitu amat lemah 3.32 bagi graduan pengajian Islam. Kemahiran pelajar menguasai bahasa Inggeris pula boleh mengangkat graduan ke peringkat antarabangsa. Oleh itu kedua-dua bahasa tersebut amat penting dikuasai oleh graduan lepasan Pengajian Islam diperingkat sarjana dan Phd.

Hamizatun Akmal (2013), menjelaskan terdapat segelintir pelajar pasca siswazah yang tidak dapat menamatkan pengajian pada tempoh yang ditetapkan. Hal ini sedikit sebanyak menimbulkan keraguan dan permasalahan kepada individu dan juga kerajaan bagi mencapai matlamat negara maju. Pelajar pasca siswazah dewasa khususnya yang telah bekerja didapati mempunyai masalah dalam pembahagian masa, cara pembelajaran yang berkesan dan mendisplinkan diri.



### Objektif Kajian

Jika dihimbau pernyataan bekas Timbalan Perdana Menteri Malaysia, Tan Sri Muhyiddin Yassin pernah menyatakan program pembelajaran sepanjang hayat adalah sebagai agenda Kementerian Pendidikan Malaysia untuk meningkatkan keupayaan modal insan negara secara berterusan. Ini kerana matlamat program Pendidikan Sepanjang Hayat bertujuan untuk meningkatkan peratusan tenaga kerja berkemahiran tinggi daripada 28 peratus kepada 35 peratus menjelang tahun 2020 (Berita Harian, 2015). Oleh itu, bagi mencapai matlamat tersebut masyarakat hendaklah berusaha bersungguh-sungguh mencapai matlamat tersebut kerana peluang untuk meningkatkan pembelajaran tidak terbatas pada umur seseorang. Peluang untuk belajar diperingkat yang lebih tinggi Malaysia amat terbuka luas walau pun seseorang itu telah pun bekerja. Pembelajaran dan pengajaran (P&P) adalah suatu proses yang berterusan samada secara formal atau tidak formal di dalam kehidupan seharian. Menurut Robert M. Gagne (1970) pembelajaran adalah perubahan tingkah laku atau kebolehan seseorang yang dapat dikekalkan, tidak termasuk perubahan yang disebabkan oleh proses pertumbuhan.

Berdasarkan sumber Berita Harian bertarikh 14 Mei 2015, melaporkan Ketua Setiausaha Kementerian Pendidikan Malaysia menyarankan kepada para guru agar tidak harus berasa selesa dengan pencapaian masa kini, sebaliknya guru perlu bergerak ke hadapan dengan menguasai ilmu terkini supaya dapat memberi sumbangan yang bermanfaat kepada masa depan murid. Kementerian amat menekankan konsep pembelajaran sepanjang hayat kepada guru yang mana ketika ini 80 peratus daripada 450,000 guru seluruh negara ketika memulakan kerjaya mereka dengan Ijazah Sarjana Muda. Selepas berkhidmat beberapa tahun, kementerian menggalakkan mereka melanjutkan pelajaran ke peringkat lebih tinggi sama ada sarjana atau ijazah kedoktoran dan bersedia menghadapi cabaran sektor pendidikan abad ke-21. Pembelajaran sepanjang hayat adalah salah satu wadah bagi para guru menyahut seruan kementerian demi masa depan negara.

Selaras dengan matlamat PSH, kini hampir kesemua Institusi Pengajian Tinggi Awam di Malaysia menubuhkan pusat atau unit tersendiri bagi menawarkan program PSH kepada seluruh rakyat Malaysia yang berkelayakan. Mereka yang berkelayakan dan sedang berkhidmat di sektor kerajaan atau swasta adalah layak memohon. Antara universiti awam yang menyediakan program sepanjang hayat ialah Universiti Kebangsaan Malaysia melalui Pusat Kembangan Pendidikan (PKP), Universiti Malaya melalui Pusat Pendidikan Berterusan (UMCCed), Universiti Sains Malaysia melalui Pusat Pengajian Pendidikan dan Jarak Jauh (PPPJJ), Universiti Teknologi Malaysia melalui UTM Space, Universiti Institut Teknologi Malaysia melalui Institut Pendidikan Neo (iNED), Universiti Teknikal Malaysia Melaka melalui Pusat Pembelajaran Sepanjang Hayat dan banyak lagi. Ada universiti menawarkan pendidikan sepanjang hayat peringkat diploma, peringkat ijazah sarjana Muda, ijazah Sarjana dan peringkat Doktor Falsafah. PSH yang dilaksanakan oleh IPTA adalah melalui pendekatan pendidikan jarak jauh, pendidikan fleksibel, pengiktirafan pengalaman bekerja (*recognition of prior learning*) dan penawaran kursus pendek bagi peningkatan pengetahuan dan kemahiran diri. Ciri pelajar juga telah berubah dari segi umur yang semakin meningkat dan cara belajar pelbagai mod tanpa batasan masa dan tempat. Antara kumpulan sasaran utama PSH ialah golongan dewasa yang bekerja, suri rumah dan warga emas yang mahu memberikan sumbangan kepada negara, menambah baik diri dan mempelbagaikan kemahiran, Mohd. Nasran Abd Halim (2016).

Bidang pengajian Islam adalah sebahagian daripada program Pembelajaran Sepanjang Hayat yang ditawarkan tempat pengajian. Antaranya bidang syariah, usuluddin dan falsafah,



pengajian Arab dan tamadun Islam, dakwah dan kepimpinan, pengajian al-Quran dan al-Sunnah. Memberi penekanan pada kaedah pengajian syariah, pengajian usuluddin, tafsir, hadis, Maqasid Al-Syariah, sejarah keilmuan dan intelektual Islam serta isu-isu semasa berkaitan akidah serta pemikiran Islam. Graduan pengajian Islam mempunyai peluang kerjaya yang luas di negara ini. Antara peluang kerjaya graduan pengajian Islam ialah dalam bidang akademik sesuai dilantik sebagai guru, tutor dan pensyarah disektor awam mahu pun swasta. Mereka juga boleh menceburi kerjaya dalam bidang penyelidikan, penyiaran, pendakwah, pegawai hal ehwal Islam, pegawai penerangan dan sebagainya. Adapun pembelajaran sepanjang hayat bermaksud aktiviti pelajaran dan pembelajaran yang dilaksanakan sepanjang hayat khususnya kepada orang dewasa yang memiliki kelayakan akademik yang mencukupi. Mereka bercadang meneruskan pengajian terutamanya bidang pengajian Islam ke peringkat yang lebih tinggi iaitu peringkat Sarjana dan Doktor Falsafah secara formal di universiti tempatan.

### **Kajian Literatur**

Pembelajaran Sepanjang Hayat (PSH) merupakan satu proses meneruskan semula pengajian seseorang untuk mendapatkan ilmu pengetahuan oleh rakyat Malaysia dalam bidang pendidikan. Antara program yang boleh ditawarkan ialah ilmu pengetahuan, kemahiran dan kompetensi sama ada secara formal atau tidak formal berdasarkan pengalaman dan latihan di tempat kerja. Dalam Islam, tuntutan menuntut ilmu tidak terhad kepada batas umur, tetapi boleh diteruskan hingga akhir hayat. Mereka boleh mendapatkan ilmu pengetahuan secara formal atau tidak formal melalui institusi masjid secara mingguan atau berkala. Wan Mohd Noor (2003), menjelaskan program budaya cintakan ilmu pengetahuan yang terdapat di masjid-masjid dewasa ini merupakan suatu proses pembelajaran sepanjang hayat yang disediakan kepada umat Islam di Malaysia. Sesiapa sahaja dalam kalangan umat Islam boleh menghadirkan diri secara berterusan bagi mendapatkan ilmu pengetahuan khususnya ilmu agama secara langsung atau tidak langsung dalam kegiatan keilmuan bagi setiap yang berkesempatan. Dilihat dari aspek waktu pembelajaran, mereka hendaklah mendapatkan waktu yang sesuai dengan kemampuan seseorang.

Rofishah Bt. Rashid (2015) menjelaskan budaya ilmu yang diamalkan di masjid-masjid kini merupakan teras bagi menghidupkan kelangsungan program pembelajaran sepanjang hayat kepada semua peringkat usia. Sasaran utama ialah golongan dewasa lelaki dan wanita. Kenyataan ini disokong oleh Safinah Ismail & Syarbaini Ahmad (2014) menyatakan Masjid Al-Azhar adalah antara masjid universiti yang aktif menganjurkan pelbagai program pembelajaran sepanjang hayat. Fokus pembelajaran adalah mencakupi bidang fardu ain, fardu kifayah, pengajian dakwah, ceramah sempena hari kebesaran Islam dan pengajian kuliah bersiri untuk kaum wanita. Antara peranan yang perlu dinyatakan dengan jelas adalah menghidupkan budaya ilmu sepanjang hidup. Budaya ilmu boleh diterjemahkan dalam dua aspek iaitu aspek profesional dan semangat belajar (Hailan, 2010). Daya saing global dan kepelbagaian keperluan telah mendesak rakyat supaya sentiasa memperbaharui pengetahuan dan kemahiran mereka secara berterusan. Hal ini juga dituntut oleh majikan dan industri bagi meningkatkan produktiviti dan sudah pastinya pendapatan ekonomi meningkat (Kementerian Kewangan, 2001). Pada masa yang sama, sejajar dengan pembangunan sosio ekonomi negara, individu semakin sedar bahawa menghayati keperluan untuk pengayaan ilmu dan kemahiran demi kemajuan dan kepuasan diri.

### **Konsep dan Matlamat Pembelajaran Sepanjang Hayat**



Berdasarkan amalan pendidikan yang lazim praktikan oleh masyarakat global termasuk negara maju seperti di Eropah dan Asia Barat, PSH adalah sangat luas dan menyeluruh merangkumi pelbagai aspek disiplin ilmu pengetahuan. Suruhanjaya Eropah bidang pendidikan mentakrifkan PSH adalah suatu aktiviti pembelajaran yang menjuruskan kepada proses mendapatkan ilmu pengetahuan secara rela. Aktiviti pembelajaran ini adalah sebagai persiapan memenuhi usia tua seseorang yang mana mereka tidak terlibat dalam tanggungjawab sebagai pekerja, ibu atau bapa kepada anak-anak. Aktiviti pembelajaran sepanjang hayat ini bertujuan untuk meningkatkan tahap ilmu pengetahuan, kemahiran dalam bidang pembinaan kemanusiaan dan kompetensi, dalam aspek yang berkaitan dengan peribadi, sosial atau pekerjaan. Manakala The National Organization for Economic Co-operation and Development (OECD) yang terdiri daripada 34 buah negara, mentakrifkan PSH sebagai semua jenis aktiviti pembelajaran tanpa mengira had umur, tahap pendidikan, demografi dan status ekonomi. UNESCO mengesahkan pendidikan non-formal dan pembelajaran adalah sebahagian daripada program PSH. (Kementerian Pendidikan Tinggi Malaysia, 2015).

Di Malaysia PSH menjadi "tonggak ketiga" untuk menggerakkan pembangunan modal insan di negara ini selepas sistem sekolah dan pendidikan tertiar. Pembangunan modal insan bermaksud berusaha membentuk umat manusia yang memiliki sikap mulia seperti berdaya saing, ikhlas, dedikasi, berhemah, berpendidikan, berkemahiran mengendali peralatan teknologi moden, memiliki kemahiran berkomunikasi dan berpotensi maju ke hadapan. Semua ciri dan sikap tersebut boleh dipindahkan kepada seseorang melalui proses pembelajaran, melalui bimbingan pakar dan sebagainya. Berdasarkan Pelan Induk Pembudayaan Pendidikan Sepanjang Hayat, mereka yang berminat mengikuti program ini ialah berumur 15 hingga 64 tahun ke atas kecuali pelajar profesional. Jika dilihat kepada kenyataan Kementerian Pendidikan Malaysia (2015), menjelaskan pelajar profesional adalah mereka yang mengikuti kursus sepenuh masa di sekolah, kolej atau universiti dengan tujuan untuk memperoleh kelayakan akademik atau kemahiran. Dalam erti kata lain, berdasarkan kepada umur produktif penduduk Malaysia berumur 15 tahun dan ke atas masih mampu menyumbang kepada pembangunan ekonomi negara.

Konsep pembelajaran sepanjang hayat bertujuan menggalakkan perkembangan ilmu pengetahuan yang membolehkan setiap orang menyesuaikan diri dengan era maklumat, seterusnya melibatkan diri secara aktif dalam semua bidang kehidupan seperti sosial dan ekonomi. Dengan mengamalkan pembelajaran sepanjang hayat, seseorang itu lebih menyedari setiap perkembangan dunia yang mempunyai kesan langsung dan tidak langsung kepada kehidupan. Seterusnya, mereka akan lebih berupaya mengawal hala tuju kehidupan yang semakin mencabar. Dalam dunia tanpa sempadan, maklumat berkaitan pembelajaran tidak mengenal batasan dan ianya datang dalam pelbagai bentuk. Oleh itu, pembelajaran sepanjang hayat menjadi lebih mudah bagi mereka yang mempunyai kemahiran maklumat atau celik maklumat. Hal ini kerana, pembelajaran sepanjang hayat berada di luar skop pembelajaran formal. Setiap orang perlu berdikari dan mencari sendiri sumber ataupun bahan pembelajaran yang diperlukan. Contohnya, mereka berminat mencari maklumat yang diperlukan melalui internet atau pun buku rujukan yang sesuai di kedai buku atau pun di perpustakaan awam dimana sikap berdikari amat penting dilatih sejak dari kecil lagi. Menurut Irma Indayu Omar, (2006), sikap berdikari merupakan asuhan ibu bapa sejak peringkat kanak-kanak hingga ke alam persekolahan menengah.

## **Metodologi**



Metodologi kajian ini dipilih adalah berdasarkan kaedah kualitatif. Cara ini adalah tepat dan sesuai untuk pengkaji mendapatkan maklumat kajian. Sampel kajian dipilih berdasarkan umur melebihi 25 tahun ke atas dan merupakan pelajar lepasan Ijazah iaitu Ijazah Sarjana yang terdiri daripada beberapa Institut Pengajian Tinggi Awam. Dalam kajian ini responden terdiri daripada pelajar Universiti Teknologi Malaysia, pelajar Universiti Sains Malaysia, pelajar Universiti Utara Malaysia, pelajar Universiti Sultan Zainal Abidin dan pelajar Universiti Utara Malaysia. Kajian ini menggunakan kaedah temubual berstruktur bagi mendapatkan maklumat secara khusus dan mengetahui gambaran sebenar tentang masalah kewangan, penyesuaian bidang atau kursus yang diambil dan kemahiran bahasa yang dihadapi oleh pelajar Pengajian Islam lepasan Ijazah Sarjana Muda. Responden dipilih terdiri daripada pelajar lepasan Ijazah Sarjana Muda dan sedang mengambil Ijazah Sarjana dan Phd. Jumlah responden yang terlibat dalam kajian ini adalah seramai 4 orang. Proses temubual dilakukan ketika responden tiada waktu sesi pembelajaran atau responden mempunyai masa lapang. Tata cara mendapatkan responden adalah dipilih berdasarkan cadangan dari pejabat Pengajian Siswazah di universiti berkaitan. Dalam kajian ini pengkaji menggunakan kaedah analisis data dengan menggabungkan maklumat/data kajian perpustakaan dan data kajian lapangan yang diperolehi menerusi temubual. Responden temubual ditandakan sebagai R1 hingga R4 dalam huraian perbincangan. Dengan menggunakan metode-metode yang dipilih tersebut, pengkaji memperoleh hasil kajian yang tepat seperti mana yang diharapkan. Kaedah analisis data dalam kajian ini menggunakan metode deduktif iaitu menghuraikan maklumat dalam bentuk umum dan menyeluruh.

### **Dapatan Kajian**

Bagi menjawab objektif yang dinyatakan di atas, penyelidik menganalisis masalah yang dihadapi oleh pelajar pasca siswazah menggunakan kaedah temubual. Berdasarkan temubual dengan Responden 1, daripada Fakulti Tamadun Islam, Universiti Teknologi Malaysia, Skudai Johor seorang pelajar lelaki berusia 28 tahun, status responden belum berkahwin, sedang mengikuti pengajian peringkat master semester 4. Ketika ditanya tentang masalah kewangan yang mungkin dihadapi, Responden 1 menyatakan sebagai berikut:

*Sebagai seorang pelajar, memang tidak dinafikan bahawa kewangan merupakan masalah utama yang dihadapi oleh pelajar seperti saya. Masa kini saya belajar sambil bekerja. Saya bekerja sebagai wakil jualan di Syarikat Takaful Malaysia. Saya perlu bertemu pelanggan yang terdiri daripada pelbagai lapisan umur manusia bagi memberi penerangan tentang kelebihan mendapatkan pelbagai perlindungan insuran. Walaupun saya belum berumah tangga, saya bercadang untuk berkahwin dalam tempoh setahun dari sekarang. Saya perlu membahagikan pendapatan yang sangat terhad untuk kos sara hidup kedua ibu bapa, menabung untuk membiayai yuran pengajian master berikut dan juga menabung untuk masa depan khususnya dalam mendirikan rumahtangga. Saya perlu menyiapkan tesis dengan secepat mungkin seperti yang diprogramkan oleh pihak Akademik. Semuanya ini saya garap (tulis) tesis pada waktu malam dan juga pada hari tidak bekerja seperti hari Sabtu dan Ahad. Ini termasuklah mendapatkan buku rujukan dan kajian lapangan.*

Berdasarkan temubual dengan Responden 2 daripada Fakulti Pengajian Kontemporari Islam, UNIZA Kampus Gong Badak, Terengganu, seorang pelajar wanita berusia 24 tahun, status belum berkahwin, sedang mengikuti pengajian peringkat master semester 2. Responden 2 diminta pandangan mengenai masalah penggunaan masa semasa pembelajaran, beliau menyatakan sebagai berikut:

*Pengurusan masa amat penting bagi seorang pelajar. Mereka yang gagal mengurus masa dengan baik dan berkesan biasanya mendapat kesan negatif dalam menyiapkan pembelajaran di peringkat master atau Phd. Dalam hal ini saya akan memastikan setiap hari satu buku berkaitan kajian tesis akan saya baca. Maksudnya saya baca buku setiap hari dua hingga tiga jam sehari. Ada ketikanya saya membaca diwaktu pagi dan ada waktunya saya membaca pada waktu malam. Saya tidak mempunyai jadual waktu membaca yang tetap tetapi bergantung kepada minat dan keperluan semasa. Selepas membaca sejumlah jurnal atau buku yang diperolehi melalui layaran internet dan buku, saya akan menaip semula maklumat tersebut ke computer riba. Bagi menyiapkan sesuatu sub topik bab, draf yang masih mentah tersebut akan dibaiki/ditambah dari semasa ke semasa. Dalam tempoh seminggu satu hingga tiga sub topik kecil boleh saya siapkan. Bila sudah siap satu topik kecil, saya akan bertemu dengan penyelia yang lazimnya dilakukan dua minggu sekali pertemuan bersemuka. Sekurang-kurangnya pertemuan bersemuka adalah sebulan sekali. Dalam tempoh dua semester (setahun), saya mampu menyiapkan bab proposal dan bab dua (konsep dan teori). Saya cuba mematuhi timeframe yang disyorkan oleh pihak Pusat Pengurusan Siswazah agar saya dapat menyelesaikan pengajian master dengan segera.*

Berdasarkan temubual dengan Responden 3 daripada Pusat Pengajian Ilmu Kemanusiaan, Universiti Sains Malaysia, Pulau Pinang pelajar lelaki berusia 35 tahun, status sudah berkahwin, sedang mengikuti program pengajian Phd di semester 7. Berkaitan isu kesesuaian bidang pengajian bagi memenuhi keperluan semasa negara, Responden 3 menyatakan pandangan sebagai berikut:

*Sekarang saya berada di tahun akhir iaitu semester 7. Bidang pengkajian saya ialah Fiqh Semasa amalan mengerjakan Haji di Makkah al-mukarramah. Saya bukan mengkaji tentang hukum semasa berkaitan haji dan umrah tetapi mengkaji tip-tip yang sesuai, mudah dan praktikal dilaksanakan oleh jemaah haji Malaysia. Kebanyakan jemaah haji masih terikat dengan budaya orang terdahulu. Sebagai contoh penggunaan selipar yang sesuai, kaedah membersihkan air kencing bagi mereka yang tidak tos, pemakaian kain ihram dan sebagainya. Kajian saya cuba mencari kaedah yang paling sesuai dan praktikal berbanding amalan jemaah haji sekarang dalam menyempurnakan rukun dan syarat sah haji. Hal ini bersesuaian dengan langkah Tabung Haji Malaysia melaksanakan Muzakarah Haji Peringkat Kebangsaan setiap tahun.*

Berdasarkan temubual dengan Responden 4 daripada Kolej Sastera dan Sains, Universiti Utara Malaysia, Sintok Kedah seorang pelajar lelaki berusia 35 tahun, status sudah

berkahwin, program pengajian peringkat Phd semester 5. Responden 4 diminta pandangan mengenai kemampuan pelajar pasca siswazah menguasai bahasa Arab dan Inggeris, beliau menyatakan sebagai berikut:

*Saya berpandangan bahawa pelajar siswazah peringkat master dan Phd, khususnya bidang pengajian Islam hendaklah menguasai bahasa Arab dan bahasa Inggeris dengan baik dan berkesan. Ini kerana bahan rujukan utama menggunakan bahasa Arab atau bahasa Inggeris. Bukan sahaja pelajar boleh membaca dan memahami kedua-dua bahasa tersebut dengan baik, tetapi juga pelajar hendaklah mampu berkomunikasi menggunakan bahasa Arab atau bahasa Inggeris dengan baik. Sebagai pelajar Phd, saya menguasai bahasa Inggeris dalam bentuk pemahaman, penulisan dan komunikasi. Sementara bahasa Arab pula saya juga boleh menguasai pada tahap sederhana. Ini kerana saya sering berkomunikasi dengan pelajar antarabangsa seperti dari negara Iran, Libya dan negara Mesir menggunakan bahasa Arab fushah.*

### **Perbincangan Dapatan Kajian**

Jika dilihat secara mendalam terhadap maklumbalas daripada empat orang responden di atas, pengkaji dapat merumuskan bahawa terdapat beberapa kategori yang berkaitan pembelajaran sepanjang hayat dalam kalangan pelajar siswazah Pengajian Islam di Universiti Awam. Masalah tersebut ialah berkaitan kewangan, penggunaan masa semasa pembelajaran, kesesuaian bidang pengajian dengan keperluan semasa dan kemampuan pelajar pasca siswazah menguasai bahasa Arab dan Inggeris. Bagi memudahkan perbincangan, pengkaji akan membincangkan berdasarkan sub topik seperti berikut;

#### **Masalah Kewangan (R1)**

Kewangan adalah sangat penting dalam semua urusan hidup manusia. Ini termasuklah dalam proses untuk mendapatkan ilmu pengetahuan dan pembelajaran sepanjang hayat. Untuk mencapai sesuatu matlamat, misalnya pelajar master boleh menyelesaikan pengajian dalam tempoh waktu yang ditetapkan, kewangan adalah salah satu faktor yang penting dalam menyelesaikan kuliah. Aisyah & Wajeeha (2016) menjelaskan bahawa semua pelajar lelaki atau wanita mempunyai keperluan yang sama dalam urusan kewangan. Bekerja sambil belajar adalah merupakan salah satu jalan penyelesaian terhadap pelajar yang menghadapi masalah kewangan. Sikap memilih pekerjaan oleh para pelajar boleh menyebabkan mereka terus dihimpit oleh kekangan menyelesaikan kuliah. Menurut Fidlizan (2015), mereka yang mempunyai ilmu pengurusan kewangan yang sempurna biasanya merancang masa depan dengan lebih baik berbanding orang yang tidak mempunyai ilmu mengurus kewangan. Ini menyebabkan mereka menghadapi pelbagai masalah kewangan seperti berhutang untuk membeli kenderaan, menanggung kos sara hidup ahli keluarga dan sebagainya. Selaras dengan pandangan Che Rugayah (2001) bahawa pelajar harus bijak mencari sumber pendapatan dan bijak mengurus perbelanjaan harian supaya pengajian di universiti dapat diselesaikan dan kewangan seharian tidak terjejas. Disamping itu, jika ada pelajar yang menghadapi masalah kewangan, mereka hendaklah membuang sikap rasa rendah diri dengan mengadu kepada pihak Hal Ehwal Pelajar di sesebuah universiti kerana universiti biasanya menyediakan ruang konsultasi pekerjaan kepada pelajar yang menghadapi kesulitan kewangan. Misalnya pelajar ditawarkan bekerja sebagai pembantu jualan di kafe universiti, sebagai pembantu penyelidik dan sebagainya. Pelajar juga boleh bekerja secara berdikari seperti berniaga secara online,



mengambil upah mencuci rumah orang, mengadakan kelas tuition dari rumah ke rumah, mengajar anak-anak mengaji al-Quran, mendapatkan pinjaman dari institusi kewangan dan sebagainya. Lihat juga [http://www.astroawani.com/gaya-hidup/ isu-sara-diri-pelajar-ipt-pelajar-dinasihat-berdikari-bersuara-bila-ada-masalah](http://www.astroawani.com/gaya-hidup/isu-sara-diri-pelajar-ipt-pelajar-dinasihat-berdikari-bersuara-bila-ada-masalah) bertarikh 10 January 2016. Mereka yang beranggapan bahawa kewangan merupakan halangan untuk mencapai kejayaan dalam akademik adalah suatu persepsi yang kurang tepat. Sebaliknya sikap dan kemahuan yang tinggi merupakan kunci kejayaan bagi seseorang itu menyelesaikan masalah kewangan dalam pembelajaran sepanjang hayat.

### ***Penggunaan masa (R2)***

Masa adalah sangat penting dalam kehidupan manusia sejagat. Penggunaan masa dan perancangan yang maksimal dapat menentukan kejayaan seseorang dalam kehidupan. Allah telah menukilkan kepentingan masa kepada manusia seperti yang dijelaskan dalam surah Al-‘Asr, ayat 1 hingga 3 yang bermaksud;

*Demi Masa!. Sesungguhnya manusia itu dalam kerugian. Kecuali orang-orang yang beriman dan beramal soleh, dan mereka pula berpesan-pesan dengan kebenaran serta berpesan-pesan dengan kesabaran.*

Berdasarkan maksud ayat di atas, dapat difahamkan bahawa semua manusia mempunyai waktu yang digunakan memenuhi ruang hidup masing-masing. Mereka berada dalam kerugian iaitu dilalaikan dengan kehidupan dunia. Kecuali golongan orang beriman dan melakukan kebaikan kepada Allah dan saling berpesan dengan mesej kebenaran serta bersikap sabar. Cabaran sebagai pelajar pada peringkat ijazah lanjutan adalah tinggi. Antaranya ialah dari aspek pengurusan masa. Menurut Nadhirah Aznan (2014), terdapat dikalangan pelajar siswazah yang melakukan aktiviti tidak berfaedah, banyak menghabiskan masa dengan gajet, kurang disiplin dalam membaca buku dan terpengaruh dengan persekitaran adalah faktor penyumbang pelajar gagal mencapai akademi cemerlang. Kenyataan ini selaras dengan Baharin (2006), menjelaskan bahawa gaya hidup cemerlang pelajar adalah bermula dengan pengurusan masa yang berkesan. Mereka yang cemerlang dalam pelajaran memiliki tahap disiplin yang konsisten dalam aktiviti harian. Kesan dari amalan murni tersebut melazimkan pelajar disiplin dalam penulisan tesis. Dalam hal ini pelajar siswazah mampu menggarap penulisan bab proposal atau bab konsep dan teori dapat disiapkan dalam tempoh yang ditetapkan.

