



INTERNATIONAL JOURNAL OF
EDUCATION, PSYCHOLOGY
AND COUNSELLING
(IJEPC)

www.ijepe.com



GOOD PRACTICE EDUCATION PROGRAM FOR TECHNICAL AND VOCATIONAL TRAINING IN GIATMARA IN MALAYSIA CONSTRUCTION INDUSTRY

Tazifuzin Azmi^{1*}, Dani Salleh²

¹ Ghazali Shafie Graduate School of Government Universiti Utara Malaysia, Kedah, Malaysia
Email: tazifuzin@giatmara.edu.my

² Department of Planning & Property Development, School Government, Universiti Utara Malaysia, Kedah, Malaysia
Email: dani.saleh@uum.edu.my

* Corresponding Author

Article Info:

Article history:

Received date: 17.03.2021

Revised date: 01.04.2021

Accepted date: 25.06.2021

Published date: 30.06.2021

To cite this document:

Azmi, T., & Salleh, D. (2021). Good Practice Education Program for Technical and Vocational Training in Giatmara in Malaysia Construction Industry. *International Journal of Education, Psychology and Counseling*, 6 (40), 368-378.

DOI: 10.35631/IJEPC.640029

This work is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)



Abstract:

The labour force is one of the most important resources of an organization or department and not the exception in the construction industry. Systematic workforce planning in construction projects needed to control the problem of shortage of skilled labour and to avoid wastage in a project. In line with this, the marketability of graduates today not only needs to be reflected in their academic achievement but also needs to be balanced with skills including technical and vocational training to be more relevant to the changing environment of the 21st-century workplace which requires more highly skilled workers. This research is a descriptive form and data collection method using a questionnaire set instrument. Data were collected and analysed using the software Statistical Packages for Social Sciences (SPSS) version 25, by considering min and Std. Deviation values. The study found that good practices emphasized by GIATMARA in providing quality education and training were supporting the economic development of the country in the knowledge-based construction industry.

Keywords:

TVET, GIATMARA, Education Programme, Construction

Introduction

The active involvement of the country in supporting the principles Nations Educational, Scientific and Cultural Organization (UNESCO) since 1958 continued through international collaboration through education, science, and culture. The government has determined that the

sectors of Education and Technical and Vocational Training (TVET) is a key step in providing human resources highly skilled as well as one of the main growth drivers for Malaysia to become a high-income country. The need TVET to strengthen the country has been recognized in many countries and trade unions (Yazçayır & Yağcı 2009), has been approved for technical innovation and globalization (Wilson 2001), and is able to achieve higher revenues (ANTA 2002), reducing poverty (ILO 2012). All this will lead to the transformation of TVET system to provide workers with the skills and the skills required to market a diverse and growing economy to strengthen communities. In Malaysia, the quality, and skills inherent in human resources are crucial to the success of economic transformation for Malaysia to become a developed country. According to the Economic Planning Unit (EPU), labour demand for TVET sector is expected to increase with the introduction of the National Key Economic Area (NKEA). NKEA requires the employment of up to 3.3 million job opportunities by 2020 in which 1.3 million are required to be graduates of TVET. Malaysia's priority TVET sectors are tourism, retail, development of Greater Kuala Lumpur, health care, and education.

The rapid growth of the construction industry has affected the country's economy and the TVET education system. As advances in the construction industry, TVET training needs to be improved to produce more trained professionals to develop the country. Demographics labour market show that all sectors are competing for the job. The labour market increasingly competitive has led to a serious labour shortage. Yusof, Buntat, Mustafa, and Rajuddin (2015) said the reality of the underdeveloped construction industry environment made it difficult to recruit school graduates to choose the construction sector as their career. As a result, the industry is struggling to overcome the shortage of skilled labour. Currently, there are various efforts and methods being made to reduce dependence on workers and improve overall construction quality, but labour in the construction sector remains disadvantaged. (Usman, Tahir, Mohd-Nor, & Ismail, 2019).

In this case, Yusof, Buntat, Mustafa, and Rajuddin (2015) find a shortage of skilled workers has become a world problem. This is also the biggest challenge in the Malaysian construction industry. In addition, the participation of local workers is very unfavourable and some understand that skilled workers resulting from vocational training do not meet the needs of the construction industry. Therefore, emphasis should be given to the quality of education and training to support the country's economic development in knowledge-based sectors of the construction industry. Buntat, Rajuddin, and Yusof (2014) found that the importance of skilled labour in the construction sector is undeniable, with this country having to build many Public Skills Training Institutions (ILKA) such as GIATMARA to meet the increasing demand for skilled workers for the construction industry. The biggest and most valuable assets of a country are its people because they exploit all forms of resources in that country. It also depends on the quality of people that can be created by the nation.

Literature Review

Technical and Vocational, Education and Training

Technical and Vocational, Education and Training or TVET is defined by UNESCO as "a process which involves aspects of education, in addition to general education, the study of technology and science related to the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various life and economy sector (UNESCO, 2016). TVET provide people not only with vocational skills, but with the knowledge, skills and attitudes needed to participate in the world of work and life (Majumdar, 2011). This includes

self-awareness, and self-esteem, citizenship, communication, and entrepreneurial skills. Through its TVET strategy, UNESCO aims to strengthen the capacity of member states in the field of TVET and focus on transformation and development of TVET to ensure that all young people and adults can develop the skills needed for work purposes to thrive (UNESCO, 2016). TVET is a term used by UNESCO member states as one of the main fields for education programs. Every country in the world adopted a different approach to TVET, which aims to develop its own national mechanisms and allocate resources to a channel to meet their economic and social conditions (Winch, 2013). In the United States this program called CTE (Career and Technical Education). In South Africa the program named FET (Further Education and Training). TVET is a term used in Southeast Asia (Vocational and Technical Education and Training). In Australia the term used is VET (Vocational Education and Training) or VTE (Vocational and Technical Education).

GIATMARA

GIATMARA start its operations in January 1986 at GIATMARA Jitra (now known as GIATMARA Kubang Pasu) with the first recruitment of 60 trainees in Domestic Electricity, Applied and Iron Bricks, and Iron Works. The high response and demand for the GIATMARA program has made GIATMARA grow exponentially in terms of the number and programs it offers. At present, GIATMARA offers 39 types of courses under 12 types of clusters, namely Mechanical, Architecture, Transportation, Manufacturing, Printing, Electricity, Computers & IT, Fabrics, Electronics / Electronics, Culinary, Hair & Makeup, and Hospitality (GIATMARA Malaysia, 2019). To date, there are 667 courses in 230 GIATMARA nationwide with more than 2,000 staff (Harian Metro, 2018).

According to Buntat and Yusof, (2012) GIATMARA established to encourage Bumiputera participation in various fields. The courses offered are closely related to aspects of trade and industry in the short term. Courses are less than 20 credit hours in less than 16 weeks and only carry a certificate of attendance. GIATMARA also helps students who drop out of school and unemployed. They are encouraged to participate in the program so that with the skills provided, they can do something for the country's prosperity (Buntat & Yusof, 2012). The establishment of GIATMARA aims to provide technical and vocational skills training for rural and urban youth. This is to enable young people to acquire skills in preparation for technically skilled workers and entrepreneurs to meet the needs of industrial and economic activity and entrepreneurship both locally and nationally (Daud, 2010).

According to the GIATMARA Official Website (GIATMARA Malaysia, 2019), the establishment of GIATMARA aims to provide technical and vocational skills training for rural and urban young people to enable young people to acquire skills in preparation for skilled workforce and technical entrepreneurs to fulfil industrial, economic, and entrepreneurial activities. The budget for managing GIATMARA operations fully funded by the Malaysian government through allocations provided through MARA.