Merujuk kepada pandangan R2 dalam penulisan tesis, walaupun R2 tidak mempunyai jadual harian khusus yang lazim dilakukan oleh kebanyakan orang, namun beliau dapat menyiapkan bab proposal dan bab dua mengikut jadual akademik. Disamping itu R2 juga dilihat memiliki minat yang mendalam terhadap bidang yang dikaji amat penting sebagai pelajar pengajian siswazah. Selain amalan bersemuka dengan pensyarah penyelia tesis adalah faktor kejayaan pencapaian akademik. Penyelia yang dilantik akan membimbing para pelajarnya memenuhi keperluan sesuatu kajian tesis. Pelajar yang kurang aktif dalam aspek penyeliaan bersama penyelia biasanya dilihat menghadapi banyak masalah terhadap kualiti selia tesis.

### ***Kesesuaian Bidang Pengajian Bagi Memenuhi Keperluan Semasa Negara (R3)***

Berdasarkan pengamatan awal pengkaji terhadap pelajar siswazah pengajian Islam di universiti awam memilih bidang kajian yang sesuai dengan keperluan semasa. Maklumbalas dari R3



mendapati kajian amalan fiqh semasa oleh jemaah haji dan umrah adalah sangat relevan dengan kajian yang sedang dikajinya. Beliau menjelaskan hukum hakam tentang amalan haji dan umrah yang terkandung dalam banyak buku dan kitab fiqh oleh para ulama sudah mencukupi perbincangannya. Tetapi hukum hakam tersebut berubah menurut perkembangan semasa. Sebagai contoh penggunaan bag kolostomi kerana sakit, keperluan orang yang berwuduk daimul hadath, penggunaan alat catheter condom urine bagi lelaki yang disarung kepada alat kemaluan dan sebagainya. (Rujuk Muzakarah Haji ke 32 Peringkat Kebangsaan tahun 2015). Hasil kajian ilmiah ini dapat dirujuk oleh umat Islam khususnya di Malaysia sebagai suatu dapatan kajian yang relevan semasa. Kemahiran menjana, menganalisis dan merumuskan bidang haji dan umrah oleh siswazah pengajian Islam di Malaysia adalah suatu pencapaian baharu yang perlu diberi perhatian khusus dalam industri pelancongan haji dan umrah kini. Ini kerana bidang pengajian Islam agak kurang diceburi oleh masyarakat berbanding bidang-bidang lain seperti sains, kimia, perladangan, pertanian, ict, computer, biotech dan sebagainya.

#### ***Kemampuan Pelajar Pasca Siswazah Menguasai Bahasa Arab Dan Inggeris (R4)***

Tidak dapat dinafikan bahawa kedudukan Bahasa Arab diperingkat antarabangsa adalah sangat penting selain bahasa Inggeris. Bahasa Arab dipertuturkan oleh bangsa Arab yang mempunyai pelbagai dealek mempunyai nilai bahasa yang perlu dikuasai oleh pelajar siswazah pengajian Islam. Mohamad Azrien (2009) menjelaskan bahawa Bahasa Arab adalah bahasa Al-Quran yang mempunyai kesusasteraan yang sangat tinggi berbanding bahasa-bahasa lain. Secara tidak langsung orang Islam yang mendalami bahasa Arab dapat memudahkan mereka memahami bahasa Al-Quran yang penuh dengan nilai kesusasteraan Arab yang unit. Di samping itu ajaran Islam yang bersumberkan al-Qur'an dan hadith adalah ditulis dalam bahasa asal iaitu bahasa Arab merupakan bahasa ilmu. Oleh yang demikian, Bahasa Arab amat dominan sebagai bahasa rujukan seluruh umat Islam termasuk sebagai bahasa yang banyak dipertuturkan oleh sebahagian besar di negara timur tengah. Bahasa Arab merupakan satu anugerah Allah SWT diberikan kepada bangsa Arab dan mereka yang cintakan ilmu-ilmu Islam. Jika dilihat kepada dasar kebanyakan universiti, hasil pembelajaran pasca siswazah peringkat master dan Phd ialah memperkasakan penggunaan bahasa Arab dalam kalangan masyarakat melalui kapasiti akademik dan professional.

Demikian juga dengan penguasaan bahasa Inggeris dalam kalangan pelajar pasca siswazah pengajian Islam, mereka hendaklah memahami dengan baik dan lancar. Mohd Hasimi (2017, mengatakan pelajar pasca siswazah yang memiliki kemahiran berkomunikasi bahasa Inggeris merupakan suatu kelebihan pelajar tersebut. Mohamad Hazrul (2012), menjelaskan bahawa mereka perlu mengikis sikap malu menggunakan bahasa Inggeris dalam perbualan harian kerana sikap ini merugikan diri sendiri. Jika tidak diatasi peringkat awal, ia memberi kesan negatif terhadap peluang memohon pekerjaan, menjejaskan peluang naik pangkat. Sudah tentunya majikan tidak berminat terhadap pekerja yang lemah dalam komunikasi bahasa Inggeris. Menurut Kadir & Nor (2015), pengaruh bahasa ibunda yang kuat dikalangan pelajar pasca siswazah menyebabkan bahasa Inggeris kurang diberi perhatian. Oleh yang demikian, pihak universiti perlu merangka kursus pemantapan bahasa Inggeris dengan memberi keutamaan kepada pelajar pasca siswazah pengajian Islam. Menurut Mohd Hasimi (2017), graduan yang dihasilkan dapat menguasai kompetensi bahasa Inggeris yang mantap.

#### **Kesimpulan**

Berdasarkan perbincangan di atas, dapat dirumuskan bahawa pembelajaran sepanjang hayat oleh pelajar pasca siswazah pengajian Islam dilihat menghadapi masalah kewangan. Namun

masalah tersebut boleh diatasi melalui pelbagai cara. Antaranya menjalankan perniagaan kecil-kecilan, mengambil upah atau mendapatkan pinjaman kewangan dari institusi kewangan. Pelajar perlu mengurus masa pembelajaran dengan baik dan pada waktu yang sama kebajikan ahli keluarga seperti suami, isteri, anak-anak serta kedua ibu bapa tidak boleh diabaikan. Pelajar siswazah sewajarnya menguasai dua bahasa utama iaitu bahasa Arab dan bahasa Inggeris dengan baik. Tanpa menguasai kedua bahasa tersebut termasuk bahasa ibunda, graduan yang dilahirkan kurang berkualiti. Masyarakat mengharapkan mereka yang memegang ijazah master dan Phd berkemampuan berkomunikasi dalam bahasa Arab dan Inggeris dengan baik.

### **Penghargaan**

Setinggi-tinggi penghargaan dan terima kasih ditujukan kepada pembiaya geran kajian ini iaitu RIMC, Universiti Pendidikan Sultan Idris (UPSII) kerana telah membiayai Geran Khas Penyelidikan Pendidikan no. Geran 2017-0313-107-01, Universiti Pendidikan Sultan Idris.

### **Rujukan**

Al-Quran Kareem.

- Aisyah Abdul Rahman & Wajeeha Zulkifly. (2016). Faktor Penentu Pengurusan Kewangan: Kes Mahasiswa Universiti Kebangsaan Malaysia (Determinants of Financial Management: The Case of Universiti Kebangsaan Malaysia Students. *Jurnal Personalia Pelajar*, 19(2), 85-94.
- Baharin, Jamaludin, Azmahani dan Mohd Hidayat. (2006). *Gaya Hidup Pelajar Cemerlang dalam Persekitaran Kampus*. Fakulti Kejuruteraan Awam. Universiti Teknologi Malaysia.
- Che Rugayah Binti Che Ismail, (2001). *Pengurusan Kewangan Pelajar: Satu Tinjauan Awal Kepada Keperluan Kaunseling Kewangan* Tesis Master, Jabatan Pendidikan Teknik dan Vokasional, UTHM.
- Fidlizan Muhammad, Azila Abdul Razak, Mohd Yahya Mohd Hussin & Fatimah Salwa Abdul Hadi. (2015). Kehidupan kelas menengah Malaysia: Satu kajian kes mengenai corak perbelanjaan guru dalam pemilikan aset dan pelaburan kewangan. *Malaysian Journal of Society and Space*, 11(11), 1-13.
- Irma Indayu Omar dan Yushiana Mansor. (2006). *Panduan mencari maklumat*, Kuala Lumpur. PTS Professional.
- Hamizatun Akmal binti Md Yusof dan Norzaini binti Azman. (2013). Perkaitan Antara Pengurusan Masa Dan Stres Dalam Kalangan Pelajar Siswazah Di Ipta, dalam *Jurnal AJTLHE* Vol. 5, No.1, Jan 2013, Bangi, UKM.
- Hanani Izzah Binti Abdul Ghani. (2007). Penilaian Penyeliaan Penyelidikan Pelajar Pasca Ijazah. Skudai: Tesis Sarjana Fakulti Pendidikan, Universiti Teknologi Malaysia.
- Kementerian Pengajian Tinggi Malaysia. (2012). My3L Direktori Pembelajaran Sepanjang Hayat Peringkat Nasional 2012/2013.
- Kementerian Pendidikan Malaysia. *Pelan Pembangunan Pendidikan Malaysia* (Pendidikan Tinggi) 2015 – 2025. Putrajaya: Kementerian Pengajian Tinggi Malaysia.
- Kementerian Kewangan Malaysia. (2001). *Pengurusan Ekonomi Malaysia*, Putrajaya.
- Mohamad Azrien Mohamed Adnan & Mohd Alwee Bin Yusoff. (2009). *Motivasi, Pembelajaran Pengaturan Kendiri Dan Prestasi Akademik: Satu Kajian Di Kalangan Pelajar Asasi Pengajian Islam Universiti Malaya Nilam Puri*. *Journal of Al-Tamaddun*, 4. pp. 1-16. ISSN 1823-7517.



3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Cophorne Hotel, Cameron Highland, Malaysia  
29<sup>th</sup>-30<sup>th</sup> June 2019

- Mohamad Hazrul Ismail. (2012). Kajian Mengenai Kebolehpasaran Siswazah di Malaysia: Tinjauan dari Perspektif Majikan. *Prosiding Perkem VII*: 906-913.
- Mohd Hasimi Yaacob, Mohd Helmi Ali & Nurhidayani Abd Wahab. (2017). Hubungan Penguasaan Bahasa Inggeris dengan Tahap Keberkesanan Kemahiran Insaniah Pelajar di Universiti Kebangsaan Malaysia. *Jurnal Personalia Pelajar* 20 (2017).
- Mohd. Nasran Abd Halim, Mohd. Isa Hamzah dan Zolkepli Haron. (2016). *Pendekatan Fleksibel Dalam Pengajaran dan Pembelajaran Bagi Menggalakkan Pendidikan Sepanjang Hayat di Malaysia*. Bangi, Universiti Kebangsaan Malaysia.
- Nadhirah Aznan. (2014). *Persepsi Mahasiswa Kolej Universiti Islam Antarabangsa Selangor (Kuis) Terhadap Amalan Pengurusan Masa* dalam E-proceedings of the Conference on Management and Muamalah (CoMM 2014), 26-27 May 2014 Synergizing Knowledge on Management and Muamalah (E-ISBN: 978-983-3048-92-2).
- Robert Mills Gagné (1970). *The conditions of learning*. Publisher: Holt, Rinehart and Winston; 2nd edition.
- Rofishah Bt. Rashid (2015). *Kepimpinan Pembelajaran Sepanjang Hayat di Masjid*, Kuala Terengganu, Proceedings of ICIC2015 – International Conference on Empowering Islamic Civilization in the 21st Century, Universiti Sultan Zainal Abidin, Malaysia.
- Wan Mohd Nor Wan Daud. (2003). *Mutiara Taman Adabi: Sebuah Puisi Mengenai Agama, Filsafat dan Masyarakat*. Kelantan, Dian Darulnaim Sdn Bhd.
- Wan Zah Wan Ali, Aida Suraya, Ramlah, Rosini, Rohani, Sharifah, Kamariah dan Habsah. (2008). Kemahiran Pengurusan Masa Pelajar Universiti Tempatan: Status dan Hubungannya dengan Pencapaian. *Jurnal Teknologi*. Universiti Teknologi Malaysia. Hlm. 49-64.
- Yasmin Huzaimah Binti Aladdin dan Anuar Ahmad (2017). *Tahap Literasi Kewangan Di Kalangan Mahasiswa*. Prosiding dalam seminar International Conference on Global Education V Global Education, Common Wealth, and Cultural Diversity, UKM.



## **GAGASAN PEMIKIRAN TUN DR. MAHATHIR (TDM): ANALISIS RANCANGAN MALAYSIA KE-4 (RMK4) HINGGA RMK8 DAN RMK11.**

**Dr. Nor Azaruddin Husni bin Hj Nuruddin<sup>1</sup>**

<sup>1</sup>Felo Kanan, Institut Kefahaman Islam Malaysia (IKIM)

---

**Abstrak:** Kajian ini bertujuan untuk mengenalpasti dan meneroka gagasan pemikiran sains Tun Dr. Mahathir Mohamad (TDM). Kaedah kajian yang digunakan dalam penyelidikan ini ialah pendekatan deskriptif analitis. Iaitu pengkajian secara sistematis terhadap pemikiran atau gagasan seorang pemikir. Sumber data utama adalah data yang berkaitan dengan Rancangan Malaysia ke-4 hingga Rancangan Malaysia ke-8 dan rancangan Malaysia ke-11. Sumber data sekunder ialah tulisan TDM yang relevan dengan persoalan kajian, ucapan-ucapan yang disampaikan dan disokong oleh tulisan-tulisan yang dihasilkan berkaitan dengan persoalan kajian. Analisis yang digunakan ialah analisis kandungan iaitu pembahasan mendalam terhadap kandungan suatu maklumat bertulis atau bercetak dan analisis dengan merujuk secara langsung bahan bacaan yang dihasilkan oleh tokoh terselidik. Pelaksanaan dari analisis dimulai dengan melakukan telaah dan pencatatan berbagai hal penting yang dilakukan oleh TDM. Langkah seterusnya dilakukan identifikasi konsep-konsep dan diformulasikan pemikiran atau pandangan TDM terhadap sains. Keputusan kajian ialah membandingkan pemikiran sains TDM pada tahun 1981-2003 dan pada tahun 2018 ketika di era revolusi industri 4.0.

**Keyword:** *Pemikiran, Tun Mahathir, Sains, Rancangan Malaysia*

---

### **Pengenalan**

Gagasan pemikiran sains TDM ini adalah satu topik yang amat menarik untuk dikaji dan diperhalusi. Jadi, timbul persoalan penulis di sini bukan apa yang telah disumbangkan oleh TDM hendak dikaji tetapi bagaimana TDM telah membuat sumbangan dan pencapaian yang luar biasa iaitu sebuah gagasan pemikiran.

Jadi, apa yang penting di utarakan dalam kertas kerja ini ialah bagaimana TDM boleh berfikir untuk memberi sumbangan besar dikenali sebagai gagasan pemikiran TDM. Pemikiran TDM ini banyak mencorakkan perubahan di Malaysia ini terutama dari segi politik, ekonomi, pentadbiran, pendidikan, hubungan luar negara, perlembagaan dan lain-lain lagi. Iklim perubahan ini adalah berkait rapat dengan nilai-nilai falsafah disebalik pemikiran TDM. TDM mendefinisikan pemikiran itu sebagai kebolehan seseorang untuk berfikir. Menurut TDM (Mahathir, 1983) kebolehan manusia berfikir membolehkannya maju daripada satu peringkat kepada peringkat yang lain dan daripada keadaan primitif kepada keadaan yang lebih maju. Dengan kata lain, kebolehan berfikir itu adalah kebolehan untuk memilih antara yang baik dengan yang buruk dan membezakan akhlak yang baik dan tidak baik dan seseorang itu boleh memilih untuk menjadi dirinya atau sesiapa sahaja. Persoalannya jika manusia mampu membuat pilihan ke arah kebaikan tetapi adakah dia mampu memupuk sifat kemanusiaannya yang lebih tinggi?

Gagasan dalam konteks kajian ini ialah apa-apa yang diilhamkan di dalam pemikiran TDM diterjemahkan kepada pelaksanaan secara sistematik. Gagasan pemikiran TDM dalam



berdasarkan kepada Rancangan Malaysia (RMK) yang telah dilaksanakan semasa pemerintahan TDM, iaitu dari Rancangan Malaysia ke Empat (RMK4) hingga Rancangan Malaysia ke Lapan (RMK8) dan RMK11. Gagasan pemikiran ini telah dilaksanakan oleh TDM sepanjang pemerintahan beliau sebagai Perdana Menteri Malaysia pada tempoh 1981- 2003 dan 2018-2019.

Kajian ini juga membuka jalan untuk kajian akan datang apabila negara telah memasuki era Revolusi Industri 4.0.

### **Kajian Kepustakaan**

Kajian analisis pemikiran Mahathir Mohamad mengenai *Islam dan Pelaksanaan Dasarnya dalam Negara Malaysia* oleh Zulfa Jamalie (2011) mengenalpasti dan meneroka gagasan pemikiran TDM mengenai Islam dan kenegaraan; pandangan TDM terhadap Islam dan isu-isu kenegaraan moden; dan pandangan TDM terhadap hubungan antara Islam dan kenegaraan. Daripada kajian ini didapati bahawa pada pandangan TDM adalah agama yang sempurna bersifat dinamik dan menghendaki kemajuan; agama yang rasional, agama keamanan dan fleksibel; agama yang sederhana dan bertoleransi. Oleh itu, Islam mesti difahami secara rasional, kritikal dan ditafsir semula berpandukan kepada al-Quran dan hadis yang berteraskan kepada *sebab, hujah* dan *logik* yang dipanggil sebagai "Islam Mahathir".

Kedua, menurut TDM, pelbagai fahaman dan konsep berkait dengan masalah kenegaraan yang datang dari Barat antaranya seperti demokrasi atau sekularisme, tidak mesti diterima mahu pun ditolak secara membuta tuli. Perkara yang mesti dilakukan adalah menyaring kembali fahaman-fahaman tersebut. Perkara yang tidak baik dan tidak sesuai mesti diketepikan dan perkara yang baik dan selaras boleh diikuti.

Ketiga, Islam dan negara adalah satu perkara yang berkait erat dan tidak boleh dipisahkan kerana kepercayaan beragama yang membawa manusia ke arah kehidupan yang lebih seimbang. Agama juga yang memberikan petunjuk sebenar dan dorongan paling kuat ke arah mencapai kehidupan yang lebih baik dan bermakna. Oleh itu, Islam yang berisikan nilai-nilai moral yang tinggi untuk mengatur kehidupan bermasyarakat, berbangsa dan bernegara boleh diserap serta menjadi dasar dalam pentadbiran negara.

Mazli Mazlan (2014) dalam kajian beliau mengenai *Pemikiran Tun Dr. Mahathir Mengenai Politik Orang Melayu Malaysia Pasca Persaraan (2003-2012)* cuba untuk menganalisis pemikiran TDM mengenai 2 perkara utama. Pertama, mengenai politik orang Melayu pasca persaraannya dan kedua, mengenal pasti penglibatan semula TDM dalam politik negara selepas persaraannya. Selepas persaraannya, TDM mengkritik keras pentadbiran Tun Abdullah kerana TDM berpendapat beberapa tindakan yang dilaksanakan oleh penggantinya menjejaskan kepentingan negara, khususnya orang Melayu. TDM turut mengkritik agenda-agenda pembangunan negara yang telah dirancang, seperti jambatan bengkok di Johor yang tidak dilaksanakan oleh pengganti beliau. Akhirnya, kritikan demi kritikan telah membawa kepada perletakan jawatan Tun Abdullah. Semasa era pentadbiran Dato' Seri Mohd Najib, TDM terus menerus mengkritik dalam hal-hal yang melibatkan kepentingan negara.

Hasil kajian ini mendapati bahawa pemikiran politik selepas TDM bersara banyak berkisar tentang beberapa isu penting yang akhirnya melibatkan maruah agama, bangsa dan negara. Isu-isu tersebut adalah isu-isu perpecahan politik yang berlaku dalam kalangan masyarakat Melayu, kuasa politik orang Melayu yang semakin menyusut dan terhakis, ancaman kepada undang-undang dan dasar pembangunan negara, keadaan ekonomi orang Melayu yang semakin menghimpit dan tertekan terutamanya nasib orang Melayu yang berada di kawasan luar bandar dan miskin bandar, kelemahan kepimpinan, pertikaian hak-hak orang



Melayu mengenai hak kesamarataan, isu-isu hak asasi manusia serta ancaman pengaruh pemikiran demokrasi liberal.

Oleh sebab itu, TDM berpandangan kontrak sosial dan perlembagaan negara harus diperkasakan dan dihormati orang semua bangsa yang ada di Malaysia ini, pembangunan ekonomi orang Melayu perlu diteruskan sehingga mencapai sasaran, dasar-dasar pembangunan negara terutama dalam era dunia berteknologi maklumat masa kini perlu relevan dan telus, kerjasama politik antara kaum perlu diperkukuhkan dan dipereratkan melalui konsep muhibah atau perpaduan.

### **Rancangan Malaysia**

Rancangan Malaysia adalah merupakan rancangan lima tahun pembangunan Malaysia. Rancangan ini merupakan peninggalan zaman pemerintahan British di Tanah Melayu selepas Perang Dunia Kedua. Rancangan Malaya Pertama bermula pada tahun 1956 hingga 1960 dan seterusnya Rancangan Malaya Kedua dari tahun 1961-1965.

Walau bagaimanapun, selepas penubuhan Malaysia, Rancangan Malaya ditukar kepada Rancangan Malaysia. Ini adalah kerana perancangan ekonomi merangkumi seluruh Malaysia termasuk Sabah dan Sarawak dan tidak lagi tertumpu hanya kepada Malaya. Rancangan Malaysia yang Pertama bermula pada tahun 1966 hingga 1970.

### **Rancangan Malaysia ke-4 (RMK4: 1981 – 1985)**

Rancangan Malaysia Keempat (1981) yang dirangka masih berteraskan Dasar Ekonomi Baru (DEB) iaitu ke arah mencapai matlamat untuk membasmi kemiskinan terutama bangsa Melayu dan seterusnya untuk menyusun semula masyarakat. Pembangunan teknologi, sosio ekonomi yang berasaskan tenaga manusia dan sumber watan merupakan strategi RM4 ke arah pembangunan industri. Oleh sebab itu, sebanyak RM59.6 bilion telah diperuntukkan bagi tujuan ini di mana sebanyak 58% daripada jumlah ini dibelanjakan untuk pembangunan sektor ekonomi. Dalam konteks pembangunan sains pula, Dasar Penswastan negara telah pun diperkenalkan yang mana bertujuan supaya sektor swasta, pengusaha tempatan dan kerajaan bekerjasama ke arah memajukan negara. Melalui dasar ini, pelaburan dan kepentingan kerajaan dipindahkan kepada sektor swasta.

Syarikat-syarikat yang terlibat dalam Dasar Penswastan ini termasuklah Telekom Malaysia (TM), Tenaga Malaysia (TNB) dan lain-lain yang juga dikenali sebagai *Government Link Company* (GLC). Namun masih terdapat juga kekurangan-kekurangan dalam pelaksanaan Dasar Penswastan ini. Semenjak dasar ini dilaksanakan ramai pihak-pihak yang mengkritik sama ada daripada media massa, ahli politik, ahli-ahli perniagaan, pegawai kerajaan dan juga ahli-ahli akademik. Ada pihak yang menganggap penswastan ini sebagai kedurjanaan kapitalis. Namun, perkara ini dinafikan oleh TDM kerana tindakan memiliknegerakan aset ekonomi terbukti kesilapan besar sistem sosialis. Malah, negara-negara komunis pun meminta bantuan daripada sektor swasta untuk memberi nafas baru ekonomi mereka.

Pada tahun yang sama juga, TDM telah memperkenalkan Dasar Pensyarikatan Malaysia. Di dalam negara Malaysia hanya terdapat dua sektor utama yang memainkan peranan untuk memajukan negara iaitu sektor swasta dan sektor kerajaan. Oleh itu, kedua-dua sektor ini haruslah bekerjasama. Jadi, dasar ini adalah bertujuan untuk menggalak kerjasama antara kedua-dua sektor ini.

Dalam RMK4 ini juga TDM telah memperkenalkan industri berat. Di bawah dasar ini TDM telah menubuhkan Perbadanan Industri Berat Malaysia (HICOM) pada tahun 1980.



Hasil daripada pembangunan industri berat ini, beberapa kawasan industri baru telah pun dibuka antaranya ialah Senawang, Skudai, Bintulu, Menggatal dan Likas. Kawasan perdagangan bebas juga telah dibuka atas motif yang sama seperti di Bayan Lepas, Pulau Pinang.

Apabila Malaysia semakin mengarah kepada sebuah negara industri didapati banyak peluang-peluang pekerjaan telah diwujudkan tetapi hanya sebagai pekerja am sahaja. Untuk itu TDM telah mengorak langkah dengan membuat persediaan awal bagi membekalkan tenaga mahir dan separa mahir kepada phak industri. Bagi mencapai matlamat ini, TDM telah mewujudkan Institut Latihan Perindustrian (ILP), beberapa buah sekolah Vokasional, Pusat Latihan Belia, Institut-institut Teknikal dan universiti-universiti yang menyediakan kemahiran teknikal.

RMK4 yang dibentuk oleh TDM adalah ekoran daripada kemelesetan ekonomi terutama apabila harga bijih timah dan getah yang telah jatuh merudum dan ini memberi kesan yang besar kepada Malaysia terutama kepada orang-orang kampung yang bergantung hidup kepada pendapatan jualan getah mereka.

TDM berpandangan ketahanan dan asas ekonomi yang kuat adalah sumber kekuatan utama bagi negara mengharungi perkembangan buruk ekonomi dunia.

#### **Rancangan Malaysia ke-5 (RMK5: 1986 - 1990)**

Rancangan Malaysia Kelima (RMK-5) terus memacu pertumbuhan industri negara. Beberapa langkah baru telah diperkenalkan oleh TDM dalam usaha menarik lebih ramai lagi pelabur untuk melabur di Malaysia ini menerusi skim galakan yang telah diperkenalkan. Antara skim galakan yang diperkenalkan ialah pengurangan bayaran elektrik, bayaran bil telefon, bil air dan tapak kilang. Selain itu, syarat-syarat pelaburan asing turut dilonggarkan bagi meningkatkan pelaburan industri terutama industri yang berorientasikan eksport.

TDM seterusnya terus mengorak langkah dengan merangka strategi baru dalam konteks pengindustrian negara, iaitu strategi Pembangunan dan Penyelidikan (*R&D*). Strategi ini dijangka dapat mengurangkan kos pengeluaran tetapi meningkatkan kualiti produk atau perkhidmatan serta mencari penemuan-penemuan baru. Lain-lain objektif diperkenalkan R&D ini termasuklah meningkatkan keupayaan dan kecepatan sumber tenaga tempatan.

Seperkara lagi, pemikiran sains TDM telah menjangkakan kepentingan menguasai teknologi komputer pada waktu itu.

Menyebut mengenai pentadbiran awam sebagaimana di dalam RMK4 ianya menjadi sokongan kepada pembangunan industri negara maka TDM telah berusaha untuk meningkatkan mutu perkhidmatan awam. Untuk itu, beberapa kod etika perkhidmatan awam telah diperkenalkan oleh TDM.

Kesemua kod etika yang telah diperkenalkan oleh TDM ini mempunyai maksud-maksud yang tertentu. Sebagai contoh penggunaan tanda nama pada penjawat awam ini memudahkan pihak swasta untuk mengenal pegawai tersebut sekiranya ingin berurusan atau melaporkan mengenai sesuatu perkara. Begitu juga Kepimpinan Melalui Teladan. Konsep ini khusus kepada ketua-ketua jabatan supaya menunjukkan contoh yang baik kepada orang bawahan. Dari segi manual prosedur kerja, kad perakam waktu kesemua ini untuk memastikan penjawat awam bekerja secara sistematik dan ke arah perlaksanaan ISO supaya mudah berurusan dengan pihak swasta dan antarabangsa. Setiap keputusan yang akan diambil akan diputuskan melalui mesyuarat. Ini mengambil kira keputusan bersama dan ketelusan. Walau bagaimanapun masih terdapat kekurangan-kekurangan yang berlaku seperti masalah rasuah serta salah guna kuasa.



Hasrat dan aspirasi TDM untuk mencapai status negara maju menjelang tahun 2020 akan diberi keutamaan dalam projek-projek pembangunan negara.

### **Rancangan Malaysia ke-6 (RMK: 1991 - 1995)**

Dalam RMK6 ini TDM telah memberi fokus kepada pengurusan kewangan secara berhemah, iaitu mengurangkan perbelanjaan negara. Perbelanjaan yang tidak produktif tetapi terpaksa ditanggung oleh kerajaan telah diswastakan. Usaha-usaha ke arah memperkukuhkan perkembangan pasaran kewangan terus giat dilakukan oleh TDM dengan mempertingkatkan sektor pembuatan agar terus berkembang dengan baik. Strategi RMK6 ini adalah kepada pengurusan kewangan yang berhemah dan mengekalkan pertumbuhan ekonomi di tahap yang tinggi sebagaimana sebelum ini.

Untuk mencapai matlamat tersebut, TDM memperkenalkan lagi dasar-dasar yang memberi fokus kepada tiga komponen utama iaitu (i) untuk mempelbagaikan asas perindustrian (ii) meningkatkan pembangunan sumber manusia (iii) menggalakkan peningkatan teknologi.

### **Rancangan Malaysia ke-7 (RMK: 1996 - 2000)**

Pembangunan RMK-7 dilaksanakan adalah berasaskan kejayaan pelaksanaan RMK6. TDM telah merangka strategi-strategi baru ke arah memacu pertumbuhan ekonomi negara di abad ke-21. Strategi utama dalam RMK7 ini ialah pengeluaran berskala besar bagi mencapai objektif tersebut, TDM telah merangka beberapa pendekatan atau pelan tindakan ke arah peningkatan produktiviti negara khususnya bagi eksport oleh industri-industri Malaysia.

TDM telah menambah bidang latihan kemahiran bagi memperkayakan sains dan teknologi. Pengetahuan mengenai sains dan teknologi digunakan sepenuhnya bagi persaingan peringkat global. Produk-produk yang dihasilkan mestilah dalam kuantiti yang berskala besar dan dalam masa yang semakin singkat. Untuk mencapai maksud ini, penggunaan teknologi harus dimaksimumkan bersama-sama dengan kepakaran yang tinggi.

Menurut TDM negara kita bukanlah hanya menjadi sekadar pengguna teknologi maklumat tetapi seharusnya menjadi pelopor kepada teknologi ini atau dengan kata lain menjadi pengeksport teknologi maklumat ini. Cita-cita murni TDM ini bukanlah mudah kerana untuk menguasai teknologi ini memerlukan kepakaran yang spesifik. Untuk itu TDM telah merangka pembinaan Cyberjaya yang menyediakan asas bagi perkembangan teknologi maklumat ini

Walau bagaimanapun terdapat peristiwa penting di dalam RMK7 ini bila mana berlaku krisis ekonomi yang betul-betul menguji kestabilan ekonomi negara akibat serangan matawang. Banyak negara-negara di rantau Asia yang terjejas terus akibat serangan mata wang ini dan memaksa negara-negara ini untuk meminjam daripada *International Monetary Fund* (IMF) bagi menyelesaikan kemelut ini tetapi Malaysia di bawah kepimpinan TDM dengan berani dan penuh keyakinan menolak pinjaman IMF dengan menggunakan langkah-langkah yang berani untuk menstabilkan ekonomi negara.

Sehubungan dengan itu, TDM menubuhkan Majlis Tindakan Ekonomi Negara (MTEN) pada 7 Januari 1998 dan Pelan Pemulihan Ekonomi Negara (PPEN) pada 23 Julai 1998. Secara ringkas, beberapa langkah yang digunakan oleh TDM telah berjaya keluar dari kemelut kegetiran ekonomi. Antara langkah-langkah tersebut ialah tambatan nilai ringgit kepada USD, memansuhkan penggunaan note RM1,000, penggabungan bank-bank komersial, menggalakkan rakyat melancong di dalam negara, projek perumahan yang terbengkalai dipulihkan supaya ekonomi bergerak, industri pembelian kereta sebelum ini tidak memihak



kepada kereta-kereta tertentu dipulihkan, beberapa syarikat-syarikat swasta yang mengalami krisis kewangan dipulihkan serta banyak lagi. Akhirnya dengan ketokohan dan kebijaksanaan TDM Malaysia telah berjaya mencari jalan penyelesaian dalam acuan negara kita yang kini menjadi contoh-contoh kepada pihak antarabangsa.

### **Rancangan Malaysia ke-8 (RMK8: 2001 - 2005)**

RMK-8 adalah Rancangan Malaysia yang terakhir bagi TDM kerana TDM telah meletak jawatan sebagai Perdana Menteri dalam tahun 2003. Walau bagaimanapun, dalam RMK8 ini TDM telah melaksanakan beberapa dasar bagi memacu pertumbuhan ekonomi negara selepas melalui zaman kegawatan.

TDM telah melaksanakan Dasar Wawasan Negara (DWN) bertujuan menjadikan pertumbuhan ekonomi mampan dan berdaya tahan. TDM telah dapat mengenalpasti bahawa dalam usaha untuk meningkatkan pertumbuhan ekonomi negara, ianya tidak semata-mata bergantung kepada hasil industri pada skala besar. Maka perlu diterokai sumber baru ataupun bidang baru.

Untuk itu, TDM telah melihat perkembangan sektor Teknologi Maklumat dan Komunikasi (ICT) yang merangkumi setiap aspek kehidupan yang merentasi berbagai budaya, bangsa dan agama di seluruh dunia. Supaya Malaysia tidak ketinggalan dalam bidang ICT ini, TDM telah memperluaskan penggunaan ICT dalam semua sektor ekonomi untuk mempercepatkan pertumbuhannya.

### **Rancangan Malaysia ke-11**

Selepas Pilihanraya Umum ke-14 yang bersejarah iaitu pada 9 Mei 2018 berlaku pertukaran kerajaan yang melibatkan reformasi secara besar-besaran. Reformasi ini perlu sekiranya Malaysia berhasrat untuk pulih, membangun semula dan muncul kembali sebagai sebuah negara yang berkemampuan untuk bersaing pada peringkat yang lebih tinggi. Sehubungan dengan itu, reformasi yang berlaku termasuklah menambahbaik tadbir urus, mempercepatkan inovasi, melonjak produktiviti dan meningkatkan industri dalam rantaian nilai yang lebih tinggi disamping mempertingkatkan kesejahteraan hidup rakyat, terutama di kalangan isi rumah berpendapatan 40% terendah (B40) dan mencapai pertumbuhan inklusif. Kaian separuh penggal RMK11 ini memberi keutamaan dan penekanan baru yang bertujuan untuk mereformasi dasar sedia ada dan menggaris sasaran sosioekonomi yang disepakati bagi tempoh 2018-2020. Kajian separuh penggal ini telah mengambil kira aspirasi kerajaan baharu, cabaran ekonomi dan trend global semasa. RMK11 ini menggariskan enam tonggak. Tonggak pertama ialah mereformasi tadbir urus ke arah meningkatkan ketelusan dan kecekapan perkhidmatan awam. Tonggak kedua, memperkukuh pembangunan inklusif dan kesejahteraan rakyat. Tonggak ketiga, menuju ke arah pembangunan wilayah yang seimbang. Tonggak keempat, memperkasa modal insan. Tonggak kelima, mempertingkatkan kemampanan alam sekitar melalui pertumbuhan hijau dan tonggak keenam, memperkukuh pertumbuhan ekonomi.

### **Penutup**

Berdasarkan RMK4 hingga RMK8 dapat dilihat satu trend bagaimana TDM membangunkan Malaysia berdasarkan kepada gagasan untuk membangunkan Malaysia menuju negara maju. RMK1 lebih menumpukan kepada membasmi kemiskinan iaitu kesinambungan daripada Perdana Menteri sebelumnya. Pada RMK 5 memberi penumpuan kepada menarik pelabur asing untuk melabur di Malaysia. RMK6 pula memberi tumpuan kepada pengurusan kewangan yang berhemah manakala RMK7 memberi tumpuan kepada pertumbuhan ekonomi



negara di abad ke 21 dan RMK8 pula memacu ekonomi semula selepas melalui kegawatan ekonomi. RMK11 pula memastikan sasaran pembangunan negara dapat dicapai. Namun, beberapa ketidaksamaan dan isu struktur ekonomi di dapati terus wujud. Dalam melangkah ke hadapan, pelaksanaan semua inisiatif pembangunan perlu diperkukuh. Malaysia baharu adalah berpaksikan kepada kepercayaan, ketelusan dan akauntabiliti. Keutamaan dan penekanan akan meletakkan Malaysia pada landasan yang betul ke arah menjadi negara maju. Menurut Nor Azaruddin Husni (2018) Pemikiran sains TDM adalah untuk mengangkat maruah agama, bangsa dan negara.

### Rujukan

- Afifah Asriati (2012). Tinjauan Kritis Terhadap Pemikiran Mahathir Tentang Kelemahan Budaya Melayu dalam Pembangunan. *Jurnal TINGKAP*. Vol 8(1): 1-16.
- Junita Budi Rahman (2014). Kuasa Insaniah Negara Malaysia dan Imej-imej Selebriti Tun Dr. Mahathir Mohamad. Tesis Dr. Fal. Universiti Utara Malaysia (UUM).
- Mahathir, 1983. Ucapan TDM semasa merasmikan Forum Sains Kebangsaan, Universiti Pertanian Malaysia pada 10 Mei 1983.
- Mazli Mazlan (2014). Pemikiran Tun Dr. Mahathir Mengenai Politik Orang Melayu Malaysia Pasca Persaraan (2003-2012). Tesis Dr. Fal, Ghazali Shafie *Graduate School of Government*. Universiti Utara Malaysia.
- Muhammad Aimin Shaie (2011) Pandangan Mahathir Tentang Islam. Tesis Sarjana. Fakulti Usuluddin, Universitas Islam Negeri Sultan Syarif Kasim Riau. Indonesia.
- Nor Azaruddin Husni Nuruddin. 2002. Pemikiran sains Datuk Seri Dr Mahathir Mohamad dari Perspektif Islam. *Prosiding Dr. Mahathir Pemikir Islam Abad ke 21*. Jabatan Hal Ehwal Khas. Kuala Lumpur: Kementerian Penerangan Malaysia.
- Nor Azaruddin Husni Nuruddin. 2018. Pemikiran Sains dan Islam Tun Dr. Mahathir Mohamad. *Utusan Malaysia* 28 Mei.
- |   |          |         |                  |
|---|----------|---------|------------------|
| Rancangan   | Malaysia | Keempat | (RMK4:1981-1985) |
| <a href="http://www.pmo.gov.my/dokumenattached/RMK/RM4.pdf">http://www.pmo.gov.my/dokumenattached/RMK/RM4.pdf</a> |          |         |                  |
| Rancangan   | Malaysia | Kelima  | (RMK5:1986-1990) |
| <a href="http://www.pmo.gov.my/dokumenattached/RMK/RM5.pdf">http://www.pmo.gov.my/dokumenattached/RMK/RM5.pdf</a> |          |         |                  |
| Rancangan   | Malaysia | Keenam  | (RMK6:1991-1995) |
| <a href="http://www.pmo.gov.my/dokumenattached/RMK/RM6.pdf">http://www.pmo.gov.my/dokumenattached/RMK/RM6.pdf</a> |          |         |                  |
| Rancangan   | Malaysia | Ketujuh | (RMK7:1996-2000) |
| <a href="http://www.pmo.gov.my/dokumenattached/RMK/RM7.pdf">http://www.pmo.gov.my/dokumenattached/RMK/RM7.pdf</a> |          |         |                  |
| Rancangan   | Malaysia | Kelapan | (RMK8:2001-1995) |
| <a href="http://www.pmo.gov.my/dokumenattached/RMK/RM8.pdf">http://www.pmo.gov.my/dokumenattached/RMK/RM8.pdf</a> |          |         |                  |
- Zulfa Jamalie. 2011. Analisis Pemikiran Mahathir Mohamad Mengenai Islam dan Pelaksanaan Dasarnya dalam Negara Malaysia. Tesis Ph.D. Universiti Utara Malaysia.



## SENARIO PEMBELAJARAN TILAWAH AL-QURAN MURID MASALAH PEMBELAJARAN (KEFUNGSIAN SEDERHANA)

Rabiatuladawiyah Saleh<sup>1</sup>  
Mohd Nizam Sahad<sup>2</sup>

<sup>1</sup>School Of Humanities, Universiti Sains Malaysia (USM), Malaysia, (E-mail: adawiyah87@student.usm.my)

<sup>2</sup>School Of Humanities, Universiti Sains Malaysia (USM), Malaysia, (E-mail: nizamsahad@usm.my)

---

**Abstrak:** Mata pelajaran Pendidikan Islam bagi murid pendidikan khas masalah pembelajaran turut mengandungi bidang pembelajaran tilawah al-Quran. Pengajaran tilawah al-Quran murid pendidikan khas adalah berbeza berbanding dengan murid tipikal. Kertas ini turut membincangkan tentang senario pembelajaran tilawah al-Quran bagi murid berkeperluan khas masalah pembelajaran kefungsi sederhana dalam pembelajaran tilawah al-Quran. Selain itu juga, terdapat beberapa cabaran yang perlu dihadapi oleh guru-guru dalam pengajaran tilawah al-Quran kepada murid ini. Justeru, kekurangan murid-murid ini boleh diatasi melalui pembelajaran terbeza berbanding yang alami. Oleh itu, murid-murid masalah pembelajaran tidak akan terabai dalam pembelajaran tilawah al-Quran.

**Kata Kunci:** Pembelajaran Tilawah al-Quran, Pendidikan Khas, Masalah pembelajaran

**Abstract:** Qur'an recitation is one of the components of Islamic Education for special education pupils with learning difficulties. The instruction of Qur'an recitation for special education pupils is different when compared to average pupils. This paper discusses the Qur'an recitation learning scenario for special needs pupils with learning difficulties of moderate functional learning. Moreover, there are some challenges that teachers need to face in teaching Quran recitation to these pupils. However, the shortcomings of these pupils can be overcome through different learning compared to the natural ones. Therefore, pupils with learning problems will not be neglected in the study of the Qur'an.

**Keyword:** Qur'an Recitation, Special Education, Learning Disabilities

---

### Pengenalan

Al-Quran merupakan *kalamullah* yang diturunkan kepada Nabi Muhammad s.a.w melalui malaikat *Jibril* a.s untuk dijadikan panduan dalam kehidupan manusia. Membaca al-Quran menjadi satu bekalan untuk menuju ke kehidupan seterusnya. Orang yang mengajar ilmu al-Quran adalah yang terbaik di kalangan manusia manakala yang mempelajari dan membaca al-Quran mendapat pahala berlipat ganda sepertimana sabda Rasullullah maksudnya “*Sesiapa yang membaca satu huruf dari kitab Allah (al-Quran), maka baginya kebaikan dan satu kebaikan itu digandakan menjadi sepuluh. Aku tidak bermaksud ‘Alif Lam Mim’ itu satu huruf, akan tetapi ‘alif’ satu huruf, ‘lam’ satu huruf dan ‘mim’ satu huruf*” (al-Albani, 2012)

Ilmu al-Quran bukan sahaja hanya perlu dipelajari oleh golongan yang normal, tetapi al-Quran juga perlu dipelajari oleh golongan berkeperluan khas. Hal ini kerana menjadi kewajipan dalam solat untuk membaca al-Fatihah. Malah dengan membaca dan memperdengarkan al-Quran juga akan dapat membentuk peribadi yang mulia. (Fariza Md Sham, Salmihah Che Mud, Manisah Mohd Ali, Zuliza Mohd Kusrin, Rosmawati Mohamad Rasit, 2017). Justeru itu, menjadi kewajipan untuk golongan ini mempelajari al-Quran terutama



mereka yang *mukallaf*. Pelbagai penambahbaikan yang telah dilakukan oleh pakar dalam bidang pembelajaran tilawah al-Quran bagi meraikan murid pendidikan khas agar mereka boleh membaca al-Quran dengan betul dan sempurna.

Antara penambahbaikan yang dilakukan dalam bidang pembelajaran tilawah al-Quran, murid pendidikan khas masalah pembelajaran ialah pada tahun 2016 bahagian kurikulum pendidikan khas telah merangka tiga objektif yang spesifik untuk murid sekolah menengah iaitu yang pertama murid dapat membaca ayat-ayat pilihan dari al-Quran dengan betul serta mengamalkan dalam kehidupan seharian. Objektif yang kedua ialah menghafaz surah-surah pilihan dari juz *Amma* untuk bacaan dalam solat dan ibadah seharian. Seterusnya objektif yang ketiga ialah menghayati maksud potongan ayat pilihan dari al-Quran dan mengamalnya. (Bahagian Pembangunan Kurikulum, 2016) Kurikulum baru ini berbeza dengan kurikulum lama pendidikan khas bermasalah pembelajaran Pendidikan Agama Islam bagi sekolah menengah disertakan dalam bidang kerohanian dan nilai-nilai murni. Bagi pembelajaran tilawah al-Quran, objektifnya ialah untuk membolehkan pelajar mengenal, menamakan dan membunyikan huruf hijaiyyah tunggal dan berbaris dan hafazan melafazkan doa-doa harian dan surah-surah tertentu (Jabatan Pendidikan Khas, 2004).

### **Murid Pendidikan Khas Masalah Pembelajaran**

Masalah pembelajaran dianggap sebagai masalah neurologi (Norzila Zakaria, 2018). Masalah ini berkaitan dengan cara otak menerima, memproses, menganalisis dan menyimpan maklumat. Masalah pembelajaran juga merupakan kecelaruan dalam satu atau lebih daripada satu proses psikologi yang melibatkan kefahaman, penggunaan bahasa lisan atau bertulis. Kecelaruan ini boleh menjejaskan keupayaan mendengar, berfikir, bertutur, membaca, menulis, mengeja atau mengira (Bahagian Pendidikan Khas, 2015). Mengikut Akta Orang Kurang Upaya 2008, masalah pembelajaran boleh dibahagikan kepada beberapa kategori iaitu lewat perkembangan bagi kanak-kanak yang di bawah umur empat tahun, Sindrom Down, Autisme, Masalah Intelek, masalah Pembelajaran Spesifik seperti Disleksia, dan Diskalkulia (Jamila KA Mohamed, 2005). Menurut (Jamila KA Mohamed, 2005) murid masalah pembelajaran mengalami ketidakupayaan dan memerlukan sokongan perkhidmatan pakar dalam kehidupan seharian.

Murid berkeperluan khas Masalah Pembelajaran terbahagi kepada tiga kumpulan iaitu murid berkeperluan khas kefungsi tinggi, murid berkeperluan khas kefungsi sederhana, murid berkeperluan khas kefungsi rendah. Murid berkeperluan khas (MBK) Berkefungsi Tinggi ialah murid-murid khas yang menguasai literasi dan Numerasi serta mampu belajar dikelas aliran biasa bersama murid-murid tipikal. Murid berkeperluan khas (MBK) berkefungsi Sederhana ialah murid MBK yang menguasai kemahiran asas Literasi dan Numerasi dan mampu untuk berkomunikasi dengan baik. Murid berkeperluan khas (MBK) Berkefungsi Rendah iaitu murid-murid khas yang tidak menguasai literasi dan numerasi serta tidak dapat mengawal emosi dan tingkah laku mereka (Bahagian Pendidikan Khas, 2016).

Pelbagai kaedah pengajaran al-Quran yang telah dicipta untuk membantu murid berkeperluan khas membaca al-Quran antaranya Kaedah Fasih, Kaedah Tahfiz Akhyar, Kaedah Tilawah Asyraf dan Kaedah Penulis wahyu (Syar Meeze Mohd Rashid, 2017), akan tetapi tiada satu kaedah yang sesuai untuk semua murid keperluan khas kerana setiap mereka mempunyai keperluan yang berbeza. Usaha murni pakar-pakar ini dalam membantu murid berkeperluan khas membaca al-Quran adalah amat mulia. Sesuai dengan sabda Nabi Muhammad s.a.w “ *Sebaik-baik kamu ialah orang yang mempelajari al-Quran dan mengajarnya*” (al-Bukhari,1979)

### Realiti Semasa Murid Masalah Pembelajaran

Data daripada Kementerian Pendidikan Malaysia menunjukkan bahawa bilangan murid-murid yang mengikuti kelas pendidikan khas (bermasalah pembelajaran) di sekolah menengah pada tahun 2016 hingga 2018 telah meningkat iaitu dari 23,185 kepada 24,498 orang. Jadual 1.1 di bawah menunjukkan bilangan murid-murid yang mengikuti kelas pendidikan khas (bermasalah pembelajaran) di seluruh negeri pada tahun 2016, 2017 dan 2018.

**Jadual 1.1:** Bilangan Murid Pendidikan Khas (Bermasalah Pembelajaran) Sekolah Menengah

Tahun	2016	2017	2018
Jumlah Pelajar Murid Masalah Pembelajaran	23,185	23,677	24,498

Sumber: Kementerian Pendidikan Malaysia, 2018

Data yang ditunjukkan ini merangkumi sekolah pendidikan khas, sekolah vokasional pendidikan khas, sekolah menengah yang mempunyai integrasi pendidikan khas di seluruh Malaysia yang merangkumi kawasan bandar dan luar bandar. Jadual tersebut juga menunjukkan terdapat peningkatan bilangan murid pendidikan khas masalah pembelajaran setiap tahun. Sekiranya murid-murid ini tidak diajar dengan pendidikan Islam sudah pasti akan menimbulkan pelbagai masalah di kemudian hari.

### Pembelajaran al-Quran Di Sekolah

Kini kandungan kurikulum standard sekolah menengah mata pelajaran pendidikan Islam bagi pembelajaran tilawah al-Quran mempunyai beberapa bahagian, iaitu bahagian tilawah al-Quran yang merangkumi bacaan, hafazan, ayat kefahaman dan hadis. Sub bahagian yang kedua iaitu ulum *syari'ah* yang merangkumi bahagian akidah, ibadat, sejarah dan akhlak Islamiah (Kementerian Pendidikan Malaysia, 2015). Peruntukan masa bagi mata pelajaran pendidikan Islam bagi murid tipikal menengah rendah ialah 240 minit dan 160 minit seminggu bagi murid menengah atas (Mohd Aderi Che Noh, 2015). Manakala peruntukan masa untuk murid masalah pembelajaran kefungsi sederhana ialah 150 minit seminggu (Kementerian Pendidikan Malaysia, 2016). Berdasarkan peruntukan masa pengajaran Pendidikan Islam kurikulum standart sekolah menengah. Tilawah al-Quran bukanlah satu ilmu yang berasingan tetapi adalah bersifat bersepadu. Dengan maksud yang lain, tilawah al-Quran bukanlah hanya dilihat dari segi membetulkan bacaan malah lebih daripada itu. Hal ini kerana, ternyata pengajaran dalam tilawah al-Quran adalah meliputi bacaan, hafazan dan kefahaman.

Proses pengajaran murid tipikal adalah secara penerangan, projek, membaca berkumpulan, berpasangan dan secara individu (Mohd Aderi Che Noh, 2015). Namun demikian, kaedah pengajaran secara *talaqqi* dan *musyafahah*, perbincangan dengan murid (Nurzuliana Rashed et al., 2015) kaedah ini masih lagi diamalkan sehingga kini. Selain itu, pembelajaran tilawah al-Quran menggunakan juga model as'ad Human, latih tubi, halaqah, kaedah tatbiqi dan kaedah tasmi' (Mohd Aderi Che Noh, 2015). Menurut (Misnan Jemali, Ab Halim Tamuri, & Azmil Hashim, 2014) pengajaran murid tipikal melalui aspek penilaian, pengulangan, rumusan, penyoalan dan pengkayaan itu adalah sangat penting dan utama dalam pengajaran tilawah al-Quran dalam kalangan pelajar sekolah menengah.

Proses pembelajaran murid pendidikan khas tidak sama dengan pembelajaran murid normal. Guru perlu memberi komitmen yang tinggi dan seharusnya mempunyai pengetahuan khusus tentang keperluan murid khas. Sesuai dengan saranan Imam Ghazali yang menyatakan



bahawa guru perlulah sentiasa komitmen, mempunyai ilmu pengetahuan yang tinggi dan ikhlas dalam mengajar muridnya (Al-Ghazali, 1967) (Khairul Bariah Md Khair, 1999). Pembelajaran al-Quran murid berkeperluan khas memerlukan guru menumpukan kepada topik yang tertentu sahaja (Hamdi Ishak, Ab Halim Tamuri, Rosadah Abdul Majid, & Safani Bari, 2012) sesuai dengan saranan Ibnu Khaldun bahawa murid perlu diperkenalkan dengan pembelajaran yang mudah dahulu, kemudian beralih kepada topik yang sukar. (Ibnu Khaldun, 1993) seperti memperkenalkan huruf hijaiyyah terlebih dahulu. Pembelajaran perlu berpusatkan kepada murid, menyalin nota, menulis dan membaca semula (Hamdi Ishak etc. all, 2012) supaya pencapaian dan kefahaman murid bertambah mantap.

Kebanyakan murid masalah pembelajaran masih berada ditahap Iqra satu walaupun sudah melanjutkan pembelajaran keperingkat menengah. Keadaan ini tidak dapat dinafikan kerana murid masalah pembelajaran mudah lupa dan memerlukan pengulangan apabila mempelajari sesuatu yang baru (Jamila K.A. Mohamed, 2005). Hal ini juga bersesuaian dengan saranan pembelajaran al-Quran oleh Ibnu Khaldun (Ibnu Khaldun, 1993) iaitu secara berperingkat dan mengulang pembelajaran setiap tahap supaya murid dapat mengingat pembelajaran (Siti Patonah Mohamad, Zulkifli Mohd Yusof, & Duriyyah Sharifah Hasan Adli, 2014).

### **Cabaran Pembelajaran Al-Quran**

Pelbagai cabaran yang perlu dihadapi oleh guru dalam mengajar murid pendidikan khas. Antaranya adalah tugas klinikal dan pengurusan diri pelajar yang perlu dilaksanakan (Junaidah Mohamad & Nik Rosila Nik Yaacob, 2013). Keadaan ini telah menyebabkan pembelajaran murid terhad. Tambahan pula, masa untuk pembelajaran al-Quran agak terbatas (Muhammad Izzat Ngah, Siti Zaleha Ibrahim, & Noraini Mohamad, 2016). Peruntukan masa untuk mata pelajaran Pendidikan Islam sebanyak 2.5 jam seminggu (Kementerian Pendidikan Malaysia, 2016) Oleh itu, kemahiran bacaan al-Quran tidak boleh diberi tumpuan oleh guru (Hajarul Bahti Zakaria et al., 2010). Menurut (Safarina Ujang & Norshidah Mohamad Salleh, 2018) guru pendidikan Islam yang mempunyai tahap pengetahuan mengenai pengajaran pendidikan khas adalah kurang. Pengetahuan guru mengenai pendidikan khas adalah perlu bagi merancang pengajaran di dalam kelas. Oleh itu, guru Pendidikan Islam yang mengajar Pendidikan Khas perlu diberi penerangan dan mempunyai persediaan mengenai pendidikan khas (Norakyairee Mohd Raus et al., 2019).