TVET in the Construction Industry in Malaysia

The country's construction industry projected to grow 7.5 percent, in line with the estimated 5.5 percent of the Gross Domestic Product (GDP). The positive outlook is driven by government infrastructure projects, especially in the construction sector. The government through the 2018 Budget has emphasized on infrastructure spending, especially involving rural areas such as the Pan Borneo Highway project and the project East Coast Route (ECRL) and Mass Transit (MRT). These projects play an important role in driving the growth of the

construction industry and help to improve existing rail system, especially in the Klang Valley and other places (Berita Harian, 2018).

Construction Industry Development Board (CIDB) had earlier estimated the value of construction projects worth RM180 billion in 2018 will be driven by high-impact infrastructure projects are being planned and ongoing. These include the Refinery and Petrochemical Integrated Development (RAPID), Kuala Lumpur–Singapore high-speed rail (HSR), MRT, Pan Borneo Highway, ECRL and 1Malaysia People's Housing Programme (PR1MA). According to CIDB statistics, the value of construction projects in 2016 amounted to RM229 billion with 6,855 construction projects recorded. This figure is the highest ever recorded since 2010. From RM229 billion, 60 per cent or RM137 billion in infrastructure projects, 19 per cent or RM43 billion is non-residential projects, 18 per cent or RM41 billion housing project and four per cent or RM9 billion project of social facilities. Therefore, from 2018 until 2020, the government will gradually impose the use of Industrial Building System (IBS) in the private sector. This is a great opportunity for all industry players to come and be a part of the Construction Industry Transformation Program (CITP) 2016-2020 and bring the industry to the next level. Until now, 8,087 contractors and 264 IBS component manufacturers have been listed under the CIDB with the majority in large cities such as Selangor, Kuala Lumpur, Johor, Penang, and Sarawak.

Goal and Objective of Study

This case study was conducted to study the level of knowledge, skills, and abilities among GIATMARA graduates after graduation. The purpose of this study was to examines the perceptions of GIATMARA trainees in terms of knowledge, technical skills, and ability to work in the technical sector to fill a labour shortage in the domestic construction industry. The purpose of this study is to identify good practices in GIATMARA as one of the vocational training institutions in meeting the needs of national construction sector.

Methodology

The study conducted in GIATMARA in Kedah, and Perlis was statistically descriptive using survey method. Sidek (2002) said descriptive research is often used to provide a systematic explanation of the facts and characteristics of populations or fields of interest in facts and accuracy. Therefore, the research conducted is descriptive through a questionnaire method. Idris (2010) stated that survey studies are very useful in gathering data about phenomena that cannot be observed. Surveying is the process of collecting data and researchers ask for samples or respondents to answer the questions given (Mohd Affandi et al., 2015). Survey method was used to measure the variables associated with a variable phenomenon without questioning why it was there. The purpose of this study was to gather information and data about the level of knowledge, skills and abilities of programs related to construction at GIATMARA Malaysia in Kedah and Perlis. Each questionnaire contains a series of closed questions that must be answered by the respondents involved in this study. Furthermore, the appropriate statistical test used to analyse the data obtained.

Sample of Study

The population is a large group that benefited from the results of scientific studies conducted on the samples. Marican (2005) describes that the sample is a group of individuals, families, groups, organizations, communities, events, or anything that would be studied by the researchers. The sample used in this study were 30 construction related training programs representing seven branches of GIATMARA Malaysia in Kedah and Perlis. There are four

GIATMARA in Kedah and Perlis which offers construction-related program that is GIATMARA Arau, GIATMARA Baling, GIATMARA Jerai, and GIATMARA Pokok Sena. Therefore, this study was conducted in GIATMARA in the state of Kedah and Perlis.

Instrument of Study

A comprehensive review collects data on GIATMARA technical education demographic practices and vocational training programs in the Malaysian construction industry. This study uses quantitative methods and questionnaires used as a research instrument. Pilots and respondents tested it were GIATMARA trainees in the related construction field. There are six items of good practice related to the purpose stated in this study; this course is related to the construction industry related; The lecturer presented a case study from the construction industry in delivery of the course; Visits to related industry sites are a prerequisite for research; There was enough time for training in related industries; The course is accredited improve the marketability of graduates, and; The training received at GIATMARA is suitable for career purposes.