Menurut (Hajarul Bahti Zakaria, Mohd Huzairi Awang@Husain, Bani Hidayat Mohd Shafie & Huzairi, 2010) dalam kajiannya mendapati bahawa sekolah murid pendidikan khas berhadapan dengan masalah kekurangan guru dalam mata pelajaran pendidikan Islam. Hasil daripada kekurangan guru pendidikan Islam yang mengajar pendidikan khas telah menyebabkan murid kekurangan pembimbing yang mempunyai asas yang kukuh dalam pengajaran al-Quran (Norakyairee Mohd Raus et al., 2013). Apabila hal ini berlaku, akan terjadilah guru pendidikan Islam tidak mempunyai kemahiran pedagogi untuk murid berkeperluan khas, dan guru khas tidak mempunyai asas pengetahuan tentang pendidikan Islam yang sebenar (Hajarul Bahti et al. 2010). Walaupun, terdapat juga kursus pendedahan pengajaran Pendidikan Islam oleh Jabatan Pendidikan namun, tiada penyelarasan dalam penganjuran kursus ini atau dalam kata lain, ia dijalankan secara tidak berkala. (Norakyairee Mohd Raus et al., 2019)

Selain itu, kesedaran ibu bapa murid berkeperluan khas juga berada ditahap yang minima di dalam memberi penekanan terhadap pembelajaran al-Quran. Mereka menganggap bahawa anak-anak istimewa tidak layak untuk mendapat pendidikan yang sempurna.. Hal ini,

akan menyebabkan kanak-kanak istimewa hilang keyakinan diri dan seterusnya menyebabkan menjadi beban dalam keluarga apabila dewasa. Sebahagian besar ibu bapa hanya menumpu kepada pembentukan diri anak mereka supaya boleh berdikari di masa hadapan berbanding dengan ilmu keagamaan. Penglibatan ibu bapa dalam aktiviti sekolah kurang dan mengharap kepada guru dalam pengajaran al-Quran. Kebanyakan penjaga tidak yakin anak mereka dapat mencuba sesuatu yang baru. Kesedaran ibu bapa dalam adalah perlu dalam pembelajaran agama untuk murid pendidikan khas. (Mohd Huzairi Awang, Hajarul Bahti Zakaria, & Syar Meeze Mohd Rashid 2019)

### Kesimpulan

Setiap insan memerlukan agama dalam memandu kehidupan. Begitu juga dengan insan yang mempunyai kekurangan. Kekurangan bukanlah penghalang dalam mempelajari al-Quran. Mempelajari al-Quran adalah penting bagi setiap mukallaf yang beragama Islam. Oleh itu, pembelajaran al-Quran bukan sahaja perlu diajar kepada kanak-kanak normal, malah hak bagi kanak-kanak istimewa juga tidak harus diketepikan dalam memenuhi tuntutan sebagai muslim yang sempurna. Menjadi kewajipan kita yang mengetahui dan berupaya mengajar al-Quran kepada masyarakat termasuklah golongan istimewa. Oleh itu kita semua perlu sama berganding bahu dalam memberi galakan dan pendidikan kepada murid istimewa dalam menjalani kehidupan beragama.

### Rujukan

- Al-Bukhari, Muhammad Ibn Ismail (1979). *Al-Jami' Al-Shahih*. Kaherah: Al-Matba'ah Al-Salafiyah.
- Al-Ghazali. (1967). *Ihya Ulumuddin*. Kaherah: Muassasat al-Halabi li al-Nasyr wa al-Tauzi'.
- Bahagian Pendidikan Khas. (2015). *Buku Panduan Pengoperasian Program Pendidikan Khas Integrasi. Bahagian Pendidikan Khas Kementerian Pendidikan Malaysia*.
- Fariza Md Sham, Salmihah Che Mud, Manisah Mohd Ali, Zuliza Mohd Kusrin, Rosmawati Mohamad Rasit, S. N. M. (2017). Panduan syariah Untuk Ibu Bapa Menangani Perilaku Seksial Remaja Autisme. *Jurnal Hadhari Edisi Khas*, 169–182.
- Hajarul Bahti Zakaria, Mohd Huzairi Awang@Husain, Bani Hidayat Mohd Shafie, N. H. F. T. & N. K., & Huzairi, M. (2010). Isu dan Cabaran Guru dalam Pendidikan Al-Quran Pelajar Bermasalah Penglihatan. *The 4th Conference on Teacher Education*, (November), 751–762.
- Hajarul Bahti Zakaria, Mohd Huzairi Awang, @Husain, Bani Hidayat Mohd Shafie, Nor Hayati Fatmi Talib, & Nabiroh Kassim. (2010). Isu dan Cabaran Guru dalam Pendidikan Al-Quran Pelajar Bermasalah Penglihatan. In *The 4th Conference on Teacher Education*.
- Hamdi Ishak, Ab Halim Tamuri, Rosadah Abdul Majid, & Safani Bari. (2012). Amalan Pengajaran Guru Dalam Pengajaran Dan Pembelajaran Pendidikan Islam Di Sekolah Kebangsaan Pendidikan Khas ( Masalah Pendengaran ). *Journal of Islamic and Arabic Education*, 4(2), 11–24.
- Hamdi Ishak, Ab Halim Tamuri, Rosadah Abdul Majid, Safani, & Safani Bari. (2012). Amalan Pengajaran Guru Dalam Pengajaran Dan Pembelajaran Pendidikan Islam Di Sekolah Kebangsaan Pendidikan Khas ( Masalah Pendengaran ). *Journal of Islamic and Arabic Education*, 4(2), 11–24.
- Ibnu Khaldun. (1993). *Muqaddimah Ibnu khaldun*. Dewan Bahasa dan Pustaka.
- Jabatan Pendidikan Khas. (2004) *Huraian Sukatan Matapelajaran Pendidikan Khas Masalah Pembelajaran Sekolah rendah Dan Sekolah menengah* (Cetakan ke 2). Jabatan Pendidikan



- Khas, Kementerian Pendidikan Malaysia.
- Jamila K.A. Mohamed. (2005). *Pendidikan Khas Untuk Kanak-Kanak Istimewa*. PTS. Professional.
- Junaidah Mohamad, & Nik Rosila Nik Yaacob. (2013). Kajian Tentang Keuasan Bekerja Dalam Kalangan Guru-guru Pendidikan Khas. *Asia Pacific Journal of Educators and Education*, 28, 103–115.
- Kementerian Pendidikan Malaysia. (2015). *Pendidikan Islam, Dokumen Standard Kurikulum dan Pentaksiran*.
- Kementerian Pendidikan Malaysia. (2016). *Buku Penerangan Kurikulum Standard Sekolah Menengah (KSSM)*.
- Khairul Bariah Md Khair. (1999). *Falsafah dan Konsep Pendidikan Menurut Imam al-Ghazali*. Universiti Malaya.
- Misnani Jamali, Ab Halim Tamuri, & Azmil Hashim. (2014). Kaedah Pengajaran Al-Quran Sekolah Menengah Kebangsaan di Negeri Perak. *International Journal of Islamic Studies and Arabic Language Education (IJISAE)*, 1(1), 35–44.
- Mohd Aderi Che Noh. (2015). *Pengajaran dan Pembelajaran Tilawah al-Quran di Malaysia*. Universiti Kebangsaan Malaysia.
- Muhammad Izzat Ngah, Siti Zaleha Ibrahim, & Noraini Mohamad. (2016). Cabaran Pengajaran Subjek Tilawah Al-Quran. In *International Conference On Aqidah, Dakwah And Syariah 2016 (IRSYAD 2016)* (Vol. 2016, pp. 966–978).
- Muhammad Nashiruddin al-Albani. (2012). *Shahih at-Tarhib wa a-Tarhib* (2nd ed.). Jakarta: Pustaka Sahifa.
- Mohd Huzairi Awang, Hajarul Bahti Zakaria, & Syar Meeze Mohd Rashid (2019) :*Kaedah Pengajaran Fardu Ain Kepada Murid Bekeperluan Khas*. di Seminar Kesedaran Pendidikan KAFA OKU pada 9 April 2019 di ILIM anjuran Bahagian Pendidikan, JAKIM
- Norakyaree Mohd Raus, Mohd Nur Adzam Rasdi, Norazman Alias, Norhasnira Ibrahim, Norullisza Khosim, Noornajihan Jaafar, Hajarul Bahti Zakaria. (2013). Pengajaran al-Quran Braille: Isu dan Cabaran Semasa. *International Journal on Quranic Research (IJQR)*, 3(4), 79–94.
- Norakyaree Mohd Raus, Mohd Nur Adzam Rasdi, Nur Amalina Azhar, Nurutthoilah Mohd Nabil, Ab. Halim Tamuri, & Norshidah Mohamed Salleh. (2019). *Pendidikan Agama Dalam Kalangan OKU: Isu dan Cabaran Semasa*. Seminar Kesedaran Pendidikan KAFA OKU. pada 9 April 2019 di ILIM anjuran Bahagian Pendidikan, JAKIM
- Norzila Zakaria. (2018). *Komplikasi Kisah Masalah Pembelajaran*. Universiti Sains Malaysia.
- Nurzuliana Rashed, Z., AbdMajid, M., Abu Bakar, S., Sudi, S., Ramizah Hasan, W., & Yusuf Marlon BAbdullah, M. (2015). Amalan Pengajaran Guru Tilawah Al-Quran: Kajian Kes Di Maahad Tahfiz Sains Negeri Selangor. *Tinta Artikulasi Membina Ummah*.
- Safarina Ujang, & Norshidah Mohamad Salleh. (2018). Pelaksanaan Jawi , Al-Quran , Bahasa Arab , Fardu Ain ( j-QAF ) dalam Program Pendidikan Khas Integrasi. *Jurnal Ortopedagogia*.
- Siti Patonah Mohamad, Zulkifli Mohd Yusof, & Duriyyah Sharifah Hasan Adli. (2014). Pengajaran dan pembelajaran Al-Quran bagi Golongan Kelainan Upaya Mental: Analisis dari sumber Tradisi Islam. *Jurnal Islam Dan Masyarakat Kontemporari*, (8).
- Syar Meeze Mohd Rashid. (2017). Kemahiran Asas Serta Kaedah Pengajaran dan Pembelajaran Al-Quran Kepada Golongan Istimewa. *Journal of Quran Sunnah Education and Special Needs*.
- Tengku Nor Husna Tengku Jamil, Hasanah Abd Khafidz, & Khazri Osman. (2019). Strategi



*3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Copthorne Hotel, Cameron Highland, Malaysia  
29<sup>th</sup>-30<sup>th</sup> June 2019*

Guru Pendidikan Islam Sebagai Pendakwah Dalam Melahirkan Pelajar Berfikir Aras Tinggi. *Journal Of Islamic, Economics and Development*, 4(19), 97–107.



## KEMAHIRAN MENULIS BAHASA ARAB: ANALISA KELEMAHAN PELAJAR UITM MELAKA

Dr Anuar bin Sopian<sup>1</sup>

<sup>1</sup> Akademi Pengajian Bahasa (UiTM), Melaka, Malaysia, (E-mail: anuar\_09@uitm.edu.my)

---

**Abstrak:** Menulis merupakan kemahiran yang penting dalam mempelajari bahasa asing. Melalui menulis pelajar akan dapat menambah kemahirannya yang lain dan dapat meningkatkan penguasaan bahasa. Menulis juga dianggap mustahak dalam apa bentuk sekalipun kerana ia dapat membantu meningkatkan pencapaian pelajar dalam pelajaran. Penguasaan kemahiran menulis di kalangan pelajar tidak terhad untuk jangka masa yang pendek sahaja, bahkan berlanjutan sepanjang usia hidup mereka. Kertas kerja ini bertujuan untuk mengenal pasti kelemahan-kelemahan pelajar dalam menguasai kemahiran menulis bahasa Arab seterusnya dapat difikirkan langkah penyelesaian terhadap masalah ini. Kajian ini dilakukan terhadap 30 orang pelajar diploma tahun pertama yang mengambil subjek bahasa Arab (TAC151) sebagai bahasa ketiga di Universiti Teknologi MARA (UiTM) Melaka. Kajian ini menggunakan penulisan sampel dalam minggu pembelajaran tanpa dinding (Week Without Wall) yang bertajuk 'Persiapan menghadapi peperiksaan' sebagai dapatan data. Dapatan kajian ini menunjukkan bahawa kelemahan utama pelajar dalam penulisan adalah melibatkan imlak dan ejaan,, penyesuaian gender, penggunaan kata kerja dan penggunaan idhofah. Kertas kerja ini turut membincangkan tentang faktor-faktor yang menyumbang ke arah kelemahan pelajar dalam menguasai kemahiran menulis dan beberapa cadangan penambahbaikan teknik pengajaran pensyarah untuk membantu pelajar menguasai kemahiran menulis bahasa Arab.

**Kata Kunci:** kelemahan, kemahiran, menulis. bahasa Arab

---

### Pendahuluan

Penulisan merupakan satu proses berterusan untuk memahami cara yang paling efektif dalam berbahasa sebagai cara untuk berkomunikasi. Penulisan juga boleh menjadi satu cabaran, sama ada menulis dalam bahasa ibunda masing-masing atau dalam bahasa kedua. Penulisan juga boleh meningkatkan penguasaan bahasa kerana para pelajar mencuba pelbagai jenis perkataan baru, ayat-ayat dan menulis dalam kuantiti yang banyak untuk berkomunikasi idea-idea mereka secara lebih efektif dan untuk mempraktikkan tatabahasa dan perbendaharaan kata yang dipelajari di dalam bilik darjah. Menurut Zamri dan Mohamed Amin ( 2003 ), kemahiran menulis pelajar ditingkatkan melalui kepelbagaian strategi kemahiran menulis. Strategi menulis yang pelbagai ini dapat membantu para pelajar dalam aktiviti penulisan, terutamanya ketika peperiksaan. Penulisan bahasa Arab begitu unik, ia sangat memerlukan setiap ejaan ditulis dengan tepat bukan sahaja pada bentuk huruf malah ketepatan juga perlu pada titik, simbol, *syaddah* dan lain-lainnya. Pelajar perlu menguasai kemahiran melakarkan huruf atau perkataan dengan cara yang betul. Sekiranya gagal, maklumat atau mesej yang hendak disampaikan tidak tepat, lari dari maksud dan tidak boleh difahami. Di samping itu, mereka mesti menguasai cara menulis perkataan yang telah dipersetujui oleh ahli bahasa, jika tidak sudah pasti penulisannya gagal untuk menjelaskan maksud yang sebenar. Mereka juga mesti mengetahui cara memilih perkataan yang betul dan menyusunnya menurut sistem yang tertentu supaya pembaca memahami idea yang ingin disampaikan (Hassan Shahatah, 1993).



### **Permasalahan**

Kemahiran berbahasa secara umumnya terbahagi kepada empat bahagian iaitu; kemahiran mendengar, kemahiran bertutur, kemahiran membaca dan kemahiran menulis. Kemahiran-kemahiran ini dipelajari secara beransur-ansur dari yang paling asas dan mudah kepada yang kemahiran yang kompleks. Kemahiran mendengar adalah merupakan kemahiran asas pertama yang dipelajari oleh kanak-kanak pada peringkat awal (Ali Al-Madkur, 1991), malah ia menjadi kemahiran yang utama sebelum menguasai kemahiran-kemahiran yang lain (Hyslop & Tone, 1988). Namun begitu, kemahiran lain seperti kemahiran menulis juga merupakan antara kemahiran yang perlu diberi penekanan yang serius dalam proses pembelajaran bahasa. Malah, salah satu cara komunikasi adalah melalui penulisan. Seseorang individu mampu mengungkap dan menzahirkan buah fikiran, menceritakan peristiwa serta meluahkan perasaan melalui penulisan. Menulis merupakan proses penghasilan simbol-simbol grafik yang disusun berdasarkan pertuturan yang membentuk perkataan-perkataan dan seterusnya menjadi ayat (Ismail Muhamad, Wan Maizatul Akmar Wan Ahmad & Azman Che Mat, 2013). Ayat-ayat yang disusun itu adakalanya panjang dan adakalanya pendek berdasarkan beberapa urutan yang bermakna yang membentuk teks, nota, draf dan bahan-bahan bercetak (Kamarudin Hj. Husin & Siti Hajar Hj. Abdul Aziz, 1997). Hal ini bermakna proses pengajaran dan pembelajaran kemahiran menulis amat mencabar kerana ia melibatkan beberapa kemahiran lain seperti kemahiran membaca. Pemerolehan kosa kata yang mencukupi turut mempengaruhi proses penguasaan kemahiran menulis.

Terdapat beberapa isu yang telah ditimbulkan berhubung dengan pendekatan pengajaran dan ketidakupayaan pelajar yang tidak mampu untuk menulis dengan baik walaupun sudah berada pada peringkat pengajian tinggi. Malah, penguasaan bahasa Arab yang mendukacitakan dalam kalangan mahasiswa tidak dapat dinafikan (Ku Fatahiyah et al., 2014). Habibah (2016) telah mengkaji amalan pentaksiran dalam pengajaran dan pembelajaran insya' Sijil Tinggi Agama Malaysia (STAM). Dapatan kajian beliau memperlihatkan kebanyakan pelajar kurang berminat untuk mengarang dengan menanggungkan tugas disebabkan faktor kekurangan perbendaharaan kata, kurang membaca bahan-bahan tambahan di samping tugas mengarang itu sendiri yang bersifat kompleks dan sukar. Menurut kajian yang telah dibuat oleh Ab. Halim dan Mohd. Azidan (2017), faktor kelemahan kurikulum dan strategi pembelajaran yang kurang berkesan juga antara punca kesalahan pelajar Melayu dalam penguasaan penulisan bahasa Arab. Kajian ini juga turut disokong melalui kajian yang dibuat oleh Mohamad Rofian et al. (2016) yang menyatakan bahawa modul kemahiran menulis bahasa Arab bagi peringkat pengajian tinggi Malaysia adalah terhad dan kurang menekankan unsur psikologi. Hal ini menunjukkan polemik berkenaan kemahiran menulis masih menjadi perhatian para pengkaji dalam penguasaan kemahiran berbahasa Arab.

Selain itu kelemahan penguasaan bahasa Arab dalam kalangan pelajar juga semakin hari semakin ketara dan meningkat terutama kemahiran menulis (Mat Taib, 2006; Che Radiah, 2009). Masalah-masalah seperti ejaan yang tidak tepat, penggunaan kata kerja yang salah dan hilangnya hubungan antara kata dalam satu ayat adalah antara rungutan para pensyarah yang memeriksa kertas jawapan untuk soalan-soalan yang melibatkan kemahiran menulis. Para pensyarah terpaksa berulang kali memeriksa dan meneliti kertas jawapan yang ditulis oleh pelajar dan ada yang terpaksa membuat kesimpulan sendiri untuk urusan pemarkahan. Kecekapan pelajar menulis dan mengarang amat mempengaruhi pencapaiannya dalam kursus-kursus bahasa Arab tersebut. Kerap kali pensyarah merungut kerana terdapat pelajar yang bergantung pada 'Google Translate' walaupun dalam membina dan menulis ayat yang mudah. Hal ini berlaku disebabkan penguasaan bahasa Arab dalam kalangan pelajar lepasan UA yang

mengambil pengkhususan bahasa Arab tidak mencapai tahap kecekapan berbahasa yang baik (Ab. Halim, 2009 & Sueraya et al., 2010).

Hanani Hasan (2011) menjalankan kajian ke atas pelajar-pelajar tahun akhir Fakulti Syariah dan Undang-undang Universiti Sains Islam Malaysia (USIM), tentang tahap penguasaan kosa kata bahasa Arab yang selalu berulang dalam bidang pengajian Islam. Beliau mendapati tahap penguasaan mereka adalah lemah.

### Persoalan kajian

Berdasarkan kepada permasalahan tersebut, apa yang ingin dilihat oleh pengkaji ialah seperti berikut:

1. Apakah aspek-aspek kelemahan-kelemahan pelajar dalam penulisan bahasa Arab
2. Apakah faktor-faktor yang menyebabkan pelajar melakukan kesalahan dalam menulis bahasa Arab.

### Metodologi kajian

Kajian ini telah dijalankan terhadap pelajar-pelajar yang mengambil bahasa Arab sebagai bahasa ke tiga, Universiti Teknologi MARA Kampus Melaka. Kajian ini melibatkan seramai 30 orang pelajar diploma tahun pertama yang mengambil kursus Bahasa Arab TAC151 yang dipilih secara rawak. Bagi mendapatkan data kajian, Kajian ini menggunakan penulisan sampel dalam minggu pembelajaran tanpa dinding (*Week Without Wall*) yang bertajuk 'Persiapan menghadapi peperiksaan' sebagai dapatan data. Karangan yang ditulis oleh pelajar dalam adalah berdasarkan pengetahuan dan kemahiran yang telah mereka pelajari di dalam kelas.

### Analisa dapatan kajian

Di sini dinyatakan beberapa contoh kesalahan beserta analisa pembedulan.

#### Aspek Pertama: Imla' atau Ejaan

BIL	Ayat salah	Ayat betul
1	اسلام عليكم	السلام عليكم
2	اراجع اللغة العربية	اراجع اللغة العربية
3	انا اراجع مع صدقتي	انا اراجع مع صدقتي
4	انا اتعلم في جمعة مارا	انا اتعلم في جامعة مارا
5	يوم الإثنين في الساعة العاشرة صباحا	يوم الإثنين في الساعة العاشرة صباحا

Analisa:

1. اسلام tiada huruf *lam* bacaan akan berbunyi islam.
2. اللغة العربية pertukaran huruf *ya* kepada *ba*.
3. صدقتي Pengguguran huruf *ya*.
4. جمعة pengguguran huruf *alif*.
5. العاشرة pengguguran huruf *alif* dan pertambahan huruf *ya*.

#### Aspek kedua : Penyesuaian Gender Maskulin Dan Feminin

BIL	Ayat salah	Ayat betul
1	لون مكتبة جامعة مارا احمر	لون مكتبة جامعة مارا حمراء
2	انا طالب مشغولة	انا طالب مشغول
3	اكتب الواجبات المنزل	اكتب الواجبات المنزلية
4	من خلال قراءة المواد العلمي	من خلال قراءة المواد العلمية
5	سأحضر الإمتحان النهائية	سأحضر الإمتحان النهائي

#### Analisa:

1. مكتبة perkataan feminin. احمر adalah kata sifat maskulin. Kata sifat (احمر) mesti serasi dengan *mausuf* (مكتبة). Kata sifat bagi feminin adalah حمراء.
2. مشغولة kata sifat feminin. Kata sifat mesti serasi dengan *mausuf* (طالب) yang maskulin.
3. المنزل kata sifat maskulin. Kata sifat mesti serasi dengan *mausuf* (الواجبات) yang feminin.
4. العلمي kata sifat maskulin. Kata sifat mesti serasi dengan *mausuf* (المواد) yang feminin.
5. النهائية kata sifat feminin. Kata sifat mesti serasi dengan *mausuf* (الإمتحان) yang maskulin.

#### Aspek Ketiga: Penggunaan Kata Kerja

BIL	Ayat salah	Ayat betul
1	كل يوم ناقش الدروس وتكتب التدريبات	كل يوم ناقش الدروس واكتب التدريبات
2	كل يوم ادعو الله وتصلى الحاجة وتقرأ القرآن	كل يوم ادعو الله واصلى الحاجة واقراء القرآن
3	ارجع الدروس في الليل	اراجع الدروس في الليل
4	يجب أن ندرس بجد لتحقيق أهدافنا ويصبحوا ناجحين	يجب أن ندرس بجد لتحقيق أهدافنا ونصبح ناجحين

#### Analisa:

1. feel mudhari' yang memberi erti awak (maskulin) sedang menulis atau dia (feminin) sedang menulis. Sepatutnya اكتب bererti saya (maskulin atau feminin) sedang menulis.
2. dan تصلي feel mudhari' yang memberi erti awak (maskulin) sedang sembahyang dan awak (maskulin) sedang membaca atau dia (feminin) sedang sembahyang atau dia (feminine) sedang membaca. Sepatutnya اصلي و اقراء bererti saya (maskulin atau feminin) sedang sembahyang dan saya sedang membaca.
3. ارجع memberi makna saya pulang. Dilihat pada ayat yang dikehendaki pelajar ialah saya mengulangkaji. Sepatutnya ialah اراجع.
4. يصبح memberi makna jadilah mereka (maskulin). Dilihat pada ayat yang dikehendaki pelajar ialah jadilah kita. Sepatutnya ialah نصبح.

#### Aspek keempat: Penggunaan idhofah

BIL	Ayat salah	Ayat betul
1	ارجع الى البيت الطلبة	ارجع الى بيت الطلبة
2	اجلس في الغرفة الجلوس	اجلس في غرفة الجلوس
3	في اليوم الإثنين	في يوم الإثنين
4	ادرس في الكلية التجارة	ادرس في كلية التجارة
5	استعير الكتاب اللغة العربية	استعير كتاب اللغة العربية
6	في الإمتحان اللغة العربية	في إمتحان اللغة العربية

#### Analisa:

1. البيت Perkataan *mudhof* tidak memerlukan kepada partikel *alif* dan *lam*
2. الغرفة Perkataan *mudhof* tidak memerlukan kepada partikel *alif* dan *lam*
3. اليوم Perkataan *mudhof* tidak memerlukan kepada partikel *alif* dan *lam*
4. الكلية Perkataan *mudhof* tidak memerlukan kepada partikel *alif* dan *lam*
5. الكتاب Perkataan *mudhof* tidak memerlukan kepada partikel *alif* dan *lam*
6. الإمتحان Perkataan *mudhof* tidak memerlukan kepada partikel *alif* dan *lam*.

#### Perbincangan dapatan

Setelah dianalisa hasil penulisan karangan pelajar, pengkaji dapat mengenal pasti di sana ada beberapa faktor yang menyebabkan pelajar lemah dalam menguasai kemahiran menulis bahasa Arab. Antaranya adalah kesilapan pelajar itu sendiri. Kajian ini bertepatan dengan kajian yang dijalankan oleh Ghazali Yusri, (2006) yang menyatakan bahawa faktor kelemahan pelajar menguasai tulisan Arab boleh dilihat dari dua dimensi iaitu pertama, faktor teknikal tulisan itu sendiri dan kedua faktor sikap dan motivasi pelajar. Faktor pertama boleh diatasi dengan mengemukakan latihan-latihan yang bersesuaian dengan kesukaran yang dihadapi namun faktor kedua memerlukan pendekatan yang lebih menyeluruh kerana ia menyentuh perkara asas dalam pembelajaran iaitu sikap dan motivasi. Selain itu Habibah (2016) dalam kajiannya mendapati isu pelajar dalam pembelajaran Insya" berkait rapat dengan faktor sikap mereka yang negatif. Sikap negatif tersebut diterjemahkan dalam tindakan pelajar yang melengah-lengahkan tugas Insya" kerana dianggap sukar dan tidak menyeronokkan. Segelintir pelajar didapati tidak pernah menghantar tugas mengarang kepada guru.

Oleh itu Faktor utama kelemahan pelajar dalam penulisan Arab adalah disebabkan kecuai pelajar sendiri. Ini dapat dilihat dari kesilapan-kesilapan yang dilakukan oleh pelajar dalam penulisan antaranya imla dan ejaan. Para pelajar cuai dan melakukan kesilapan dalam perkataan-perkataan yang mudah dan yang sering digunakan dalam pertuturan. Selain itu kecuai penulisan perkataan berkaitan perbezaan gender perbezaan gender, *idhofah* dan juga

Penggunaan kata kerja. Menurut Wan Moharani & Muhammad Marwan, (2008), Kesalahan memilih perkataan mengikut *I'rabnya* akan mencacatkan makna perkataan khususnya dan ayat secara keseluruhannya. Penggunaan kata kerja dalam bahasa Arab berkait rapat dengan masa atau kala. Begitu juga sebagaimana yang dijelaskan oleh Azlan dan Rosni (2015) bahawa faktor utama yang menyumbang kepada kesalahan ialah kurang kecekapan dalam memahami kaedah nahu dan sorof serta kekurangan latihan esei.

Faktor berikutnya adalah kaedah yang digunakan oleh pensyarah dalam proses pengajaran kemahiran menulis. Pengajaran pensyarah kurang memberi pendedahan tentang kemahiran, teknik dan strategi menulis dalam kelas menyebabkan pelajar kurang bersedia untuk menulis. Pernyataan kelemahan pengajaran guru dinyatakan oleh Roselan Baki (2003) iaitu kebanyakan guru pada umumnya masih kurang jelas tentang kandungan ilmu penulisan dan mereka menerapkan pengalaman. Kajian Muhamad Zaidi (2011) mendapati bahawa menyemak binaan perkataan atau ayat dalam kelas dan menyemak kesalahan murid secara berhadapan sangat membantu murid untuk mengenal pasti kesalahan yang dilakukan secara langsung. Pendekatan ini amat membantu pelajar serta dapat mengelakkan perasan malu bertanya dalam kalangan pelajar.

### **Cadangan bagi mengatasi masalah kelemahan pelajar dalam penulisan Arab**

Bagi mengatasi isu permasalahan dalam penulisan bahasa Arab, berikut merupakan cadangan bagi meningkatkan kemahiran menulis bahasa Arab dalam kalangan pelajar antaranya ialah pendedahan strategi. Beberapa cadangan dan kajian telah dilakukan oleh beberapa pengkaji untuk memastikan pelajar dapat menulis karangan bahasa Arab dengan baik melalui teknik-teknik tertentu dan proses pembelajaran seperti pendekatan strategi bagi mengatasi masalah kemahiran menulis bahasa Arab (Mohamad Rofian et al., 2014; Rosni & Azlan, 2015). Selain itu, Muhamad Zaidi (2011) mendapati bahawa menyemak binaan perkataan atau ayat dalam kelas dan menyemak kesalahan murid secara berhadapan sangat membantu murid untuk mengenal pasti kesalahan yang dilakukan secara langsung. Pendekatan ini amat membantu pelajar serta dapat mengelakkan perasan malu bertanya dalam kalangan pelajar.



Selain itu dengan memperbanyakkan aktiviti kemahiran penulisan bahasa Arab yang sesuai. Wan Norazwani (2011) mencadangkan beberapa aktiviti bagi meningkatkan kemahiran menulis seperti menulis diari harian, catatan log, jurnal peribadi, penulisan secara kumpulan, bahan-bahan bercetak, aktiviti permainan dan juga aktiviti mengkritik hasil penulisan rakan sebaya. Selain itu kajian Mohd Firdaus et al. (2014) yang telah menjalankan kajian bagi mengenal pasti tahap kemahiran menulis pelajar melalui aktiviti *Jawlah Lughawiyah*. Hasil dapatan kajian menunjukkan terdapat peningkatan pada tahap penguasaan pelajar terhadap kemahiran menulis.

Proses menulis adalah proses berterusan yang tidak tertakluk kepada pengajaran di dalam kelas sahaja tetapi berlangsung sepanjang hidup. Pelajar tidak sepatutnya mengharapkan pembelajaran di dalam kelas sahaja. Kemahiran menulis dapat dipraktikkan dengan membuat latihan menulis yang banyak. Latih tubi amat penting dalam proses pembelajaran bahasa untuk tujuan kefahaman dan pembentukan kebiasaan berbahasa. Pelajar digalakkan membaca teks atau karya-karya bahasa Arab yang pelbagai dan melatih diri menganalisis penulisan tersebut dari segi gaya dan penggunaan perkataan, di samping mencatat dan menghafal frasa-frasa menarik yang boleh digunakan dalam penulisan.

## Penutup

Kajian ini bukanlah bertujuan untuk mencari kesilapan pelajar dan memperbetulkannya semata-mata malah kajian ini dijalankan dengan tujuan untuk melihat aspek kelemahan pelajar dalam penulisan karangan bahasa Arab. Maka dengan kajian ini mudah-mudahan akan dapat memberi ruang dan peluang kepada pensyarah-pensyarah bahasa Arab memikirkan

Teknik-teknik atau kaedah-kaedah yang lebih terkini dan praktikal dalam proses pengajaran dan pembelajaran kemahiran menulis bahasa Arab. Penulisan merupakan proses kognitif yang kompleks melibatkan aspek teknikal dan kognitif. Analisa kesilapan yang dilakukan ke atas penulisan pelajar sedikit sebanyak akan membawa perubahan dalam cara mengajar bahasa Arab khususnya yang berkaitan dengan penguasaan pelajar dalam aspek leksikal.

## Rujukan

- Ab. Halim Mohammad. 2009. *Tahap Komunikasi dalam Bahasa Arab dalam Kalangan Pelajar Sarjana Muda Bahasa Arab di IPTA Malaysia*. Journal of Islamic and Arabic Education 1(1)
- Ab. Halim Mohamad & Mohd. Azidan Abdul Jabar. (2017). *Faktor Kesalahan Bahasa yang Mempengaruhi Pelajar Melayu dalam Mempelajari Bahasa Arab*. Jurnal AL-ANWAR, Persatuan Bekas Mahasiswa Islam Timur (PBMITT). Volume 1 (3); June 2017: Pg 21- 32
- Ali Al-Madkur. (1991). *Tadris funun al-Lughah al-'Arabiyyah*. Al-Qahirah: Dar al-Syawaf
- Azlan Shaiful Baharum & Rosni Samah. (2015). *Persepsi Pelajar Universiti Awam terhadap Kesalahan Bahasa Arab, Faktor Penyumbang dan Implikasi*. Sains Humanika, 6(1).
- Che Radiah Mezah. 2009. *Kesilapan Leksikal dalam Pembelajaran Bahasa Arab*. (Cetakan Pertama). Selangor: Penerbit Universiti Putra Malaysia.
- Ghazali Yusri Bin Abd Rahman & Ahmad Bin Salleh. 2006. *Kemahiran Menulis Tulisan Arab Di Kalangan Pelajar-Pelajar UiTM: Kelemahan Dan Cara Mengatasinya*. Laporan Penyelidikan Akademi Pengajian Bahasa, Universiti Teknologi MARA, Shah Alam
- Habibah Mat Rejab. (2016). *Amalan Pentaksiran dalam Pengajaran dan Pembelajaran Insya' Sijil Tinggi Agama Malaysia (STAM)*. Tesis Doktor Falsafah. Fakulti Pendidikan. Kuala Lumpur: Universiti Malaya.



- Hanani Hasan.(2011). *Ma'rifah mufradaat fi maqalah islamiyyah lada talabah sanah rabi'ah kulliyah syariah wa qanun fi jami'ah ulum islamiyyah maliziyyah li'am dirasi 2010/2011*. Projek Ilmiah. Fakulti Pengajian Bahasa Utama. Nilai: Universiti Sains Islam Malaysia.
- Hassan Shahatah. (1993). *Ta'lim al-Lughah al-'Arabiyyah bayn al-nazariyyah wa altatbiq*. Kaherah: Dar al-Misriyyah al-Lubnaniyyah.
- Hyslop, N. & Tone, B. (1988). *Listening: Are we teaching it, and if so, how*. ERIC Digest 3 (atas talian) <http://eric.ed.gov/?id=ED295132> (30 Oktober 2013)
- Ismail Muhammad, Wan Maizatul Akmar Wan Ahmad & Azman Che Mat. (2013). *Sikap dan reality penguasaan kemahiran bahasa Arab pelajar program j-QAF*. GEMA OnlineTM Journal of Language Studies, 13(2), 81-97.
- Kamarudin Hj. Husin & Siti Hajar Hj. Abdul Aziz. (1997). *Keterampilan bahasa*. Kuala Lumpur: Kumpulan Budiman Sdn. Bhd.
- Ku Fatahiyah Ku Azizan Awatif Abd Rahman Hairun Najuwah Jamali. (2014). *Tahap Kemahiran Asas Bahasa Arab di IPT Malaysia*. GSE E-Journal of Education E-ISSN: 2289-688. Vol 1 No 2 2014.
- Mat Taib Pa. 2006. *Dasar-dasar Umum Pengajaran Bahasa Arab di Malaysia. Pengajaran dan Pembelajaran Bahasa Arab di Malaysia*. disunt: Mohd Rosdi Ismail & Mat Taib Pa. Kuala Lumpur: Penerbit Universiti Malaya.
- Mohd Firdaus Yahaya, Mohd Shahrizal Nasir, Wan Abdul Hayyi Wan Omar, Zulazhan Ab. Halim, & Essmat Nasr Sweedan. (2014). *Kemahiran Menulis dalam Bahasa Arab Menerusi Aktiviti Jawlah Lughawiyyah*. Issues in Language Studies, 3(1), Pg 36–53.
- Muhamad Zaidi Zakaria. (2011). *Penguasaan Kemahiran Menulis Bahasa Arab dalam kalangan murid sekolah kebangsaan menerusi program j-Qaf*. Disertasi Sarjana Fakulti Bahasa dan Linguistik, Universiti Malaya, Kuala Lumpur.
- Mohamad Rofian, Ahmad Redzauddin, Khairatul Akmar & Muhammad Daoh (2016). *Kerangka Pembinaan Modul Kemahiran Menulis Karangan Bahasa Arab untuk Penutur Bukan Arab di Ipta Malaysia*. In Seminar Antarabangsa Akidah, Dakwah dan Syariah 2016 (IRSYAD 2016) Bangi, Selangor: Kolej Universiti Islam Antarabangsa Selangor. Pg 581–592.
- Roselan Baki. 2003. *Pengajaran dan Pembelajaran Bahasa Melayu*. Shah Alam: Karisma Publications Sdn. Bhd
- Sueraya Che Haron et.al. 2010. *Understanding Arabic-Speaking Skill Learning Strategies Among Selected Malay Learners: A Case-Study At The International Islamic University Malaysia (IIUM)*. Contemporary Issues in Education Research; Aug 2010; ProQuest Education Journals.
- Wan Moharani dan Muhammad Marwan. (2008). *Kajian Bandingan Ayat Namaan Bahasa Arab-Bahasa Melayu*. (Cetakan Pertama). Negeri Sembilan: Penerbit Universiti Sains Islam Malaysia.
- Wan Norazwani Wan Jaafar. (2011). *Penguasaan Kemahiran Menulis Bahasa Arab Pelajar Kelas Aliran Agama di Kota Setar*. Disertasi Sarjana, Fakulti Pengajian Islam. Universiti Kebangsaan Malaysia.
- Zamri Mahamod & Mohamed Amin Embi. 2003. *Strategi pembelajaran bahasa pelajar sekolah menengah*. Jurnal Bahasa, 3 (2): 263-319



## CABARAN KERJAYA KEUSAHAWANAN ATAS TALIAN DALAM KALANGAN PELAJAR UNIVERSITI KEBANGSAAN MALAYSIA

Helmy Emyrul Mohd Nor Efendee<sup>1</sup>  
Norasmah Othman<sup>2</sup>

<sup>1</sup>Fakulti Pendidikan, Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia. (Email: helmyemyrul@gmail.com) (Email: [lin@ukm.edu.my](mailto:lin@ukm.edu.my))

---

**Abstract:** Government has implementing an agenda in creating more entrepreneurs among student in the university. In this Industrial Revolution 4 era, online business is one of the encouraged careers for students but data shown the number that venture in this area is still considered low. Thus, this study was conducted to identify the challenges of online entrepreneurship career based on Universiti Kebangsaan Malaysia (UKM) student's perceptions. Total of 150 students were selected using random sampling and the completed questionnaire used as an instrument for this research. The study found three main challenges of starting an online business according to student's perception which are the cost of business, interpersonal communication and ICT skills. The implications of this research to encourage the university to develop the program to overcome the challenge in the future.

**Keywords:** Challenges, students, business cost, interpersonal communication, ICT skills

**Abstrak:** Pembentukan usahawan dalam kalangan pelajar universiti merupakan agenda kerajaan masa kini. Di era Revolusi Industri ke 4, perniagaan atas talian merupakan salah satu kerjaya yang digalakkan untuk diceburi pelajar namun data menunjukkan bilangan yang menceburi bidang ini masih dianggap rendah. Justeru, kajian ini dijalankan bagi tujuan mengenal pasti cabaran kerjaya keusahawanan atas talian mengikut persepsi pelajar Universiti Kebangsaan Malaysia (UKM). Seramai 150 pelajar telah dipilih secara rawak berstrata dilibatkan dalam kajian ini dan soal selidik digunakan sebagai instrumen kajian. Hasil kajian mendapati bahawa terdapat tiga cabaran utama perniagaan atas talian mengikut persepsi pelajar iaitu berkaitan kos perniagaan, komunikasi interpersonal dan kemahiran ICT. Implikasi kajian ini adalah mendorong pihak universiti untuk memperbanyakkan program berkaitan cabaran tersebut agar dapat diatasi pelajar nanti.

**Kata kunci:** Cabaran, pelajar universiti, perniagaan atas talian, kerjaya keusahawanan

---

### Pengenalan

Dewasa ini, terdapat ramai usahawan muda mengusahakan produk tempatan hasil daripada gabungan pelbagai sumber bahan mentah yang berkualiti serta diiktiraf penggunaannya. Kaedah pemasaran atas talian menjadi platform utama penyebaran produk kepada sasaran pasaran yang ingin dicapai. Menurut Faradillah Iqmar et al. (2015), penggunaan Internet menjadi pemangkin dalam memperkasakan usahawan dalam kalangan pelajar, terutamanya dalam menceburi perniagaan atas talian. Perniagaan tempatan seperti Elrah Exclusive, Radiusite, CandidSyndrom dan banyak lagi jenama terkenal diusahakan dengan menggunakan kemudahan teknologi bagi mempromosikan produk oleh graduan lepasan Institusi Pengajian Tinggi. Justeru, mereka ini adalah layak dikenali sebagai usahawan muda yang berinovatif dan

produktif mempromosikan produk atau servis menerusi Internet, malah golongan usahawan muda ini juga dapat mencorak pembangunan ekonomi negara.

Manakala kemudahan teknologi maklumat yang pantas menjadi keperluan utama dalam kehidupan seharian masyarakat pada masa kini (Nur Yuhainis & Shuhymee, 2017). Sejak kebelakangan ini, perniagaan atas talian telah membawa satu perubahan yang besar terhadap sistem jual beli yang lebih mudah dan selamat sebagai contoh jenama-jenama fesyen menggunakan laman sesawang dan media sosial untuk mempromosikan pakaian dan pembayaran melalui platform yang lebih selamat. Perniagaan atas talian merupakan satu medium perniagaan yang lebih mudah diuruskan berbanding penjualan produk dan perkhidmatan di kedai fizikal atau secara tradisional. Walau bagaimanapun, pelajar universiti yang terdedah dengan pelbagai program keusahawanan dilihat tidak berminat menceburi keusahawanan secara talian atas faktor kekurangan kemahiran teknikal (Gusniar et al. 2014). Ini merupakan cabaran individu untuk menguasai kemahiran ICT bagi memenuhi kepentingan perniagaan atas talian. Oleh itu, kejayaan penglibatan dalam keusahawanan atas talian juga bergantung kepada kos perniagaan, kepentingan komunikasi interpersonal dan kemahiran ICT.

## **Kajian Literatur**

### **Cabaran Keusahawanan Atas Talian**

Pada era revolusi industri 4.0 masa kini, perniagaan atas talian merupakan keperluan utama kepada pengusaha untuk menyiapkan diri bersaing dengan produk tempatan lain dengan mempromosikan produk kepada pelanggan dengan menggunakan kos pemasaran yang rendah. Namun terdapat cabaran untuk memaksimumkan keuntungan melalui perniagaan atas talian ini. Usahawan perlu menempuh pelbagai dugaan dan cabaran bagi menjadi pilihan utama di hati pelanggan. Menurut Amirul & Mujahed (2018), cabaran utama usahawan di Malaysia adalah persaingan yang kian mencabar dan mendesak kerana mereka perlu memenuhi kehendak pelanggan yang mengikuti peredaran masa dan bersaing dalam industri yang penuh dengan pesaing berpengalaman. Selain itu, peranan Institusi Pengajian Tinggi (IPT) untuk melahirkan lebih ramai usahawan siswazah memberi tekanan dan memaksa pelajar untuk menceburi bidang perniagaan berbanding kerjaya yang ingin diceburi. Fenomena ini adalah selaras dengan objektif ke empat Kementerian Pengajian Tinggi (KPT) untuk menghasilkan ramai graduan yang kompeten untuk memenuhi keperluan guna tenaga negara dan antarabangsa dengan sasaran 75% graduan mendapatkan pekerjaan dalam bidang relevan dalam tempoh enam bulan selepas tamat pengajian (KPT, 2017).

### **Kos Perniagaan**

Cabaran usahawan merancang perniagaan yang melibatkan kos rendah dan relevan merupakan cabaran utama sebelum melangkah ke penubuhan perniagaan sebenar. Usahawan lebih gemar menjana idea perniagaan yang memenuhi kehendak pelanggan namun melibatkan kos yang tinggi. Hasilnya perniagaan tersebut bertahan hanya bertahan dalam jangka masa yang singkat. Menurut kajian Gusniar et al. (2014), seseorang individu perlu lebih cenderung memulakan perniagaan yang menggunakan modal yang kecil, menjimatkan masa pengeluaran dan tenaga mahir. Seseorang individu yang baru menceburi bidang keusahawanan perlu memilih perniagaan kecil-kecilan dan perniagaan tersebut diuruskan dengan kos yang rendah berserta matlamat untuk membantu mengurangkan bebanan masyarakat (Faradillah, Samsudin, & Ali, 2015). Namun Fuentelsaz et al. (2018) mempunyai perspektif yang berbeza dan mendapati kos yang rendah dalam memulakan perniagaan akan menghadkan pelbagai kos perbelanjaan awal dan memberi risiko kepada perniagaan untuk berkembang. Ini kerana keuntungan yang lumayan menjadi faktor pemilihan kerjaya keusahawanan berbanding menceburi bidang



perniagaan yang memberi keuntungan yang rendah, namun usahawan hanya mengeluarkan modal yang rendah dan takut mengambil risiko.

### **Komunikasi Interpersonal**

Secara umumnya, komunikasi interpersonal berfungsi sebagai alat pertukaran idea dan maklumat dengan tujuan mendapatkan keperluan tertentu dalam kehidupan seharian antara dua pihak (Mohd Asri, 2015). Dalam konteks keusahawanan, jaringan komunikasi yang erat antara dua pihak perniagaan menjadi asas kepada pembentukan dan perkembangan perniagaan baharu. Menurut Freudenberg et al. (2012) cabaran usahawan berkomunikasi secara interpersonal adalah daripada segi penyampaian idea dengan penuh keyakinan dan mendapat perhatian daripada pihak pelabur luar. Beliau juga menyifatkan usahawan mempunyai halangan untuk mendapatkan maklumat yang diperlukan dalam perniagaan jika gagal bersikap peka terhadap keperluan dan menerima maklum balas terhadap sesuatu perkara. Manakala kebaikan komunikasi interpersonal dalam perniagaan memberi kelebihan kepada seseorang usahawan untuk mengakses sumber yang mempengaruhi prestasi perniagaan melalui hubungan jaringan dengan pihak berkepentingan. Menurut kajian Natashadora (2013), penguasaan kemahiran komunikasi interpersonal dapat melahirkan seseorang individu yang berpotensi membentuk jaringan dengan entiti luar bagi tujuan perniagaan.

### **Kemahiran ICT**

Teknologi telah mengubah persekitaran masyarakat yang lebih kondusif dan berdaya maju pada hari ini. Menurut kajian Suriatie dan Nor Aishah (2017) teknologi menjadi satu instrumen yang memudahkan aktiviti seharian dengan adanya jaringan jalur lebar berkualiti tinggi. Manakala penggunaan ICT dan internet kini lebih sinonim dengan bidang keusahawanan untuk melengkapkan aktiviti pemasaran seperti pengiklanan yang lebih terurus. Cabaran dilihat kepada kemahiran menguruskan perniagaan dengan mengaplikasikan penggunaan komputer dan Internet. Ini kerana penglibatan akses Internet dan diuruskan dengan kemahiran ICT yang sedia ada dapat membantu usahawan mengenal pasti kehendak dan keperluan terkini masyarakat (Suriatie & Nor Aishah, 2017; Ruziah Ali, 2011). Tambahan, Suriyani et al. (2017) juga menekankan faktor yang memenuhi keperluan afektif penggunaan ICT dalam perniagaan adalah mudah digunakan (*easy to use*), usahawan merasakan perbezaan yang ketara setelah menggunakan ICT dan akhir sekali proses penyampaian maklumat lebih afektif dengan bantuan ICT. Dengan ini jelas menunjukkan kemahiran ICT merupakan cabaran yang perlu dilalui usahawan kerana dapat membantu masa depan perniagaan.

### **Metodologi**

Populasi kajian adalah seramai 39,140 pelajar (KPT, 2017) yang terdiri daripada pelajar sarjana muda, sarjana (Master) dan PhD di Universiti Kebangsaan Malaysia. Kajian ini menggunakan kaedah kuantitatif yang melibatkan 150 sampel pelajar tahun kedua dan ke atas yang telah mengikuti kursus keusahawanan. Seramai 90 pelajar Fakulti Ekonomi dan Pengurusan dan 60 pelajar daripada Fakulti Sains Sosial Kemanusiaan telah terlibat dalam kajian ini. Majoriti responden merupakan pelajar perempuan iaitu seramai 78 orang (52.0%) dan selebihnya responden lelaki seramai 72 orang (48.0%). Pemilihan sampel ini dibuat secara rawak mudah dan saiz sampel pula adalah mengikut penentuan saiz sampel Krejcie dan Morgan (1970).

Reka bentuk kajian ini berbentuk tinjauan yang menggunakan soal selidik sebagai instrumen kajian. Soal selidik yang dibina oleh pengkaji merupakan soal selidik yang diadaptasi dan diubahsuai daripada Nor Aishah (2007) iaitu soal selidik psikometrik indeks keusahawanan yang mengandungi 3 bahagian utama. Bahagian A mengandungi item kos



perniagaan, Bahagian B pula mengandungi item komunikasi interpersonal manakala Bahagian C ialah item kemahiran ICT. Instrumen yang dibina kemudiannya diberikan kepada dua orang pakar akademik yang mempunyai pengalaman luas dalam pendidikan keusahawanan bagi mendapatkan kesahan muka dan kesahan kandungan. Analisis data bagi kajian ini melibatkan penggunaan statistik deskriptif. Analisis data bagi kajian ini menggunakan Perisian Statistical Package For Social Science. Pengkaji menggunakan jadual interpretasi skor min yang diadaptasi daripada Norasmah (2002) bagi menganalisis data utama kajian iaitu elemen cabaran kerjaya keusahawanan atas talian.

### **Dapatan dan perbincangan**

Dapatan kajian daripada analisis deskriptif menunjukkan setiap kompenan cabaran keusahawanan berada pada tahap tinggi. Kemahiran ICT (min = 4.42) mencatatkan min tertinggi, diikuti kos perniagaan (min = 4.41) manakala komunikasi interpersonal hanya mencatat (min = 4.31). Ketiga-tiga faktor tersebut memainkan peranan penting dalam mencorakkan minat keusahawanan pelajar. Dapatan juga menunjukkan cabaran keusahawanan mencatatkan skor min pada tahap tinggi secara keseluruhan. Ini bermakna responden bersetuju bahawa faktor tersebut merupakan cabaran utama sebelum memulakan perniagaan.

Kemahiran menguruskan perniagaan dengan menggunakan kemudahan perkomputeran dan Internet meningkatkan kreativiti dan daya saing usahawan. Dapatan kajian menunjukkan kemahiran ICT merupakan cabaran paling besar terhadap pemilihan kerjaya keusahawanan atas talian. Selaras dengan kajian Suriatie & Nor Aishah (2017) mendapati usahawan perlu melibatkan penggunaan Internet dan perlu menguruskannya dengan kemahiran ICT yang sedia ada namun pada individu yang kekurangan kemahiran tersebut akan mengalami kesusahan untuk mengenal pasti kehendak dan keperluan terkini masyarakat. Seterusnya kos perniagaan merupakan cabaran kedua paling mencabar sebelum memulakan perniagaan kerana pelajar mempunyai dana kewangan yang terhad. Namun kajian Fuentelsaz et al. (2018) menegaskan individu yang mempunyai kos yang rendah semasa memulakan perniagaan akan menghadapi pelbagai kos perbelanjaan awal dan mengagalkan usaha individu untuk mengukuhkan perniagaan baru. Manakala komunikasi interpersonal merupakan cabaran yang kurang memberi tekanan kepada individu untuk memulakan perniagaan atas talian. Menurut kajian Freudenberg et al. (2012) cabaran usahawan berkomunikasi secara interpersonal hanya pada teknik penyampaian idea dengan penuh keyakinan bagi mendapatkan perhatian daripada pihak luar.

### **Kesimpulan**

Analisis kajian menunjukkan kos perniagaan, komunikasi interpersonal dan kemahiran ICT merupakan cabaran utama kepada pelajar dalam memulakan perniagaan atas talian. Keinginan memulakan perniagaan atas talian didorong oleh faktor penentu pemilihan kerjaya keusahawanan melalui penciptaan dan pembentukan sebuah organisasi perniagaan atau usaha meneroka peluang baru di pasaran. Melalui dapatan kajian, beberapa cadangan dapat dilaksanakan bagi mengatasi cabaran dalam kalangan pelajar untuk memulakan perniagaan agar mencapai hasrat kerajaan yang memberi tumpuan terhadap penguasaan teknologi moden. Dalam melaksanakan pembangunan keusahawanan, platform perniagaan atas talian dapat melahirkan usahawan yang berintegriti serta berpengetahuan dalam bidang teknologi bagi meningkatkan kualiti diri dan bersedia untuk bersaing dalam pasaran pada era globalisasi kini selaras dengan aliran perkembangan ekonomi negara (Kementerian Pendidikan Tinggi, 2015). Selain itu, perancangan aktiviti keusahawanan perlu diselaraskan agar pelajar bersedia menjana perniagaan yang lebih berinovasi. Melalui kekerapan aktiviti keusahawanan juga boleh



memberi keuntungan kepada pelajar dari segi kewangan dan kemahiran. Oleh itu, inisiatif institusi pengajian memberi pendedahan awal kepada pelajar dalam bidang keusahawanan atas talian dapat mendorong kepada kejayaan perniagaan dan berdaya saing dengan produk tempatan serta antarabangsa.

### Rujukan

- Faradillah, I., Samsudin, A., & Ali, S. (2015). Penyertaan digital dan ciri keusahawanan dalam pemerikasaan usahawan di Malaysia. *Jurnal Komunikasi*, 241-256.
- Fuentelsaz, L., Juan, P., & Javier, M. (2018). Entrepreneurs and innovation: The contingent role of institutional factors. *International Small Business Journal: Researching Entrepreneurship*, 1-26.
- Freudenberg, B., Brimble, M., & Cameron, C. (2012). WIL and generic skill development: The development of business students' generic skills throughwork-integrated learning. *Asia-Pacific Journal of Cooperative Education*, 12(2), 79-93.
- Gusniar Nurdin, Geraldine, Chan, Sivapalan Selvadurai, & Suraiya Ishak. (2014). Hubungan sosial dan perniagaan kecil-kecilan di Malaysia - tingkah laku inovatif usahawan wanita atas talian. *Malaysian Journal of Society and Space*, 10(6), 206-218.
- Kementerian Pendidikan Tinggi. (2015). *Pelan Tindakan Keusahawanan Intitusi Pendiidikan Tinggi 2016-2020*. Putrajaya: Kementerian Pendidikan.
- Kementerian Pendidikan Tinggi. (2017). *Dasar Pembangunan Keusahawanan*. Putrajaya: Kementerian Pengajian Tinggi.
- Mohd Asri, A. (2015). *Hubungan kompetensi usahawan dan efikasi keusahawanan terhadap tingkah laku inovatif guru praperkhidmatan IPG*. Universiti Teknologi Malaysia: Tesis Dr Falsafah.
- Natashadora Muridan. (2013). *Penguasaan kemahiran komunikasi interpersonal dalam kalangan pelajar tahun satu fakulti pendidikan teknikal dan vokasional di UTHM*. Parit Raja: Universiti Tun Hussein Onn Malaysia.
- Ruziah Ali. (2011). Strategi e-pemasaran di dalam transformasi pemasaran penerbitan buku. *journal of Human Capital Development*, 4(1), 79-89.
- Suriatie Mohd Yunus, & Nor Aishah Buang. (2017). Pendekatan penggunaan medium e-pemasaran dalam kalangan usahawan wanita. *Journal of Global Business and Social Entrepreneurship (GBSE)*, 1(1), 47-57.
- Suriyani Muhamad, Noraida Hj Ali, & Masita Abdul Jalil. (2017). A sustainable e-business model for rural women: a case study. *Journal of Sustainability Science and Management*
- Muhamad Amirul Fikri, & Mohammad Mujahed (2018). Faktor penglibatan dan cabaran wanita melayu dalam keushawanan di Malaysia. *Jurnal Sains Kemasyarakatan dan Pembangunan*. 101-115.