Data Analyses

Survey data were collected and analysed using the Statistical Package for Social Sciences (SPSS), version 25, IBM. This study uses descriptive statistics and cross tabulation based on frequency to analyse data. Because the data were collected mostly on the scale categories, cross tabulation considered most appropriate to analyse the relationship.

Demographics of the participants were collected and analysed using the size and percentage of central tendency. Five of the six best practices for technical education courses and vocational training in GIATMARA identified based on the percentage of participants. Based on these six items, respondents were profiled based on their experience in technical education and vocational training programs at GIATMARA.

Demography

This study involved 30 GIATMARA training participants from four GIATMARA in states of Kedah and Perlis. The respondents consisted of 70% men and 30% women between the ages of 18 and 30. All respondents were full time trainees. Respondents reported that they would earn the GIATMARA Professional Certificate, the GIATMARA Skills Certificate, and the Malaysian Skills Certificate upon graduation (see Table 1).

Table 1: Demographics of Respondents

Characteristics	Category	Percentage
Gender	Man	70
	Woman	30
Age	18-25	66.7
	26-30	33.3
Certificate Obtained Upon Completion of Course	GIATMARA Professional Certificate	56.7
	GIATMARA Skills Certificate	16.7
	Malaysian Skills Certificate	26.7

Results

This column displays the results of the study findings obtained to achieve the objectives of the study as determined at the beginning of the study. Display of level, good practices, and perceptions of education program for Technical and Vocational Training in GIATMARA is based on the following three (3) tables as below.

Referring to table 2, the study has measured the level of education program for Technical and Vocational Training in GIATMARA where the respondent agrees with the statement that the subject taught is fulfilling a future profession as an engineer with min value of 4.14 ($\sigma = 0.879$). The high value of mean also showed by the balance between theoretical and practical sessions is appropriate and the curriculum covers issues good employment and career advice which figure the amount of 4.18 ($\sigma = 0.906$) and 4.15 ($\sigma = 0.708$). These indicate that the respondents were agreed with the statement. Furthermore, most of the respondents also agreed to the statement The course areas related to the knowledge and skills offered qualify students to become successful engineers with the mean value of 4.05 ($\sigma = 0.792$). Finally, respondents accept that the Assessment strategies for the course are appropriate which comprise of the mean value of 4.03 ($\sigma = 0.843$). Overall result showed that the level of the education program for Technical and Vocational Training in GIATMARA is high.

Table 2: Level of Education Program for Technical and Vocational Training in GIATMARA

Good Practices	Min	Std. Deviation
The subject taught is fulfilling a future profession as an engineer.	4.14	.879
The course areas related to the knowledge and skills offered qualify students to become successful engineers.	4.05	.792
The balance between theoretical and practical sessions is appropriate.	4.18	.906
Assessment strategies for the course are appropriate.	4.03	.843
The curriculum covers issues good employment and career advice.	4.15	.708

Analysis showed base on table 3 that most respondents agreed to the course they follow in relation to the construction industry with min value of 4.03 ($\sigma = 0.490$). Similar results were seen in the opinions of respondents that lecturers presented a case study of the construction industry in the delivery of the course. An average value of 4.43 on relevant industry site visit items is a requirement. This shows that the course not only emphasizes aspects of class skills, but also exposes trainees to the real world of the construction industry.

However, for the time item for training in the industry is enough to produce average values were low (2.93). The average value is low because a high response rate of 33.3 percent and only 26.7 percent of respondents agreed and the rest chose uncertainties. For accredited programs enhance the marketability of graduates show a high average value of 4.07 ($\sigma = 0.450$).

The respondents also agreed that the training received from GIATMARA suitable for the purpose of construction-related careers in the industry. As many as 63.3 percent of respondents voted in favour, 26.7 percent strongly agreed and only 10 percent of respondents voted uncertainly.