## KAEDAH CUES DALAM MENINGKATKAN KEMAHIRAN PENYELESAIAN MASALAH MATEMATIK BERAYAT

Phyllida Anak Anthony Nyoel<sup>1</sup>  
Effandi bin Zakaria<sup>2</sup>

<sup>1</sup> Fakulti Pendidikan, Universiti Kebangsaan Malaysia, Malaysia (E-mail: phyllberry@hotmail.com)

<sup>2</sup> Fakulti Pendidikan, Universiti Kebangsaan Malaysia, Malaysia (Email: effandiza@gmail.com)

---

**Abstrak:** Kajian tindakan ini dijalankan bertujuan untuk mengenal pasti masalah-masalah yang dihadapi oleh murid semasa menyelesaikan masalah matematik berayat di samping membantu meningkatkan kemahiran murid dalam menjawab masalah matematik berayat melalui kaedah CUES (Circle, Underline, Evaluate, Solve and Check). Responden kajian adalah seramai 15 orang murid Tahun 5 di sebuah sekolah luar bandar di daerah Kapit, Sarawak. Kajian ini menggunakan kaedah kuantitatif dan kualitatif untuk menganalisis instrumen ujian pra dan ujian pasca, pemerhatian dan senarai semak dan analisis dokumen. Ujian pra dan pasca melibatkan kaedah statistik deskriptif. Senarai semak digunakan untuk menganalisis dan menentukan sama ada responden dapat menggunakan kaedah CUES dengan betul. Data yang dikumpulkan daripada analisis dokumen, seperti ujian awal tahun sekolah dan data statistik pencapaian Matematik dalam UPSR 2017 peringkat daerah Kapit digunakan sebagai rujukan dalam membantu kajian ini. Data dianalisis secara deskriptif dalam bentuk peritus, min skor dan sisihan piawai menerusi perisian Microsoft Excel Worksheet. Hasil analisis data mendapati berlaku perubahan min skor yang ketara iaitu semasa ujian pasca berbanding semasa ujian pra sebanyak 29.93%. Sisihan piawai turut merekodkan peningkatan iaitu daripada 12.146 semasa ujian pra kepada 13.641 semasa ujian pasca. Analisis dokumen kertas peperiksaan, pemerhatian dan senarai semak digunakan dan ditafsirkan secara kualitatif dan kuantitatif. Kesimpulannya, kaedah CUES ini dapat meningkatkan kefahaman dan kemahiran pelajar dalam menyelesaikan masalah matematik berayat dengan lebih cekap dengan menghubungkan kata kunci dengan soalan tersebut.

**Kata Kunci:** Kemahiran, Penyelesaian, Matematik Berayat, CUES

---

### Pengenalan

Matematik adalah suatu bidang ilmu yang amat penting untuk melatih pemikiran dan minda seseorang agar dapat berfikir secara kreatif dan sistematik dalam penyelesaian sesuatu masalah (Kementerian Pendidikan Malaysia 2014). Justeru, mengikut Kementerian Pendidikan Malaysia, matematik dapat menghasilkan pelajar yang berfikiran kreatif dan analitis. Bukan sahaja itu, pemahaman makna ayat dalam sesuatu permasalahan matematik berayat adalah amat penting bagi membolehkan pelajar untuk membina konsep dan menghubungkan simbol matematik dan bahasa abstrak yang terkandung dalam subjek matematik (Farizan Binti Ismail 2013). Di samping itu, tahap kesukaran masalah matematik berayat yang dikemukakan oleh para guru haruslah mengikut aras kemahiran pelajar. Dengan itu, pelajar dapat menggunakan dan mengaplikasikan ilmu matematik dalam kehidupan seharian seperti menguruskan perbelanjaan harian dan menabung untuk masa depan.

Mengikut kajian yang didapati oleh Ashari et. al. (2010), beliau merumuskan bahawa kemahiran penyelesaian masalah adalah amat penting dalam melahirkan individu yang lebih



sensitif terhadap sebarang masalah yang timbul serta berkemampuan untuk berfikir secara kreatif dan kritis dalam menyelesaikan sesuatu permasalahan. Kementerian Pelajaran Tinggi, KPT (2006) telah mentakrifkan kemahiran penyelesaian masalah sebagai “suatu kebolehan seseorang individu dalam berfikir secara kritis, kreatif, inovatif, serta dapat memahami dan bertindak dengan pantas dan efisien terhadap sesuatu permasalahan.”

### **Pernyataan Masalah**

Masalah pembelajaran matematik adalah umum dalam kalangan pelajar di Malaysia. Menurut beberapa kajian yang lepas, subjek matematik dianggap sebagai mata pelajaran yang tidak menarik, sukar dan membosankan jika dibandingkan dengan mata pelajaran lain, seperti bahasa melayu, sains (Allchin 1999; Tan 1997; Proctor 1991), dan juga latihan fizikal (Alphin & Saunders 1996; Lee & Cockman 1995). Selain itu, sesetengah pelajar mengibaratkan mempelajari pelajaran matematik sama seolah dengan mendengar sesuatu cerita yang mengerikan.

Menurut Azlina (2003), kebanyakan pelajar luar bandar menganggap pembelajaran matematik adalah sukar dan juga menganggap bahawa matematik merupakan mata pelajaran yang sukar untuk memperoleh keputusan yang cemerlang atau dianggap sebagai “*killer subject*”.

Penerokaan penyelesaian masalah dapat meningkatkan keupayaan kognitif seseorang, seperti kemahiran berfikir secara kritis, kreatif, dan inovatif (Rita & Mulia 2016; Abu Bakar Nordin 2013). Justeru, guru memainkan peranan yang agak penting untuk menerapkan teknik penyelesaian masalah dan kemahiran berfikir dalam kalangan pelajar agar mereka dapat menguasai kemahiran penyelesaian masalah dengan lebih mudah.

Kemahiran menyelesaikan masalah merupakan kemahiran yang penting dalam meningkatkan akademik pelajar. Idris et al. (2009) mengatakan bahawa kemahiran dalam penyelesaian masalah ini dapat membantu pelajar melaksanakan strategi penyelesaian dan menilai terhadap sesuatu keputusan yang telah dibuat bagi mengatasi halangan-halangan di hadapan mereka. Hal ini disokong oleh Doru dan Koklu (2011) dalam kajian mereka terhadap kefahaman pembacaan teks matematik dimana murid menghadapi kesukaran dalam menterjemah masalah matematik berayat dalam bentuk persamaan dan simbol.

### **Sorotan Literatur**

Kemahiran menyelesaikan masalah merupakan kemahiran yang penting dalam meningkatkan akademik pelajar. Idris et al. (2009) mengatakan bahawa kemahiran dalam penyelesaian masalah ini dapat membantu pelajar melaksanakan strategi penyelesaian dan menilai terhadap sesuatu keputusan yang telah dibuat bagi mengatasi halangan-halangan di hadapan mereka. Perancangan strategi yang sesuai dapat membantu pelajar menangani masalah dan memastikan setiap masalah yang diberi dapat diselesaikan. Hal ini kerana, ciri-ciri penyelesaian masalah memerlukan perancangan strategi dan juga pemilihan kaedah bersesuaian yang bergantung kepada pengetahuan, pengalaman dan kemahiran sedia ada pelajar dan kefahaman masalah berkenaan (Sarimah binti Ismail & Abreza binti Atan 2011). Hal ini juga akan membawa kepada perkembangan daya pemikiran yang kreatif (Zuriawahida 2016). Kebanyakan ahli-ahli psikologi kognitif seperti Thorndike, John Dewey, dan Gestlat, berminat untuk mengetahui apa yang berlaku dalam minda manusia apabila seseorang menyelesaikan masalah dan bagaimana mereka mengendalikan maklumat untuk menyelesaikan masalah.

Dalam kajian beliau, beliau menggunakan masalah dalam tajuk Statistik untuk melihat keupayaan guru menjana masalah yang tersendiri dalam subjek tersebut. Menurut beliau juga,



pembelajaran konstruktivisme sangat penting kerana pembelajaran ini dianggap bersifat generatif. Hal ini kerana, pembelajaran ini dapat melatih individu untuk mencipta sesuatu makna daripada pembelajaran yang dipelajari. Teori konstruktivisme ini dapat dibahagikan kepada dua jenis, iaitu konstruktivisme radikal dan sosial. Teori ini dapat diguna-pakai oleh semua peringkat umur pelajar. Menurut Vygotsky (1978), konstruktivisme sosial melibatkan aktiviti sosial dengan orang lain. Aktiviti ini dapat membantu pembentukan ilmu pengetahuan yang dingini.

Berdasarkan hasil kajian Farizan (2013), beliau menyimpulkan bahawa penyelesaian masalah matematik berayat merupakan aktiviti sosial yang melibatkan proses interaktif yang aktif. Hal ini kerana, pelajar akan membuat visualisasi melalui idea matematik yang diperoleh melalui pembacaan seterusnya mereka akan membentangkan idea mereka secara bertulis, melukis gambar, graf atau menggunakan bahan-bahan konkrit. Beliau memperkenalkan kaedah Model Bar dalam menyelesaikan masalah matematik berayat. Kaedah Model Bar merupakan satu strategi yang ditakrifkan sebagai bentuk segi empat tepat untuk mewakili kuantiti yang diketahui dan tidak diketahui, serta hubungan antara kuantiti dinyatakan. Kaedah ini memberi gambaran visual untuk menggabungkan nombor dan maklumat lain dari masalah berayat ke dalam model bar itu sendiri.

Kajian tersebut turut disokong oleh Debrenti (2015) yang menegaskan penyelesaian masalah matematik berayat adalah amat penting sekali kerana pembinaan konsep operasi matematik dapat dilakukan dan seterusnya dapat dipraktikkan melalui operasi tersebut secara tidak langsung. Berdasarkan kajian Maslinah Lasiun (2016), pelajar tahap rendah dan sederhana cenderung melakukan lakaran bergambar manakala pelajar tahap tinggi cenderung melakukan gambaran menggunakan simbol, seperti pemboleh ubah. Berdasarkan kajian tersebut, kedua-dua jenis visualisasi ini membantu meningkatkan keupayaan pelajar dalam menyelesaikan masalah matematik berayat.

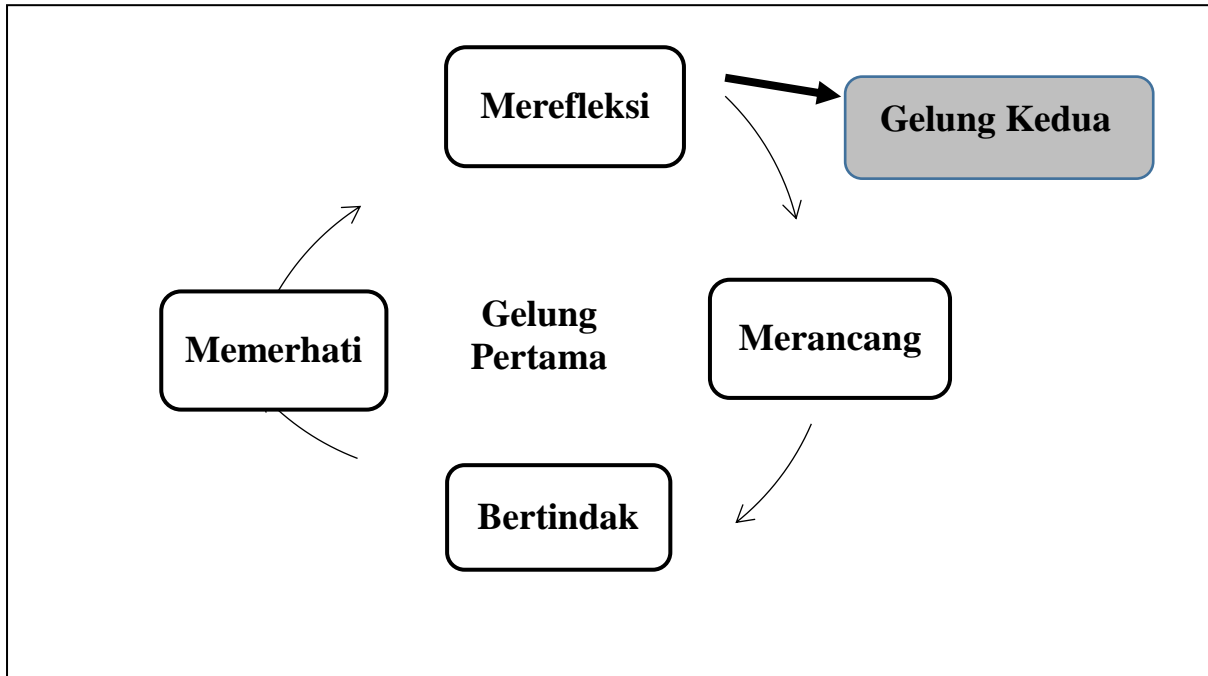
### **Objektif Kajian**

Kajian ini dijalankan untuk mencapai objektif seperti berikut:

1. Mengenal pasti masalah-masalah yang dihadapi oleh murid semasa menyelesaikan masalah matematik berayat.
2. Membantu meningkatkan kemahiran murid dalam menjawab masalah matematik berayat melalui kaedah CUES.

### **Metodologi Kajian**

Metodologi yang digunakan dalam kajian tindakan ini melibatkan dua jenis, iaitu dengan menggunakan kaedah kualitatif dan kuantitatif. Dalam kajian ini, instrumen yang digunakan dalam kaedah kualitatif adalah melalui analisis dokumen dan senarai semak. Kaedah kualitatif merupakan satu instrumen untuk mendapatkan maklumat secara terperinci dan mendalam di Reka bentuk yang digunakan dalam kajian ini ialah Kajian Tindakan Kemmis & Mc Taggart (1988). Steven Kemmis menegaskan bahawa kajian tindakan adalah suatu pendekatan penyelidikan yang mampu mempertingkatkan profesionalisme guru (Kemmis dan McTaggart, 1988).



**Rajah 1:** Model kajian tindakan dalam menyelesaikan masalah kelemahan pelajar dalam matematik berayat

### Batasan Kajian

Kesemua responden adalah berbangsa Iban. Pengkaji menghadapi kesulitan dan kesukaran untuk menterjemahkan dan menerangkan maksud istilah-istilah matematik dalam Bahasa Iban supaya dapat meningkatkan pemahaman murid. Di samping itu, lokasi sekolah yang terletak jauh dalam pedalaman menyebabkan kelas Tahun Lima bersaiz agak kecil, iaitu hanya 15 orang murid sahaja. Oleh itu, pengkaji mengalami kekurangan responden dalam usaha untuk mencapai tahap minimum sampel kajian, iaitu sebanyak 30 orang. Pengkaji hanya akan menguji kemahiran menyelesaikan masalah murid untuk topik nombor dan operasi sahaja. Ini adalah disebabkan oleh kekangan masa yang dihadapi oleh murid untuk melibatkan diri dalam kajian ini. Hal ini kerana, pelajar telah mula sibuk mengikuti pelbagai aktiviti anjuran sekolah dan peringkat daerah sepanjang bulan Ogos hingga Oktober. Oleh sebab itu, kajian ini hanya dapat dijalankan dari awal bulan Jun hingga akhir bulan Julai sahaja. Walaupun masa kajian adalah singkat, tetapi kajian ini dapat disempurnakan dalam tempoh masa yang dirancang atas kerjasama penuh pelbagai pihak yang terlibat dalam kajian ini.

### Instrumen Kajian

Dalam kajian ini, pengkaji telah menggunakan beberapa instrumen yang bersesuaian untuk mencapai objektif kajian iaitu ujian pra, ujian pasca, analisis dokumen dan senarai semak.

Dalam Rosinah Edinin (2011) menyatakan triangulasi data dilakukan bertujuan untuk memastikan kesahan dan kebolehpercayaan instrumentasi.

Ujian pra dan ujian pasca merupakan instrumen yang pertama. Dalam instrumen ujian, pengkaji telah menggunakan ujian pra dan ujian pasca dalam topik “Nombor” dan “Operasi” bagi menguji tahap kemahiran responden dalam penyelesaian masalah matematik berayat. Ujian pra dilaksanakan bertujuan mendapatkan data awal sebelum sesi intervensi dijalankan. Lembaran ujian pra dan ujian pasca adalah serupa dan diadaptasi daripada Modul Pengajaran dan Pembelajaran Matematik (Sekolah Kebangsaan) Tahun 5 Bahagian 1 hasil terbitan Bahagian Pembangunan Kurikulum pada tahun 2014.

Instrumen yang seterusnya adalah analisis dokumen. Dalam kajian ini, pengkaji meneliti beberapa jenis dokumen. Kajian Merriam (2001) menyatakan dokumen merupakan sumber sedia ada yang dapat membantu dalam sesuatu penyelidikan. Dokumen terdiri daripada bahan-bahan bercetak, bahan bertulis, rekod audio dan visual, sama ada yang bersifat umum (*public record*) atau peribadi (*personal documents*) yang di dalamnya terkandung maklumat tentang sesuatu aktiviti, perkara atau sejarah. Dalam pelaksanaan kajian ini, dokumen yang relevan seperti Dokumen Standard Kurikulum dan Prestasi, pencapaian Ujian Awal Tahun dalam Sistem Analisis Peperiksaan Sekolah (SAPS), lembaran kerja, ujian pra dan ujian pasca, analisis data pencapaian Matematik UPSR 2017 peringkat daerah telah dikumpulkan dan dirujuk bagi membantu kajian. Pengkaji telah meneliti lembaran kerja yang dilengkapi oleh responden berdasarkan kaedah CUES yang digunakan. Lantaran itu, ini akan memudahkan pengkaji mengenal pasti bahagian yang kurang difahami oleh subjek kajian. Borang analisis dokumen digunakan untuk merekodkan semua dokumen. Analisis dokumen juga membolehkan triangulasi dilakukan terhadap data yang dipungut menerusi kaedah ujian dan pemerhatian.

Akhir sekali, instrumen ketiga ialah senarai semak. Kaedah senarai semak digunakan untuk menilai kebolehan responden dalam mengaplikasikan setiap langkah kaedah CUES yang telah disampaikan oleh guru. Tujuan senarai semak digunakan adalah untuk mengenal pasti setiap langkah CUES dilaksanakan semasa menjawab soalan matematik berayat. Senarai semak yang digunakan adalah adaptasi daripada senarai semak yang digunakan dalam kajian Chong Siew Ha (2017). Borang senarai semak yang terdapat dalam kajian ini berbentuk jadual 7 lajur dan 6 baris. Senarai semak ini memberi fokus untuk mengesan kebolehan responden mengikuti langkah-langkah kaedah CUES dalam menjawab soalan matematik berayat.

Kaedah senarai semak dan pemerhatian digunakan untuk melihat penguasaan responden terhadap penyelesaian masalah matematik berayat dengan menggunakan kaedah CUES. Tujuan senarai semak digunakan adalah untuk mengenal pasti jenis kesalahan, merekodkan kemahiran responden mengkategorikan nombor, soalan dan kata kunci dalam soalan penyelesaian masalah matematik berayat sebelum dapat menyelesaikan masalah dengan menggunakan operasi yang sesuai.

## **Dapatan Kajian**

### **Dapatan Ujian Pra Dan Pasca**

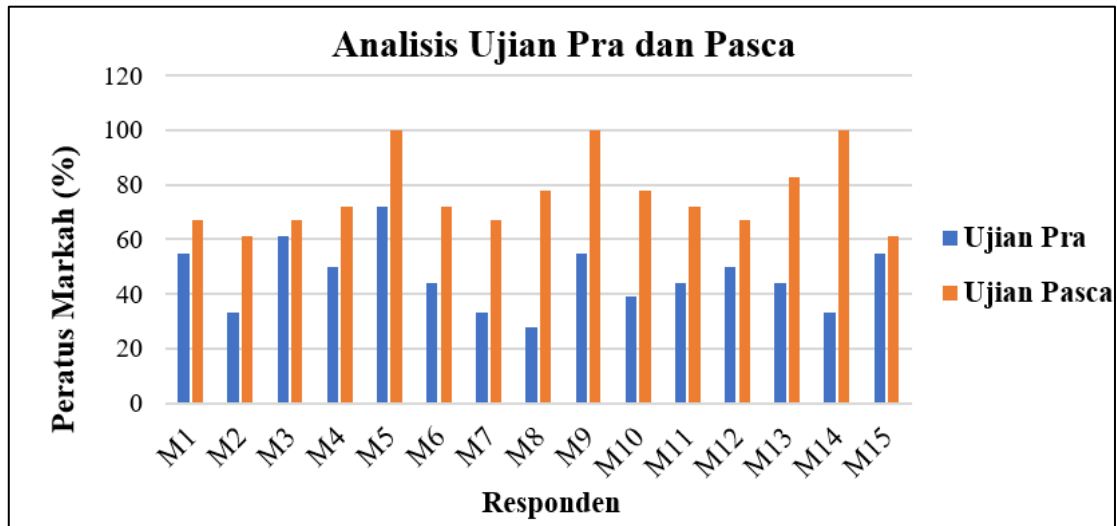
Ujian pra telah diberikan kepada semua responden sebelum pendedahan kepada kaedah CUES manakala ujian pasca dijalankan selepas kaedah CUES diperkenalkan. Ujian ini mengandungi 6 soalan yang memerlukan responden mengeluarkan maklumat yang dikehendaki daripada soalan seterusnya membuat rumusan yang bersesuaian. Jadual 1 mengandungi data ujian pra dan pasca manakala Rajah 2 menunjukkan graf perbandingan pencapaian responden dalam ujian pra dan pasca. Berdasarkan Jadual 1, kesemua 15 responden menunjukkan peningkatan

markah dalam ujian pasca berbanding dengan ujian pra. Hal ini dapat dilihat berdasarkan purata ujian pra yang mencatat sebanyak 46.4%, manakala purata ujian pasca pula ialah 76.33%. Oleh itu, terdapat peningkatan purata markah sebanyak 29.93%. Selain itu, Jadual 1 juga menunjukkan peratus tertinggi di kalangan semua responden dalam ujian pra ialah sebanyak 72% manakala peratus terendah dalam ujian ini ialah 33%.

Di samping itu, rajah ini juga menunjukkan bahawa peratus markah yang tertinggi dicatat dalam ujian pasca ialah sebanyak 100% manakala peratus terendah ialah sebanyak 61%. Berdasarkan Jadual 1 dapat dilihat bahawa hanya terdapat 4 responden yang berjaya mendapat peratus markah melebihi 50% daripada jumlah 15 orang responden dalam ujian pra. Walau bagaimanapun, ujian pasca mencatat keputusan yang jauh lebih baik dengan keseluruhan responden mendapat markah melebihi 50%. Sisihan piawai dalam Jadual 1 semasa ujian pra juga adalah rendah, iaitu 12.146 dan ianya menunjukkan bahawa serakan antara markah rendah dan tinggi adalah kecil manakala sisihan piawai semasa ujian pasca adalah tinggi 13.641 dan ianya menunjukkan bahawa serakan antara markah rendah dan tinggi adalah besar.

**Jadual 1:** Taburan markah ujian pra dan pasca

Responden	Markah Ujian Pra		Markah Ujian Pasca		Perubahan Markah (+/-)
	%	Gred	%	Gred	
M1	55	C	67	C	+12
M2	33	E	61	C	+28
M3	61	C	67	B	+6
M4	50	C	72	B	+22
M5	72	B	100	A	+28
M6	44	D	72	B	+28
M7	33	E	67	B	+34
M8	28	E	78	B	+50
M9	55	C	100	A	+45
M10	39	E	78	B	+39
M11	44	D	72	B	+28
M12	50	C	67	B	+17
M13	44	D	83	A	+39
M14	33	E	100	A	+67
M15	55	C	61	C	+6
<b>Min</b>	<b>46.4</b>		<b>76.33</b>		<b>29.93</b>
<b>Sisihan Piawai</b>	<b>12.146</b>		<b>13.641</b>		<b>1.49</b>



**Rajah 2:** Graf perbandingan pencapaian responden dalam ujian pra dan pasca

### Dapatan Analisis Dokumen

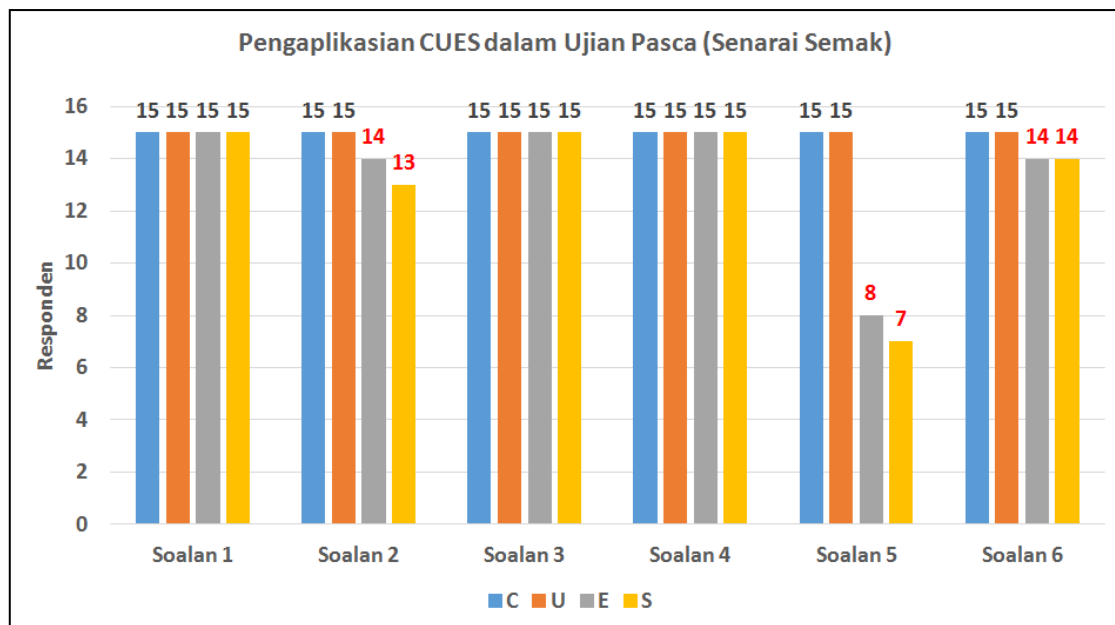
Analisis dokumen dalam penyelidikan ini dibuat sebelum dan selepas pengenalan intervensi kaedah CUES. Analisis sebelum intervensi diperkenalkan dibuat bagi tujuan mengesan masalah responden dalam soalan penyelesaian masalah berayat. Pengkaji membuat rujukan ke atas dokumen berkaitan dengan pencapaian pelajar Ujian Awal Tahun, data analisis UPSR 2017 daerah Kapit dan dokumen ujian pra. Selepas intervensi kaedah CUES diperkenalkan, pengkaji melakukan analisis terhadap lampiran akhir dan ujian pasca. Berdasarkan analisis Ujian Awal Tahun yang terdapat dalam Lampiran C, kesemua responden mendapat keputusan yang kurang memberangsangkan dalam ujian tersebut, di mana hanya 4 orang responden daripada jumlah 15 orang responden mendapat gred C, diikuti dengan 8 orang memperoleh gred D dan 3 orang responden mendapat gred E. Data UPSR pula dirujuk sebagai bukti bahawa mata pelajaran Matematik ini merupakan subjek yang amat kritikal di peringkat daerah Kapit. Berdasarkan Lampiran C, subjek Matematik mencatat GPMP yang kurang memberangsangkan, iaitu 3.5 jika dibandingkan dengan subjek Sains. Ini memerlukan tindakan guru-guru mencari alternatif bagi menangani masalah yang dihadapi ini. Masalah utama yang dikenal-pasti daripada analisis ini adalah berkaitan dengan Kertas 2, iaitu penyelesaian masalah matematik berayat.