Table 3: Good Practice Education Program for Technical and Vocational Training in GIATMARA

Good Practices	Min	Std. Deviation
This course is related to the construction industry related	4.03	.490
The lecturer presented a case study from the construction industry in delivery of the course	4.03	.490
Visits to related industry sites are a prerequisite for research	4.43	.817
There was enough time for training in related industries	4.13	.507
Accredited of the course is improve the marketability of graduates	4.07	.450
The training received at GIATMARA is suitable for career purposes	4.17	.59

Finally, the findings of the study show the results for respondents' perceptions of education program for Technical and Vocational Training in GIATMARA. Based on table 4 below which shows the breakdown of the display of certain mean values as presented in this study, it was found that overall respondents exhibited a high perception of the statements presented. The statement of *I got full information about my studies and job opportunities after graduation* showed the highest mean value figure of 4.29 ($\sigma = 0.745$). It is followed by *I got full information about the institution I was studying now before I decided to apply for it* and *My opinion was taken into consideration and considered by the GIATMARA* which consist of mean value of 4.25 ($\sigma = 0.765$) and 4.22 ($\sigma = 0.858$).

Next, respondents agreed and showed high perception on *GIATMARA applies a learning model that encourages innovation* as the mean value showed is 4.13 ($\sigma = 0.836$). The other two statements were also similar with the result which showed high perception by respondents in the research. The average value of mean consists of the statement which are *Opportunity is given to undergo training abroad as a sharing and addition of knowledge* and *good laboratory equipment for the delivery of the practical part of the course* stands the value of 4.10 ($\sigma = 0.876$) and 4.04 ($\sigma = 0.870$).

Table 4: Perception of Education Program for Technical and Vocational Training in GIATMARA

Good Practices	Min	Std. Deviation
I got full information about the institution I was studying now before I decided to apply for it	4.25	.765
I got full information about my studies and job opportunities after graduation.	4.29	.745
My opinion was taken into consideration and considered by the GIATMARA.	4.22	.858
Opportunity is given to undergo training abroad as a sharing and addition of knowledge.	4.10	.876
Good laboratory equipment for the delivery of the practical part of the course.	4.04	.870
GIATMARA applies a learning model that encourages innovation	4.13	.836

Discussion

The willingness of the participants to enter the construction industry is vital to meet the country's needs in the construction industry. According Azizun (2011), a systematic workforce planning in construction projects needed to control the problem of shortage of skilled labour and to avoid wastage in a project. The rapid growth of the construction sector today has resulted in high demand for construction workers. Thus, Yusof, Buntat, Mustaffa, and Rajuddin (2015) say that these high demands cannot be met by the local labour force and thus lead to a high demand for foreign labour. As a result, there is an over-reliance on foreign workers, as though the country's shortage of skilled local labour.

With GIATMARA's ability to produce apprentices in accordance with industry demand, it can meet industry demands and shift its dependence on foreign workers to local skilled workers. Good practices at GIATMARA ensure that the labour force born is not dependent on or limited to one skill. his is in line with Yusof's (2005) suggestion that skills should be varied so that the energy required in almost every stage of construction and for that reason should not be limited skills for one skill alone.

Furthermore, the level of technical skills programme offered at GIATMARA are also found to be high and suit the current skills criteria required in the situation of where Malaysia is a developing country and heading towards developed country status. The offering of a cohesive, efficient, and organized skills program has also increased the skills participants' perception of the quality and marketability of the programs being offered. Based on this aspect, GIATMARA needs to continue to offer existing skills programs and improve the program according to the passage of time and its suitability.

Hands-on or direct training practiced by GIATMARA makes local workers trained in the market to avoid wasting labour, thereby eliminating dependence on foreign workers. Hands-on training that starts after the end of high school provides more specialized courses and training in 6 months, one or two years and students can work full time or part time to get hands-

on experience. In addition, GIATMARA also works closely with the local construction industry to ensure that participants are always prepared for the current construction situation.

The programs offered at GIATMARA are accredited by the Department of Skills Development which enables them to improve the marketability of graduates. According to Hall and James (2018) accreditation of organizational entities that are important for related professions is very important in proving graduates to receive adequate training related to industry. In addition, in this country, an Accreditation Certificate is a formal certificate whose certificate, diploma or degree given to its graduates meets the quality standards and criteria set by the Malaysian Qualifications Agency (MQA) and complies with the Malaysian Qualifications Framework (MQF) (myGovernment, 2020).