Selepas intervensi ini diperkenalkan, berdasarkan analisis dokumen yang dijalankan ke atas semua responden pada latihan akhir telah menunjukkan kemajuan dan peningkatan pencapaian setiap responden dalam menjawab masalah matematik berayat. Berdasarkan Jadual 4.2, iaitu pencapaian responden mengikut soalan dalam latihan akhir menggunakan intervensi kata kunci dan kaedah CUES, keseluruhan responden mendapat jumlah markah melebihi 10 daripada 18 markah. Selain itu, Rajah 4.2 menunjukkan responden berjaya mengaplikasikan kaedah CUES dengan betul dalam ujian pasca.

**Jadual 2:** Pencapaian responden mengikut soalan dalam latihan akhir menggunakan intervensi kata kunci dan kaedah CUES

Responden	Soalan (3 markah)						Jumlah Markah (18 Markah)
	1	2	3	4	5	6	
M1	2	2	2	2	2	2	12

M2	1	2	3	2	2	1	11
M3	1	3	2	2	2	2	12
M4	2	3	3	1	2	2	13
M5	3	3	3	3	3	3	18
M6	2	3	2	2	3	1	13
M7	2	3	2	1	1	3	12
M8	2	2	3	3	2	1	14
M9	3	3	3	3	3	3	18
M10	2	3	2	1	3	2	14
M11	2	3	2	2	2	2	13
M12	2	3	3	2	1	1	12
M13	2	3	3	2	3	2	15
M14	3	3	3	3	3	3	18
M15	2	2	1	2	2	2	11



**Rajah 4 :** Hasil senarai semak yang menunjukkan bilangan responden yang mengaplikasikan kaedah CUES dalam setiap soalan penyelesaian matematik

### Perbincangan

Masalah-masalah yang Dihadapi oleh Pelajar Semasa Menyelesaikan Masalah Matematik Berayat

Melalui kajian yang telah dilaksanakan ini, pengkaji merumuskan subjek kajian menghadapi masalah seperti berikut dalam penyelesaian masalah berayat matematik sebelum intervensi diperkenalkan:

- i. Lemah dalam penguasaan bahasa Melayu.
- ii. Tidak memahami maksud dan kehendak soalan memandangkan ayat agak panjang.

- iii. Malas membaca dan memahami apabila melihat soalan berayat yang banyak.
- iv. Menggaris perkataan yang bukan kata kunci.
- v. Kurang pasti dan tidak tahu operasi matematik yang perlu dilakukan untuk menyelesaikan soalan yang diberi.

Secara keseluruhannya, menurut analisis kesilapan penyelesaian masalah Newman (1977), kajian menunjukkan subjek kajian menghadapi masalah pembacaan, pemahaman dan transformasi. Hal ini dibuktikan melalui kajiannya yang mendapati bahasa yang digunakan juga merupakan penyumbang kepada sebahagian besar masalah yang dihadapi oleh pelajar dalam penyelesaian masalah matematik. Kajian ini disokong berdasarkan kajian Philips (2003) menyatakan pelajar perlu memahami setiap istilah yang digunakan sebelum menguasai konsep. Salah satu masalah utama dalam pembelajaran Matematik ialah masalah penguasaan bahasa.

Sehubungan dengan itu, dapatan telah menunjukkan bahawa subjek kajian menghadapi masalah untuk membaca dan memahami masalah penyelesaian masalah matematik berayat dalam bahasa Melayu. Faktor lemah dalam penguasaan bahasa Melayu telah menyukarkan mereka memahami perbendaharaan kata, ungkapan dan ayat matematik dalam soalan seterusnya gagal untuk menyelesaikan masalah matematik berayat. Melalui dapatan yang diperolehi Donny dan Siti Mistima (2017), ramai murid yang melakukan kesilapan pada tahap kemahiran proses (25.71%) dan transformasi (24.64%). Hal yang sama diperolehi melalui kajian yang dilakukan oleh Nik Nur Fadhlillah, Azurah, Desi dan Yong (2014) dimana didapati ramai murid lebih berupaya memahami kehendak soalan (55.88%) berbanding merancang strategi (24.5%), melaksana strategi (26.75) dan menulis jawapan (16.67%).

Penyelesaian masalah matematik berayat di kalangan murid masih tidak begitu mahir kerana mereka kurang faham soalan-soalan yang dikemukakan menyebabkan mereka tidak mampu menterjemahkan soalan berayat kepada perwakilan matematik. Oleh sebab itu, pemahaman soalan adalah unsur utama dalam permasalahan matematik berayat seperti yang digariskan dalam kajian model penyelesaian masalah Polya (1957). Mengikut hasil kajian Polya (1957), langkah pertama penyelesaian masalah matematik adalah pemahaman soalan yang dikemukakan. Justeru, kaedah CUES ini diperkenalkan di kalangan murid bagi membantu murid memahami soalan dan kehendak soalan tanpa kekeliruan, mengkategorikan nombor, dan menentukan dan memahami kata kunci sebagai langkah awal dalam pemahaman soalan. Seterusnya, murid perlu memilih operasi dan algoritma yang sewajarnya untuk menyelesaikan soalan yang diberi.

### **Perbandingan Prestasi Pelajar Sebelum dan Selepas Kaedah CUES Diperkenalkan**

Dengan purata peningkatan dalam ujian pasca sebanyak 29.93% dan keseluruhan subjek kajian mendapat skor melebihi 50% berbanding hanya 7 orang subjek kajian sebelum ini membuktikan keberkesanan kaedah CUES dalam meningkatkan daya ingatan pelajar. Selain itu, kajian membuktikan pelajar yang lemah dapat dibantu dalam penyelesaian masalah dengan menggunakan kaedah CUES ini. Dengan berbantuan bulatan digit dan garisan kata kunci akan dapat membantu pelajar menghasilkan satu ayat matematik yang lengkap dan boleh mendapat sekurang-kurangnya 1 markah minimum untuk setiap soalan. Perkara ini juga sudah cukup memadai untuk membantu pelajar lulus dalam Kertas 2 walaupun dengan hanya menulis ayat matematik sekiranya pelajar tidak dapat menjawab soalan tersebut. Dapatan kajian ini bertepatan dengan kajian Glen dan Wilkie (2000) menghuraikan proses penyelesaian masalah



sebagai “kaedah pengajaran dan pembelajaran di mana ianya melibatkan pelajar bergerak secara aktif dalam kumpulan kecil dan menyelesaikan masalah yang diberi secara berhati-hati”. Selain itu, dapatan kajian ini turut disokong oleh Thomas (2000) dan Sarimah binti Ismail dan Abreza binti Atan (2011) dalam kajian mereka yang menyifatkan proses penyelesaian masalah sebagai satu proses pendidikan yang melatih pelajar-pelajar untuk berfikir secara kritikal melalui permasalahan soalan yang diberi mengenai sesuatu topik. Oleh sebab itu, ia adalah sangat penting untuk memastikan setiap permasalahan soalan yang diberi dapat ditangani dan diselesaikan dengan teknik yang betul dan juga sistematik.

Dapatan kajian ini menunjukkan perbezaan yang agak ketara dalam kemahiran pelajar dalam penyelesaian masalah matematik berayat selepas kaedah CUES diperkenalkan berbanding dengan situasi sebelum kajian ini. Walau bagaimanapun, kaedah CUES yang diperkenalkan untuk penyelesaian masalah perlulah dilengkapi dengan lembaran kata kunci untuk membantu pelajar membaca dan memahami kata kunci ataupun istilah dalam masalah matematik berayat yang diberi. Kemahiran penyelesaian masalah berayat matematik didapati meningkat dengan cemerlang atas bantuan lembaran kata kunci yang diberikan. Kajian ini selari dengan dapatan Zuriawahida (2016) yang menyatakan bahawa seseorang individu perlulah mendapatkan penyelesaian yang terbaik serta melakukan penilaian dalam memastikan langkah yang diambil menepati sasaran.

Guru perlu pandai mempelbagaikan kaedah, teknik dan pendekatan dalam pengajarannya untuk menghasilkan sesuatu pengajaran yang baik dan berkesan seperti yang dibuktikan dalam kajian Sinari (2003). Maka dengan ini, kaedah CUES merupakan satu kaedah penyelesaian masalah baru yang boleh digunakan oleh guru untuk menyampaikan pembelajaran dan pemudahcaraan dengan lebih efektif dan mudah. Dapatan kajian ini turut disokong oleh kajian Ethell dan McMeniman (2000), Hiebert et al. (2002) yang menunjukkan bahawa pengetahuan guru berkaitan pendekatan pengajaran, isi kandungan dan amalan pengajaran membantu proses P&P di dalam bilik darjah.

### **Cadangan Kajian Lanjutan**

Beberapa cadangan kajian lanjutan dikemukakan agar kajian seperti ini mendapat penambahbaikan berdasarkan dapatan kajian yang diperolehi. Penambahbaikan seumpama ini diharapkan dapat memberikan manfaat terhadap golongan pendidik dan pelajar terutamanya bagi mereka yang berada di sekolah rendah. Antara cadangan adalah:

1. Menjalankan kajian yang serupa terhadap topik lain dalam matematik yang dianggap sering dianggap susah oleh pelajar.
2. Memperluaskan skop kajian kepada sampel populasi yang lebih besar.
3. Kajian ini dilanjutkan kepada murid Tahap 1 bagi memberi pendedahan awal dan sebagai langkah membendung masalah ini bermula akar umbi supaya tidak berlarutan hingga ke peringkat Tahap 2.

### **Kesimpulan**

Sebagai rumusan, bagi membantu pelajar menyelesaikan sesuatu masalah memerlukan intervensi yang sesuai dengan tahap pelajar. Kajian ini telah berjaya meningkatkan kemahiran penyelesaian masalah matematik berayat pelajar melalui kaedah CUES. Hal ini dibuktikan



berdasarkan kajian Chong dan Roslinda (2017) bersetuju bahawa penyelesaian masalah matematik berayat merupakan satu kemahiran asas yang perlu dipelajari oleh murid agar masalah kehidupan rutin dan bukan rutin dapat diselesaikan melalui pelbagai strategi. Pendapat mereka turut selari dengan kajian Azizi dan Elanggoyan (2010) yang membuktikan murid yang mempunyai kemahiran menyelesaikan masalah matematik berayat akan dapat membantu mereka menyelesaikan masalah dalam situasi sebenar kehidupan.

Selain itu, kajian ini telah berjaya membantu pelajar dalam menyelesaikan masalah matematik berayat. Malah turut membantu pengkaji untuk memperbaiki aspek amalan dengan cara penyampaian pengajaran yang lebih efektif. Selain itu, kajian ini dapat dijadikan panduan untuk mereka mempelbagaikan pendekatan bagi memperkenalkan dan mengukuhkan kemahiran pelajar dalam penolakan. Kaedah ini boleh dijadikan panduan atau alternatif bagi menyelesaikan masalah serta menambahbaikkan amalan pengajaran mereka sekiranya guru menghadapi situasi masalah yang serupa dengan penyelidik.

### Rujukan

- Abu Bakar Nordin. 2013. Kurikulum ke arah penghasilan kemahiran berfikir kritis, kreatif dan inovatif. *Jurnal Kurikulum dan Pengajaran Asia Pasifik*. 1(1): 10-18.
- Ariffin Nor Ezah & Aziz Nurulwahida. 2017. Persepsi murid tahun lima terhadap penggunaan kaedah model bar dalam penyelesaian masalah matematik berayat tajauk pecahan. *Proceedings of the ICECRS*. 1(1): 287-304.
- Bahagian Pembangunan Kurikulum (2014). Kemahiran Berfikir Aras Tinggi Aplikasi di Sekolah. Kuala Lumpur: Kementerian Pendidikan Malaysia.
- Bansford, J.D., Linda Z., Daniel S., Brigid B., Nancy V. & The Cognition and Technology Group at Vanderbilt. 1996. Fostering mathematical thinking in middle school students: Lessons from research. Dlm. Sternberg, R.J. & Ben-Zeev, T. (pnyt.). *The Nature of Mathematical Thinking*. Mahwah, N.J.: Lawrence Erlbaum Associates.
- Branca, N.A. 1980. Problem solving as a goal, process, and basic skill. Dlm. S. Krulik and R. E. Reys (pynt.).1980. *Problem Solving in School Mathematics: 1980 Yearbook*. Reston, VA: National Council of Teachers of Mathematics
- Chapman, O. 1997. Metaphors in the teaching of mathematical problem solving. *Educational Studies in Mathematics*. 32(3): 201-228.
- Chong Siew Ha & Roslinda Rosli. 2017. Penggunaan Kaedah CUES Dalam Penyelesaian Masalah Matematik Berayat Tahun 6. *Simposium Pendidikan diPeribadikan: Perspektif Risalah An-Nur (SPRiN2017)*. 552-564.
- Creswell, J.W. 2005. *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. Edisi ke-2. Upper Saddle River, NJ: Pearson Prentice Hall.
- Debrenti, E. 2015. Visual representation in Mathematics teaching: An experiment with student. *Acta didactica Napocensia*. 8(1): 19-26.
- Dixon, R.A. 2012. Transfer of learning: Connecting concepts during problem solving. *Journal of Technology Education*. 24(1): 1-15.
- Donny Anak Chindang & Siti Mistima binti Maat. 2017. Aplikasi Analisis Kesilapan Newman Dalam Penyelesaian Masalah Matematik Berayat Murid Tahun 4. *Simposium Pendidikan diPeribadikan: Perspektif Risale-I Nur (SPRiN2017)*. 536-543.
- Ethell, R.G. & McMeniman, M.M. 2000. Unlocking The Knowledge In Action Of An Expert Practitioner. *Journal of Teacher Education*. 51. 87-101.



- Farizan binti Ismail. 2013. Keberkesanan kaedah model bar dalam menyelesaikan masalah Matematik berayat. Tesis Sarjana, Fakulti Pendidikan, Universiti Teknologi Malaysia.
- Hiebert, J., Gallimore, R. & Stigler, J.W. 2002. A Knowledge Base For The Teaching Profession: What Would It Look Like And How Can We Get One? *Educational Researcher*. 31 (5). 3-15.
- Kementerian Pendidikan Malaysia. 2013. *Draf Kurikulum Standard Sekolah Rendah Dokumen Standard Kurikulum Dan Pentaksiran Matematik Tahun Lima*. Putrajaya: Bahagian Pembangunan Kurikulum.
- Maslinah Lasiun. 2016. Keberkesanan kaedah visualisasi: Meningkatkan keupayaan menyelesaikan masalah Matematik berayat. *Proceeding of ICECRS*. 1: 687-698.
- Noriati A. Rashid, Boon, P. Y. & Sharifah Fakhriah. 2012. *Murid dan Alam Belajar*. Shah Alam: Oxford Fajar Sdn Bhd.
- Rosinah Edinin. 2011. *Penyelidikan Tindakan Kaedah Dan Penulisan*. Kuala Lumpur: Freemind Horizons Sdn. Bhd.
- Suhaimi Zakaria Othman, Hasnah Mohamed, Baharuddin Aris & Norasykin Mohd Zaid. 2014. Penerapan kemahiran berfikir aras tinggi melalui model stesen rotasi pelbagai mod. *Konvensyen Antarabangsa Jiwa Pendidik 2014*. 11-13 Ogos.
- Yip, L.S. 2015. Analisis perkaitan kajian tindakan dengan keberkesanan pengajaran dan pembelajaran kajian tempatan. *Jurnal Penyelidikan Kent*. 15.
- Zuriawahida binti Zulkifli. 2016. Keberkesanan Kaedah Pembelajaran Berasaskan Masalah dalam Meningkatkan Kemahiran Berfikir Aras Tinggi dan Menyelesaikan Masalah dalam Kalangan Pelajar. Tesis Sarjana, Fakulti Pendidikan Teknikal dan Vokasional, Universiti Tun Hussein Onn Malaysia.



3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Cophorne Hotel, Cameron Highland, Malaysia  
29<sup>th</sup>-30<sup>th</sup> June 2019

## PENDEKATAN PERSEMBAHAN TEATER-TEATER BERUNSUR ISLAM DINSMAN

Fazilah Husin<sup>1</sup>  
Nik Fazli<sup>2</sup>  
Zulkifli Mohamad<sup>3</sup>  
Mohd Zariat<sup>4</sup>

<sup>1</sup>Fakulti Bahasa Moden dan Komunikasi, Universiti Putra Malaysia (UPM), Malaysia, (E-mail: fazilahh@upm.edu.my)

<sup>2</sup>Fakulti Bahasa Moden dan Komunikasi, Universiti Putra Malaysia (UPM), Malaysia, (E-mail: aqiemfazliey@yahoo.com)

<sup>3</sup>Fakulti Bahasa Moden dan Komunikasi, Universiti Putra Malaysia (UPM), Malaysia, (E-mail: zulkiflimohamad@upm.edu.my)

<sup>4</sup>Fakulti Bahasa Moden dan Komunikasi, Universiti Putra Malaysia (UPM), Malaysia (E-mail: zariat@upm.edu.my)

---

**Abstract:** - *Kertas kerja ini adalah tentang pendekatan penyampaian dan persembahan yang dipraktikkan oleh dramatis dan pengarah yang mementaskan teater berunsur Islam di Malaysia. Islam menyediakan garis panduan untuk setiap perkara dalam kehidupan penganutnya. Perbincangan dan pemaparan perkara dan isu yang berkaitan dengan Islam dan hal ehwal sekitarnya adalah suatu yang dituntut dengan tujuan kefahaman dan penjelasan mahu pun penghayatan dalam kalangan umatnya. Dalam perkembangan teater di Malaysia, terdapat beberapa dramatis dan pengarah teater yang berusaha menampilkan hal ehwal Islam ke pentas antaranya termasuklah Noordin Hassan, Hassan Jali dan Dinsman. Kajian ini bertujuan meninjau pendekatan persembahan yang digunakan oleh dramatis dan penggiat teater, Dinsman atau Shamsuddin Osman dalam menampilkan isu-isu yang berkaitan dengan Islam di pentas melalui teater Menunggu Kata dari Tuhan dan Tamu dari Medan Perang. Fokus penelitian terhadap nashkah-nashkah ini ialah tentang pendekatan Dinsman dalam memaparkan kisah yang berkait langsung dengan hal-ehwal Islam. Data kajian dikumpulkan melalui pemerhatian terhadap amalan pementasan yang dilaksanakan sama ada secara langsung mahu pun melalui rakaman video persembahan. Data kajian dianalisis berasaskan pendekatan Teater Fitrah yang menyenaraikan prinsip-prinsip dalam pementasan teater oleh seorang Muslim. Kedua-dua nashkah ini mengangkat isu yang berbeza tetapi mempunyai kaitan rapat dengan isu, sikap dan pemikiran masyarakat Islam. Kajian juga mendapati bahawa penyediaan dan pembinaan nashkah-nashkah ini dalam konteks pementasan, dengan senarai watak yang relatif kecil memudahkan kawalan pergerakan dan interaksi antara pelakon, dilaksanakan. Ini kerana antara isu dalam pementasan teater ialah tentang pergerakan bercampur antara pelakon/watak lelaki dan wanita terutama yang melibatkan babak-babak dengan watak yang ramai. Pemilihan isu yang menjadi persoalan dalam kedua-dua nashkah tersebut juga sangat relevan dalam konteks sikap seorang Muslim serta situasi semasa umat Islam demi kesinambungan iman dan kehidupan.*

---

**Katakunci:** *Teater, Islam, Pementasan, Dinsman, Fitrah*

---

### Pengenalan

Malaysia mempunyai tradisi teater tradisi yang lebih dikenali sebagai 'main' yang merujuk kepada persembahan lakonan termasuklah wayang kulit - lakonan patung yang digerakkan oleh



dalang, mak yung – teater tari dan bangsawan mirip kepada opera. Teater moden yang merujuk kepada teknik persembahan yang dirujuk kepada bentuk teater daripada Yunani telah pun ditemui konsepnya dalam bangsawan. Walau bagaimana pun, kemodenan teater Melayu ialah apabila pementasan teater-teaternya telah meninggalkan kisah dewa-dewi, legenda dan mitos serta lawak jenaka serta tarian yang tidak ada perkaitan dengan jalan cerita. Pementasan pentas dalam konteks teater moden adalah persembahan kisah kehidupan masyarakat harian atau realiti bukan lagi imaginasi atau sejarah silam. Persembahan berlaku di pentas prosenium mengasingkan antara penonton dengan pelakon, dilengkapi bingkai yang terbentuk daripada tirai dan tiang antara ruang utama lakon untuk tujuan persiapan pementasan. Seterusnya teater di Malaysia berkembang lagi dengan bentuk persembahan yang lebih terbuka sama ada dari segi pentas atau panggung yang tidak lagi terikat kepada bentuk prosenium dan pasukan persembahan bersembunyi di belakang tirai sebelum lakonan dipersembahkan, pergerakan adalah rahsia kecuali persembahan ditunjukkan kepada penonton. Pentas dan set telah dibuka kepada penonton sebelum pementasan belum lagi bermula, pergerakan penukaran set dan prop kerap kali berlaku di hadapan penonton tanpa perlu menarik tirai atau menggelapkan lampu panggung untuk tujuan mengekalkan fokus penonton kepada cerita yang terhenti sebentar tadi. Sementara isu dan persoalan yang dibincangkan lebih meluas, lebih daripada realiti kehidupan tetapi merangkumi falsafah, persoalan, kejiwaan dan emosi, isu persekitaran dan fenomena tertentu, serta permasalahan politik, ekonomi dan konflik yang dibincangkan dalam pendekatan dan aliran termasuklah absurd, surrealis, ekspresionis, simbolik dan sekitaruang (environmental).

Aliran dan pendekatan persembahan tersebut bersifat eksperimental pada awal perkembangannya sekitar tahun 1970-an, kemudian perlahan-lahan membentuk aliran yang kukuh dalam konteks perkembangan teater di Malaysia. Terdapat beberapa dramatis dan pengarah teater yang berusaha menampilkan hal ehwal Islam ke pentas antaranya termasuklah Noordin Hassan, Hassan Jali dan Dinsman. Kesedaran ini berkaitan dengan perkembangan dan penghayatan terhadap ajaran Islam yang semakin meningkat dalam kalangan masyarakat di Malaysia. Menurut Badlihisam Mohd Nasir (2010), berlaku reformasi sistem pendidikan agama secara besar-besaran seiring dengan era kebangkitan gerakan Islam pada awal tahun 1970-an. Beliau merumuskan bahawa gerakan Islam sebenarnya berperanan membangunkan sistem dan institusi pendidikannya sendiri di samping sebahagiannya terlibat secara langsung dalam arus pendidikan nasional. Sementara itu, apabila dirujuk kepada kebangkitan teater

## **Latar Belakang Kajian**

### **Dinsman**

Dinsman atau Shamsudin Othman berasal dari Jitra Kedah, menerima pendidikan agama di Maktab Mahmud, Alor Setar, Kedah dan Kolej Islam, Petaling Jaya, Selangor. Beliau mula terkenal dalam bidang teater sejak tahun 1970-an dengan naskah dan pementasan *Protes* (1972), *Jebat* (1973), *Bukan Bunuh Diri* (1974), *Ana* (1976) dan *Di Pulau Sadandi* (1977). Pada tahun 1980 dan 1990-an terdapat dua buah naskah teater yang dihasilkan iaitu *Projek Izie* (1982), *Siapakah Takutkan Amerika* (1996),<sup>i</sup> dan *Apocalipso* (2008).<sup>ii</sup> Pementasan lain yang turut dihasilkan oleh Dinsman dalam tempoh yang sama termasuklah *Teater Atas Pokok* (2016) dan *Teater di Sawah Padi* (2017) yang mengangkat naskah Muzikal *Uda dan Dara* karya Sasterawan Negara Usman Awang. Dinsman dikenalpasti mula aktif berteater selepas era di mana aliran realisme dianggap tidak mampu meneroka ke alam batiniyah manusiawiah. Justeru muncul aliran baru iaitu drama atau teater yang berbentuk simbolik untuk menampung keperluan pada kelompok masyarakat dan juga atas faktor perubahan sejarah hidup dan



pemikiran manusia termasuklah penyebaran fahaman dan falsafah daripada tokoh-tokoh Barat yang berkaitan dengan kehidupan, psikologi dan evolusi (Mana Sikana, 1989). Pada era millennium, Dinsman didapati cenderung menghasilkan naskhah dan pementasan teater yang berunsur Islam antaranya termasuklah Teater Nabi Yusuf (Teater dari Al-Quran) (2005),<sup>iii</sup> *Tamu dari Medan Perang* (2006), *Menunggu Kata dari Tuhan: Teater dari Hadis Nabi* (2009), Pengisytiharan Abul 'As Menantu Nabi (2013) (Dinsman, 2012 & 2017).

### **Perkembangan Aliran dan Pendekatan Teater di Malaysia**

Peperangan adalah antara faktor yang mencetuskan aliran baru dalam perkembangan teater dunia yang kemudian berkembang ke Asia, Nusantara dan Malaysia khususnya, serta dapat dikesan dalam penghasilan naskhah dan pementasan teater dalam bahasa Melayu bermula pada tahun 1970-an. Peperangan menyebabkan manusia menderita fizikal, mental dan emosi hingga mampu mengubah pandangan dan pemikiran terhadap sesuatu yang selama ini telah dipercayai termasuklah sistem sosial, politik dan ekonomi. Aliran-aliran pasca modenisme ini kemudian berkembang lagi kepada beberapa cabang termasuklah surealisme, absurdisme dan ekspresionisme (Mana Sikana, 1989). Dalam konteks perkembangan teater Melayu pula, Peristiwa Berdarah 13 Mei 1969 meninggalkan kesan yang signifikan terhadap kelahiran bentuk-bentuk teater baru yang bertentangan dengan bentuk-bentuk teater sebelum itu. Teater tradisional dan realisme didapati kurang memberikan ruang untuk unsur-unsur lain masuk ke dalam persembahannya. Teater bentuk baharu yang dikenali dalam beberapa label termasuklah eksperimental dan kontemporari bersifat terbuka dalam pendekatan pementasan dan pengkarya bebas membina bentuk teater yang mereka mahu lakukan. Selain Dinsman, dramatis dan pengiat teater yang berkarya ketika itu dalam bentuk pengkaryaan baharu ini termasuklah Mana Sikana, Anuar Nor Arai, Syed Alwi, Johan Jaaffar, Hatta Azad Khan dan Noordin Hassan (Fazilah Husin, 2010). Penggiat teater 1970-an ini mulai bereksperimen terhadap pendekatan pementasan konvensional khususnya dari aspek keterikatan terhadap ruang lakon di mana lakonan tidak lagi hanya bergantung kepada panggung yang mempunyai pentas proscenium tetapi lakonan juga dilaksanakan di panggung yang datar (tanpa pentas). Pada ketika inilah Noordin Hassan, Ismail Kassin, Mana Sikana dan beberapa dramatis lagi mulai menyuguhkan idea, aspek dan pemikiran yang berkaitan dengan Islam dan keislaman dalam karya masing-masing. Kemasukan unsur Islam dalam teater Melayu adalah sesuatu yang tidak dapat dielakkan kerana konsep orang Melayu itu sendiri tidak dapat dipisahkan dengan Islam, seperti yang terdapat dalam Perlembagaan Malaysia (Kamaluddin Abd. Rahman, 2007). Dinsman sendiri, melalui naskhah *Bukan Bunuh Diri* (BBD) juga membawakan isu yang berkaitan dengan kewujudan manusia (dirinya) hubungannya dengan Tuhan. Watak Adam yang dikemukakan dalam naskhah ini juga secara tidak langsung berkaitan dengan ajaran Islam dalam konteks penciptaan manusia. Mas Rynaa Wati Ahmad (2013) telah meneliti naskhah ini melalui pendekatan metafizik Al-Ghazali, *The Alchemy of Happiness*. Kajian ini mendapati bahawa Dinsman telah membawakan pendekatan metafizik dalam BBD untuk menjelaskan tentang ruang lompang atau persoalan yang tidak terjawab dalam kalangan masyarakat yang berpaksikan logik akal dalam kehidupan mereka. Persoalan kewujudan Tuhan, manusia dan tujuan hidup tidak mampu dicapai dengan hanya bergantung kepada pemikiran realistik semata-mata. Akal manusia mempunyai batas dan keupayaannya untuk memahami semua perkara dalam alam maya ini.