Conclusion

Human resources are an important factor in the economic development of a country. The prosperity of a country is determined by its membership, and the positive attitude of its people. Many countries can grow quickly because of the human resource needs of these countries, including the skills and skills of trained people. For example, countries such as Japan, Singapore, Germany, and Hong Kong have made advanced economic progress by mobilizing their human resources. Direct human resources will help eliminate the economic downturn. Therefore, the skills to society must be developed efficiently. Nkondola and van Deuren, (2017) said human resource management is considered as an essential element to contribute to quality education.

Therefore, good practices emphasized by GIATMARA in providing quality education and training are supporting the economic development of the country in the knowledge-based construction industry. Seeing the importance of skilled labour in the construction sector is undeniable, therefore the country must offer more training related to the construction industry at GIATMARA to meet the increasing demand for skilled workers for the construction industry according to the minimum standard level of the technical training offered. Based on the result, the level and perception of the education program for Technical and Vocational Training in GIATMARA is acceptable at the moment. Any changes occur will definitely base on time and environment in the world overall and in Malaysia specifically.

Thus, the biggest and most asset of any country is its people because they exploit all forms of resources in the country. This also depends on the quality of people who can be created by the nation. If we look at some countries that were once threatened and almost destroyed during World War II like German and Japan di mana where their country's economy almost collapsed because of the war. But with the skills emphasized by the state and high morale of the people, they can develop the country in the short term. This is where technical education and training such as TVET must be empowered by each country so that people can play an important role, and the country's human resources can be utilized and its productive potential to be fully utilized.

References

- Ananiadou, K. (2013). Revisiting Global Trends in TVET: Reflections on Theory and Practice. In *UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training* (pp. 20-35). Bonn: UNESCO.