### **Objektif Dan Kaedah Kajian**

Kajian ini bertujuan meninjau pendekatan persembahan yang digunakan oleh dramatis dan penggiat teater, Dinsman atau Shamsuddin Othman dalam menampilkan isu-isu yang berkaitan

dengan Islam di pentas melalui dua buah naskah teaternya *Menunggu Kata dari Tuhan* (MKdT)<sup>iv</sup> dan *Tamu dari Medan Perang* (TdMP).<sup>v</sup> Pendekatan persembahan adalah teknik atau strategi yang digunakan oleh Dinsman untuk membentuk aspek dramatik dan teaterikal termasuklah cara watak-watak tersebut mengungkapkan dialog masing-masing selain pemilihan perkataan dan maksud yang dibawa oleh dialog tersebut. TdMP mengemukakan teguran terhadap kuasa-kuasa besar Islam tentang sikap mereka terhadap perjuangan daripada kelompok lain dan dalam kes ini, perjuangan tersebut adalah jihad. TdMP adalah teater pendek sekitar satu jam pementasan yang melibatkan tujuh watak iaitu QUEEN, SULTAN, MUFTI, SESEORANG, PENONTON 1, PENONTON 2 dan PELAYAN. MKdT merupakan teater monolog yang melibatkan satu watak sahaja iaitu sahabat Nabi bernama KA'AB, dalam sesetengah pementasan, pengarah memasukkan pemetik gitar yang mengiringi persembahan secara langsung. Teater ini tentang kesengsaraan yang ditanggung oleh KA'AB untuk menunggu keputusan daripada Allah SWT melalui Rasulullah SAW atas taubatnya atas kesalahan tidak pergi berperang bersama Rasulullah. Data kajian dikumpulkan melalui pemerhatian terhadap amalan pementasan yang dilaksanakan sama ada secara langsung mahu pun melalui rakaman video persembahan. Data kajian dianalisis berasaskan pendekatan Teater Fitrah yang menyenaraikan prinsip-prinsip dalam pementasan teater oleh seorang Muslim. Pendekatan Teater Fitrah diasaskan oleh Noordin Hassan, Sasterawan Negara Malaysia dan telah dibentangkan pada tahun 1981 di Kuala Terengganu dalam Seminar Teater yang berlangsung ketika itu (Fazilah Husin, 2017a). Inti pati falsafah Teater Fitrah dan esei-esei yang membahaskan teori persembahan teater ini telah diterbitkan dalam buku berjudul *Teater fitrah dan esei pilihan Noordin Hassan, Edisi Khas Sasterawan Negara* oleh Dewan Bahasa dan Pustaka pada tahun 2002. Rumusan kepada prinsip-prinsip dalam pendekatan Teater Fitrah adalah seperti berikut: (i) penyelesaian cerita berpihak kepada protagonis yang mempercayai bahawa beriman kepada Allah adalah fitrah manusia; (ii) mengemukakan watak dengan adegan yang sedar tentang hakikat tentang pengabdian diri kepada Allah; (iii) cerita boleh memanifestasikan perkataan tentang kejiwaan atau spiritual, yang diutamakan adalah niat yang baik; (iv) memanifestasikan keimanan kepada Allah melalui tindak-tanduk tertentu; (v) teater yang mengandungi nilai-nilai Islam<sup>vi</sup> merangsang fikiran dan emosi penonton; (vi) nilai Islam ditampilkan gambaran dan imejan melalui teater dengan tujuan untuk ibadat, tetapi menjaga etika dan tatasusila pementasan (Fazilah Husin, 2017b).

### Dapatan Kajian dan Perbincangan

Naskah dan pementasan TdMP dan MKdT telah dianalisis berdasarkan enam prinsip yang terkandung dalam pendekatan Teater Fitrah. Kajian mendapati bahawa kedua-dua karya ini memenuhi atau menepati prinsip-prinsip yang digariskan oleh pendekatan tersebut dalam menyediakan naskah drama pentas dan pelaksanaan persembahan teater yang mengandungi aspek dan hal ehwal Islam. Berikut adalah paparan dan huraian yang dikemukakan mengikut urutan prinsip-prinsip Teater Fitrah seperti yang disenaraikan sebelum ini:

**Jadual 1:** Prinsip (i) penyelesaian cerita berpihak kepada protagonis yang mempercayai bahawa beriman kepada Allah adalah fitrah manusia

<i>Tamu dari Medan Perang</i>	<i>Menunggu Kata dari Tuhan</i>
Permasalahan atau isu yang dikemukakan dalam teater ini belum selesai, isu berkaitan dengan pendanaan terhadap organisasi jihad yang dianggotai oleh	Permasalahan atau isu yang dikemukakan dalam teater ini telah selesai apabila watak utamanya, sahabat Nabi bernama KA'AB telah menerima keampunan daripada Allah SWT melalui firman

QUEEN masih lagi diperingkat perundingan dengan SULTAN, belum ada kata putus. Kedua-dua watak ini mengakui keislaman masing-masing. <sup>vii</sup>	kepada Nabi Muhammad SAW yang kemudian disampaikan oleh wakil Baginda kepada KA'AB yang sedang berada dalam pengasingan daripada masyarakat dan isteri/keluarga. <sup>viii</sup>
--	--

**Jadual 2:** Prinsip (ii) mengemukakan watak dengan adegan yang sedar tentang hakikat tentang pengabdian diri kepada Allah

<i>Tamu dari Medan Perang</i>	<i>Menunggu Kata dari Tuhan</i>
QUEEN mewakili organisasi yang dianggotainya adalah watak yang sedar akan tujuan utama hidupnya iaitu berjuang di jalan Allah SWT. Watak SULTAN menganggap dirinya Islam dan tidak memikirkan tahap keislamannya serta menikmati kehidupan (mewah) sebagaimana sepatutnya, selesa dan berkuasa. Tetapi QUEEN tidak mengiktiraf seorang Islam yang mempunyai kuasa atau pengaruh besar di dunia dan kekayaan seperti yang dimiliki oleh SULTAN, dengan keislaman begitu. bagi QUEEN, golongan ini perlu memainkan peranan atau turut berjihad atau membantu gerakan jihad, barulah Islam mereka itu sempurna. Mereka tidak hanya membiarkan kekejaman berlaku tanpa membuat sesuatu yang dalam kemampuan mereka. <sup>ix</sup>	Watak KA'AB sangat sedar akan tanggungjawab beliau terhadap Rasulullah dan Allah SWT dalam konteks memerangi musuh Islam dengan menunjukkannya melalui penyertaan ke medan perang. Justeru, apabila beliau dihukum dalam bentuk pengasingan akibat daripada perbuatan tidak pergi berperang, beliau menerima hukuman tersebut dan menzahirkan rasa kesal dan taubat terhadap perbuatan tersebut. <sup>x</sup>

**Jadual 3:** Prinsip (iii) cerita boleh memanifestasikan perkataan tentang kejiwaan atau spiritual, yang diutamakan adalah niat yang baik

<i>Tamu dari Medan Perang</i>	<i>Menunggu Kata dari Tuhan</i>
Dalam usaha SULTAN menunjukkan bahawa beliau masih sedar tentang perjalanan hidup yang hakiki, iaitu menuju akhirat beliau telah mengongsikan tazkirah yang pernah beliau dengar daripada Mufti Negara: "Saya masih ingat tazkirah daripada Mufti Negara. Hidup di dunia ibarat seorang pengembara berhenti sekejap untuk berehat di bawah seponon pokok, sebelum dia meneruskan perjalanannya yang panjang menuju akhirat. Dan kehidupan yang	KA'AB: ... Kemudian, tatkala duduk berhadapan dengan baginda, bagi menyatakan syukurku yang tak terhingga, kerana taubatku diterima Allah, aku menyatakan hajatku untuk bersedekah. Semua harta milikku, semua kebun-kebunku hendak ku sedekahkan kepada Allah dan Rasul-Nya, Tetapi Rasulullah tidak bersetuju. "Sedekahkanlah sebahagian sahaja daripada hartamu," katanya. "Itulah cara yang paling baik." (hal. 42)

sebenarnya ialah kehidupan akhirat. Saya masih ingat tazkirah itu. Bahawa Nabi sendiri pun menjalani kehidupan seperti orang susah, seperti orang miskin (hal. 28).

**Jadual 4:** Prinsip (iv) memmanifestasikan keimanan kepada Allah melalui tindak-tanduk tertentu

<i>Tamu dari Medan Perang</i>	<i>Menunggu Kata dari Tuhan</i>
<p>QUEEN memmanifestasikan keimanannya terhadap Allah SWT melalui jihad. Beliau bukan sahaja meletakkan dirinya di dalam dan di jalan jihad tetapi juga mengajak watak SULTAN untuk berjihad bersamanya, khususnya melalui kuasa dan kekayaan yang dimiliki oleh SULTAN sebagai antara individu yang terkaya di muka bumi.</p>	<p>KA'AB: ... Aku tahu, bukan keputusan lambat diambil. Allah telahpun menetapkan qadha dan qadar semua perkara. Hanya waktunya belum tiba untukku. Kiranya ini hukum Tuhan ke atas kelalaianku, aku percaya pasti ada hikmahnya, dan kelalaianku, aku percaya pasti ada hikmahnya, dan aku redha ya Allah. (Dinsman, 2009: 36).</p>

**Jadual 5:** Prinsip (v) teater yang mengandungi nilai-nilai Islam merangsang fikiran dan emosi penonton

<i>Tamu dari Medan Perang</i>	<i>Menunggu Kata dari Tuhan</i>
<p>Teater ini menampilkan kedua-dua nilai sama ada mahmudah mahu pun mazmumah, dan nilai ini pula ditampilkan secara langsung melalui watak dan perwatakan yang tampil dalam perjalanan persembahan atau cerita. Terdapat juga nilai yang hanya disebut oleh watak-watak yang tampil semasa mereka membincangkan sesuatu isu yang berkaitan dan nilai tersebut disebutkan.</p>	<p>Teater ini menampilkan nilai keinsafan yang sangat mendalam terhadap Allah SWT dan rasa kasih sayang terhadap Nabi Muhammad SAW, KA'AB menampilkan perwatakan sebagai seorang Muslim bercakap benar walau pun pahit, mengakui kesilapan dan kecuaiannya untuk turut serta pergi berperang Tabuk bersama rombongan Rasulullah, beliau menzahirkan keinsafan dan bertaubat terhadap perbuatannya. Keikhlasannya dalam mengakui kesalahannya dan bertaubat, serta sentiasa bersyukur di atas hukuman yang sedang dijalaninya sehinggalah permasalahannya selesai di mana Allah telah mengampunkan dosanya dan menerima taubatnya.</p>

**Jadual 6:** Prinsip (vi) nilai Islam ditampilkan gambaran dan imejan melalui teater dengan tujuan untuk ibadat, tetapi menjaga etika dan tatasusila pementasan

<i>Tamu dari Medan Perang</i>	<i>Menunggu Kata dari Tuhan</i>
-------------------------------	---------------------------------

Teater ini telah dipentaskan di Auditorium Universiti Sultan Azlan Shah, Kuala Kangsar, Perak sempena dengan Program Pertemuan Seni @ USAS 2017 pada 7-9 April 2017. Berdasarkan pemerhatian dan penontonan untuk sesi latihan dan persembahan yang berlangsung pada 8 April 2017, etika dan tatasusila pementasan adalah terjaga dan dilaksanakan dengan penuh kesedaran dalam konteks pergerakan antara watak wanita dengan beberapa watak lelaki yang ditampilkan dalam teater ini. Pakaian setiap pelakon adalah menutupi tubuh dan tidak mendedahkan aurat. Tidak ada berlaku sebarang sentuhan dan aksi yang mencemarkan imej Islam seperti aksi lucu, bercumbuan dan pakaian yang terdedah aurat. Muzik dan kesan bunyi digunakan hanya untuk tujuan merangsang imaginasi penonton terhadap kisah atau isu yang dipaparkan.

Pementasan terakhir teater monolog ini ialah pada 20 Februari 2016 di Pusat Konvensyen Aman Jaya, Meru, Ipoh, Perak, sebagai persembahan khas oleh Sabri Yunus dan Sani Sudin pada Majlis Penutup Menghafaz Al-Quran Peringkat Kebangsaan 2016. Rakaman pementasan ini telah disiarkan di saluran *YouTube Ar-RahmanTV* pada 21 Februari 2016.<sup>xi</sup> Aksi dan persembahan yang dipaparkan berdasarkan tontonan rakaman video terhadap monolog ini memperlihatkan gerak lakon dan pengucapan dialog yang bersesuaian dengan watak dan cerita. Aksi dan emosi seperti tangisan oleh watak KA'AB bersesuaian dengan keperluan kisah yang dibawakan dan tidak melanggar etika dan tatasusila pementasan.

### Rumusan

TdMP – menyediakan saranan ADEGAN SELINGAN berbentuk tayangan video tentang perang, kemiskinan dan pelarian di Palestin, Afghanistan dan Iraq di halaman 15 nashkah. Tayangan video atau multimedia jika mahu dimasukkan perlulah mengandungi bahan yang tidak menjatuhkan maruah Islam dan individu atau negara yang dipaparkan. MKdT membawakan bentuk teater yang mirip kepada penceritaan lisan atau lipurlara yang disampaikan oleh individu yang dikenali sebagai penglipurlara. Bentuk persembahan cerita yang bersifat asas dalam hierarki perkembangan seni persembahan lakon pentas Melayu berbanding dengan wayang kulit, mak yung dan bangsawan, diikuti drama moden. Dalam penyampaian cerita oleh penglipurlara suasana penceritaan adalah tidak formal atau terikat pada peraturan pementasan yang rumit seperti teater moden. Khalayak penonton datang mendengar sambil berbual dan makan-minum (Muhammad Haji Salleh, 2000). Tetapi bentuk ini belum ditakrifkan sebagai teater kerana konotatif teater yang sentiasa dikaitkan dengan lakonan, pentas dan aspek teaterikal seperti solekan, rekaan lampu, busana, set pentas dan prop. Hal ini berlaku kerana keterlewatan konsep kesusasteraan dalam Islam (Chelkowski, 1984) sedangkan perihal persembahan itu telah pun wujud termasuklah penyampaian khutbah, pembacaan kitab dan hadis, berzikir dan bersalawat. Kedua-dua nashkah ini, MKdT dan TdMP, mengangkat isu yang berbeza tetapi mempunyai kaitan rapat dengan isu, sikap dan pemikiran masyarakat Islam. Kajian juga mendapati bahawa penyediaan dan pembinaan nashkah-nashkah ini dalam konteks pementasan, dengan senarai watak yang relatif kecil memudahkan kawalan pergerakan dan interaksi antara pelakon, dilaksanakan. Ini kerana antara isu dalam pementasan teater ialah tentang pergerakan bercampur antara pelakon/watak lelaki dan wanita terutama yang melibatkan babak-babak dengan watak yang ramai. Pemilihan isu yang menjadi persoalan dalam kedua-dua nashkah tersebut juga sangat relevan dalam konteks sikap seorang Muslim serta situasi semasa umat Islam demi kesinambungan iman dan kehidupan. Dalam pada itu,



memang elemen-elemen moden aspek teater dan drama yang merujuk kepada pendekatan Barat masih lagi dapat dilihat dalam teater-teater berunsur Islam Dinsman tetapi menurut Manja Mohd Ludin dan Ahmad Suhaimi (1995), proses perubahan dan perkembangan serta penegasan idea baru merupakan suatu yang perlu diambilkira. Situasi ini yang sedang diusahakan oleh Dinsman dalam mempelopori dan mengetengahkan bentuk persembahan teater yang selaras dengan syariat Islam.

### **Penghargaan**

Kertas kerja ini dibiayai oleh Geran Universiti Putra Malaysia GP/2018/9662400. Setinggi penghargaan ditujukan kepada Universiti Putra Malaysia atas sokongan yang diberikan.

### **Rujukan**

- Badlihisam Mohd Nasir. Pendidikan dalam Gerakan Islam di Malaysia: Satu tinjauan. *Journal Of Islamic And Arabic Education* 2(1), 2010 1-12.
- Chelkowski , P. (1984). Islam in Modern Drama and Theatre. *Die Welt des Islams* New Series, Bd. 23/24, pp. 45-69.
- Dinsman. (2006). *Tamu dari Medan Perang*. Kuala Lumpur: Teater Elit.
- Dinsman. (2009). *Menunggu Kata dari Tuhan*. Kuala Lumpur: Teater Elit.
- Dinsman. (2012). *Pemikiran dan Perancangan Seni-Budaya*. Kuala Lumpur: Seniman Paksi Rakyat (PAKSI).
- Dinsman. (2017). *Mencari Kewajaran Islam di Malaysia (Esei-esei pilihan 2008-2015)*. Petaling Jaya: Strategic Information and Research Development Centre.
- Fazilah Husin. (2010). *Teater Melayu: Teks dan Eksperimentasi*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Fazilah Husin. (2017a). Islamic Theatre Theory: Theatre of *Fitrah* (Faith) by Noordin Hassan. Kertas kerja dibentangkan di Academic Forum on Theatre in International View, pada 2-4 November 2017 di Shanghai Theatre Academy (STA), Shanghai, China.
- Fazilah Husin. (2017b). Islam dalam Drama dan Teater Melayu. *Sastera Melayu Islam: Antologi Puisi & Kertas Kerja*. Kuala Lumpur: Sastera Enterprise.
- Kamaluddin Abd. Rahman. (2007). *Teater Melayu: Suatu Risalah Pemikiran Melayu*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Mana Sikana. (1989). *Disekitar Pemikiran Drama Moden*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Manja Mohd. Ludin dan Ahmad Suhaimi Hj. Mohd. Nor. (1995). *Aspek-aspek Kesenian Islam*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Mas Rynna Wati Ahmad . (2013). Finding God in Dinsman's *It Is Not A Suicide: An Islamic Metaphysical Approach*. *GEMA Online® Journal of Language Studies*, Volume 13(3), September: 223-235.
- Muhammad Haji Salleh. (2000). *Puitika Sastera Melayu*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

---

<sup>i</sup> belum dipentaskan.

<sup>ii</sup> belum dipentaskan.

<sup>iii</sup> belum dipentaskan.

<sup>iv</sup> Isu yang diangkat iaitu tentang dugaan untuk Ka'ab bin Malik untuk bercakap benar terhadap kesalahan atau kecuiaan yang telah dilakukannya. Pada hari umat Islam di bawah pimpinan Rasulullah SAW

berangkat ke medan perang untuk menentang musuh dalam peperangan yang dinamakan Perang Thabuk, Ka'ab telah gagal mengikuti pasukan yang telah berangkat ke medan perang. Selain Ka'ab terdapat beberapa orang lagi yang telah gagal menyertai peperangan itu. Sekembali Rasulullah SAW dan umat Islam yang berjuang ke kampung halaman mereka, semua yang tidak pergi berperang telah datang menemui Rasulullah SAW untuk meminta ampun dan maaf serta memberikan sebab atas ketidakhadiran masing-masing ke medan perang. Di sinilah dugaan paling hebat lebih, daripada tentang tidak pergi berperang itu sendiri iaitu untuk Ka'ab memberikan alasannya kepada Rasulullah SAW. Beliau tidak mempunyai alasan yang munasabah dan tiada alasan selain daripada kecuaiannya atau berlengah-lengah hingga tertinggal daripada gerombolan yang telah bergerak ke medan perang. Situasi yang lebih mendera perasaan Ka'ab ialah kesnya tergantung tidak diberi hukuman atau kata putus oleh Rasulullah SAW hinggalah sampai wahyu daripada Allah SWT selepas sekian masa dan dugaan demi dugaan yang dihadapinya (Fazilah Husin, 2017b).

<sup>v</sup> Teater MKdT pertama kali dipentaskan dalam Majlis Santapan Diraja Kelantan, di Kota Darul Naim, Kota Bharu pada 30 Mac 2009 diikuti pementasan ke dua di Dewan Bahasa dan Pustaka Cawangan Timur, Kota Bharu, pada keesokannya (31 Mac 2009). Sebelum itu, lebih awal daripada itu, pada tahun 2006, Dinsman telah menulis dan mementaskan naskah TdMP di Kuala Lumpur (Dinsman, 2009).

<sup>vi</sup> “Pada pandangan Islam, sumber asas yang menentukan sistem nilai adalah wahyu Allah dalam bentuk al-Qur’an dan al-Sunnah. Hal ini bermakna bahawa sistem nilai Islam yang terbentuk daripada panduan wahyu ini tidak bersifat subjektif dan abstrak. Sebaliknya, nilai itu jelas dalam al-Qur’an dan al-Sunnah. Apa-apa tradisi, kebiasaan, amalan dan budaya yang dianggap baik oleh sumber wahyu, maka ia adalah baik pada bila-bila masa sahaja bagi mana-mana masyarakat juga. Sebaliknya, apa-apa yang dianggap sebagai buruk atau jahat dalam sumber wahyu, maka ia tetap jahat dan buruk bagi mana-mana masyarakat juga pada bila-bila masa sahaja. Hal ini bererti nilai-nilai ini akan tetap kekal dan tidak akan berubah-ubah sampai bila-bila bagi mana-mana masyarakat juga.” Artikel ini membahagikan nilai Islam kepada nilai terpuji dan terkeji: nilai terpuji adalah mahmudah (contoh – jujur, amanah, bercakap benar, berani, berbaik sangka, ikhlas, menepati waktu, menepati janji dan tekun) sementara nilai terkeji ialah mazmumah (contoh – menderhakai Allah dan rasul-Nya, menderhakai ibu bapa, khianat, menipu, penakut, buruk sangka, mungkin janji dan pemalas) (Haji Sabri Said & Khoo Chiew Keen (Penyunting). (Tanpa tahun). *WLA 104/03 Pengajian Islam*. Wawasan Open University. <https://pengajianislam.pressbooks.com/chapter/sistem-nilai/> 17/6/19); Mohd Hasrul Shuhari. 2015. Nilai-nilai penting individu Muslim menurut Al-Ghazali. Bil. 9 Januari 2015, hal. 41-60. <https://journal.unisza.edu.my/jimk/index.php/jimk/article/view/82/69> 17/6/19; Antara nilai-nilai penting individu Muslim menurut pemikiran al-Ghazali ialah al-ikhlas (keikhlasan), al-sidq (benar), al-amanah (amanah) serta al-mas’uliyah (bertanggungjawab) dan al-kamal (kesempurnaan).

<sup>vii</sup> QUEEN: ... Kita umat Islam sepatutnya berpegang pada quran dan hadis, tuan. Ini wasiat daripada Rasulullah (SAW.) Baginda bersabda: “Aku tinggalkan kepada umatku dua perkara. Barangsiapa berpegang dengannya nescaya mereka tak akan sesat, iaitulah al-Quran dan hadis” (Dinsman, 2006: 7). SULTAN: ... Kami ada cukup lengkap semuanya – kami ada Penasihat agama, kami ada Menteri Agama, kami ada mufti, kami ada ulama-ulama yang berwibawa dalam pelbagai ilmu – Quran, hadis, fiqh, tauhid ... (Dinsman, 2006: 10).

<sup>viii</sup> “TIBA-TIBA TERDENGAR SUARA ORANG BERTERIAK DI KEJAUHAN: “Wahai Ka’ab bin Malik. Terimalah khabar gembira untukmu!” Aku seperti mendengar orang memanggil namaku. Tetapi apakah benar telinga ini yang mendengar atau itu hanya imaginasi? Aku tidak pasti. Aku takut suara itu hanya imaginasi semata. Tapi ... itu ... namku dipanggil lagi. Ada khabar gembira untukku ... TERDENGAR LAGI SUARA ORANG BERTERIAK DI KEJAUHAN. “Wahai Ka’ab bin Malik. Terimalah khabar gembira untukmu!” KA’AB TERUS SUJUD. DALAM SUJUD DIA BERKATA: Alhamdulillah! ... syukur ke hadzrat-Mu ya Allah. Syukur Alhamdulillah! ... (Dinsman, 2009: 38-39).

<sup>ix</sup> QUEEN: Syukur *Alhamdulillah*. (Mulai bercakap gaya gila-gila sikit). Allah merestui kerja yang baik. *Fii sabiilillaah*. Itulah tujuan kita – ‘kan, tuan? *Fii sabiilillaah*. Berjuang di jalan Allah. Tuan telah dikurniakan oleh Allah dengan rezki dan nikmat yang begitu besar nilainya. Tak terhingga. Syukur! Syukur! SULTAN: Ya, kami bersyukur. *Alhamdulillah*.

<sup>x</sup> “(KA’AB) ... Ya Rahman ya Rahim ya Zal-Jalaali wal-Ikraam. Sungguh aku menyesal ya Allah. Aku menyesal kerana berlengah-lengah ketika orang sibuk bersiap, dan akhirnya aku tidak ikut bersama dengan mereka, keluar menghadapi musuhmu orang-orang Rom di Tabuk. Aku menyesal ya Allah. Ya Ghaffaar ya Lathiif, ampunilah kelalaianku. Ampunilah dosa-dosaku ya Allah. Aku bertaubat kepada-Mu, Tuhan maha berkuasa. Engkau pemilik segalanya. Terimalah taubatku ya Allah. Terimalah taubatku. Aku menyesal dan akan ulangi lagi kesalahan itu ... (Dinsman, 2009: 36-37).



*3<sup>rd</sup> International Conference on Education, Business,  
Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)  
eISBN: 978-967-2245-13-1  
Cophorne Hotel, Cameron Highland, Malaysia  
29<sup>th</sup>-30<sup>th</sup> June 2019*

---

<sup>xi</sup> Ditonton di <https://www.youtube.com/watch?v=J-LeIjnYCWQ>, 19/6/19.

# 3<sup>rd</sup> International Conference on Business, Islamic and Technology (3<sup>rd</sup> ICEBIT 2019)

## ORGANIZING COMMITTEE:

### **Chairman:**

Assoc. Prof. Dr. Nor Hasni Osman

### **Treasurer:**

Nurul Syazni Muhamad

### **Technical Committee:**

Zafira Zainudin

Siti Nur Najihah Abdullah

Nur Hajar Mohamad Fadzil

### **Technical Reviewer:**

Dr. Mpawenimana Abdallah Saidi

Dr. Norasibah binti Abdul Jalil

Mohd Zakhiri Md Nor

Norrina Din

Dr. Ahmad Zahiruddin Yahya

Dr. Dayang Affizzah Awang Marikan

Dr. Abdul Rauf Hj Ridzuan

Dr Zalina Abdul Halim

Dr. Shaizatulaqma Kamalul Ariffin

Dr. Norshahila Ibrahim

Dr. Nik Alia Fahada Wan Ab Rahman

Dr. Gusman Nawanir

### **Liaison Officer:**

Muhamad Firdaus Abdull Razab



3<sup>rd</sup> ICEBIT



**Published by:**  
**Global Academic Excellence (M) Sdn. Bhd. (1257579-U)**  
**KELANTAN, MALAYSIA**

ISBN 978-967-2245-13-1



9 789672 245131