- Ashari, Z. H., Rasul, M. S., & Azman, N. (2014). Hubungan Individu, Persekitaran dan Kebolehsesuaian Terhadap Pemilihan Kerjaya Pelajar Sistem Persijilan Kemahiran Malaysia (SPKM): Suatu Analisis Kandungan. *Sains Humanika*, 2(1), 1-10.
- Azizun, H. (2011). *Keperluan Tenaga Kerja Mengikut Tred Kemahiran bagi Projek Pembinaan Sekolah di Sekitar Lembah Klang, Malaysia*. Sintok: Universiti Utara Malaysia.
- Berita Harian. (2018). *Keperluan mendesak transformasi TVET*. Retrieved April 23, 2020, from BH Online: <https://www.bharian.com.my/berita/nasional/2018/06/441696/keperluan-mendesak-transformasi-tvet>
- Buntat, Y., & Rajuddin, M. R. (2004). Aspek-Aspek Penting dalam kemahiran Employability. *Buletin Fakulti Pendidikan Universiti Teknologi Malaysia*, 2(3), 1-10.
- Buntat, Y., & Yusof, Z. M. (2012). *Kursus Dan Latihan Jangka Pendek Dalam Memberikan Peluang Kerjaya Pelatih Di Pusat Giat Mara: Satu Kajian Kes*. Skudai: Universiti Teknologi Malaysia .
- Daud, N. S. (2010). *Persepsi Pelatih-pelatih Giatmara Terhadap Program latihan Kemahiran Yang Diterima Di Giatmara Tanjong Piai*. Skudai: Universiti Teknologi Malaysia.
- GIATMARA Malaysia. (2019). *Info GIATMARA*. Retrieved April 23, 2020, from GIATMARA Malaysia: <http://giatmara.edu.my/language/ms/profil/>
- Hall, & James. (2018). The Importance of Accreditation "Of, By, and For Audiology". *AUDIOLOGY*, 30(5), 86-100.
- Harian Metro. (2018). *GiatMARA tawar kursus baru lebih kompetitif*. Retrieved April 23, 2020, from Harian Metro: <https://www.hmetro.com.my/mutakhir/2018/02/309083/giatmara-tawar-kursus-baru-lebih-kompetitif>
- Hassan, R., Foong, L. M., & Ismail, A. A. (2019). TVET in Malaysia. *Vocational Education and Training in ASEAN Member States* (pp. 109-132). Singapore: Springer.
- Ismail, A., & Abiddin, N. Z. (2014). Issues and challenges of technical and vocational education and training in Malaysia towards human capital development. *Middle-East Journal of Scientific Research*, 19(2), 7-11.
- Ismail, K., Nopiah, Rasul, M. S., & Leong. (2017). Malaysian teachers' competency in technical vocational education and training: A review. *Proceeding of Regionalization and Harmonization in TVET* (pp. 1-10). London: Taylor & Francis Group.
- kolej.my. (2018). *Apa itu TVET di Malaysia?* Retrieved April 23, 2020, from kolej.my: <https://www.kolej.my/blog/apa-itu-tvet-malaysia>
- kolej.my. (2019). *Sijil Kemahiran Malaysia dan Kerangka Kelayakan Malaysia (KKM)*. Retrieved April 23, 2020, from kolej.my: <https://www.kolej.my/blog/sijil-kemahiran-malaysia-kerangka-kelayakan-kkm>
- Majumdar, S. (2011). Teacher education in TVET: Developing a new paradigm. *International Journal of Training Research*, 9(1.2), 49-59.
- Marican, S. (2005). *Kaedah penyelidikan sains sosial*. Kuala Lumpur: Prentice Hall/Pearson.
- Ministry of Education. (2019). *TVET*. Retrieved April 23, 2020, from Ministry of Education Malaysia: <https://www.moe.gov.my/pendidikan/tvet/sekolah-menengah-teknik>
- Mohamed, R. K., Ramendran, C., & Yacob, P. (2012). The impact of employment of foreign workers: Local employability and Trade Union roles in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 2(10), 530-545.
- Mukhtar, M. I., & Ahmad, J. (2015). Assessment for learning: Practice in TVET. *Procedia-Social and Behavioral Sciences*, 204(2015), 119-126.
- myGovernment. (2020). *Maklumat Akreditasi*. Retrieved April 23, 2020, from myGovernment: <https://www.malaysia.gov.my/portal/subcategory/143?language>

- Nkondola, A. A., & Deuren, R. v. (2017). Human Resource Management Challenges in Technical and Vocational Education in Developing Countries: The Case Study of Technical Institutions in Tanzania. *International Journal of Business and Social Science*, 8(2), 20-35.
- Saibon, R. A., Kamis, A., & Zainol, Z. (2019). Entrepreneurship Education: Unemployment Issues, People's Well Being and Entrepreneurial Intentions among TVET Graduates in Malaysia. *International Journal of Psychosocial Rehabilitation*, 23(4), 1-10.
- UNESCO. (2016). *Strategy for technical and vocational education and training (TVET)(2016-2021)*. Bonn: UNESCO.
- Usman, Tahir, Mohd-Nor, & Ismail. (2019). Keberkesanan Sistem Binaan Berindustri (IBS) Kerangka Keluli Dalam Pembinaan Rumah Teres. *Journal of Design*, 12(1), 1-16.
- Winch, C. (2013). The attractiveness of TVET. In *Revisiting global trends in TVET: Reflections on theory and practice* (pp. 86-122). Bonn: UNESCO.
- Yusof, Z. M. (2005). Ke Arah Pengurangan Kebergantungan Tenaga Kerja Asing di Sektor Binaan. *Jurnal Alam Bina*, 7(2), 1-16.
- Yusof, Z. M., Buntat, Y., Mustafa, M. S., & Rajuddin, M. R. (2015). Cabaran-Cabaran Di Sektor Binaan Dalam Menyediakan Tenaga Kerja Mahir Tempatan – Satu Sorotan Penulisan. *Jurnal Pembangunan Sosial*, 10(4), 70-86.