

Discovering the Quality of TVET in Malaysia from TVET Educator's Perspective

Samir Muhazzab Amin^{1*}, Mohd Fathullah Mustafa², Nur Shuhamin Nazuri³, Siti Shazwani Ahmad Suhaimi⁵, Muhd. Dhamir Audi Azizul⁴

^{1,2}Faculty of Human Ecology, University Putra Malaysia, 43400, Serdang, Selangor

³School of Economics, Finance and Banking (SEFB), University Utara Malaysia, 06010, Sintok, Kedah, Malaysia

⁴Center for English Language and General Studies, Lincoln University College, 47301, Petaling Jaya, Selangor

⁵Leave A Nest Malaysia, Century Square, Jalan Usahawan, Off Persiaran Multimedia, 63000 Cyberjaya, Selangor

*Corresponding author

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.90400048>

Received: 18 March 2025; Accepted: 22 March 2025; Published: 27 April 2025

ABSTRACT

Technical and Vocational Education and Training (TVET) plays a crucial role in Malaysia's efforts to progress as a nation, especially in equipping the workforce with diverse skills for the Fourth Industrial Revolution. Nevertheless, there is a lack of research about the knowledge of TVET educators in order to improve its quality. This study aims to explore the current state of Technical and Vocational Education and Training (TVET) institutions, delving into the key issues and challenges they face while providing practical recommendations and strategic proposals for improvement. The method of purposive sampling was utilized for selecting TVET educators from a wide range of technical fields. The interviews were performed online. The findings of this study highlight the critical role of Technical and Vocational Education and Training (TVET) in fostering national resilience and achieving competitiveness on a global scale, aligning Malaysia with the standards of developed nations. Instructors underscore the significance of adopting an inclusive approach by engaging all relevant stakeholders—educators, industry leaders, policymakers, and communities—to collaboratively shape the future of TVET. Furthermore, they emphasize the need for early exposure to TVET, ensuring students and younger generations recognize its value and potential career pathways from an early age. This study provides valuable insights into the current state of TVET in Malaysia, offering recommendations that can guide future policies, improve institutional effectiveness, and enhance the overall perception of TVET as a vital component of the nation's educational and economic development framework.

Keywords: TVET, Instructor, Employability, Industry 4.0

INTRODUCTION

Technical and Vocational Education and Training (TVET) has become an essential and active part of educational systems worldwide, as they strive for educational excellence and national progress. According to UNESCO, Technical and Vocational Education and Training (TVET) is defined as a process that involves aspects of education, beyond science, technology, and general education that pertain to the acquisition of practical skills, attitudes, understanding, and knowledge related to work in various sectors of the economy (UNESCO, 2019). Within the Malaysian setting, there is a strong emphasis on exploring and comprehending TVET education. This reflects the country's dedication to cultivating a workforce that is skilled and flexible, in line with the requirements of a rapidly evolving global environment. Malaysia acknowledges the significance of Technical

and Vocational Education and Training (TVET) in developing practical skills and fostering a workforce that can make substantial contributions to many industries. This recognition is driven by Malaysia's diverse cultural heritage and growing economy. The significance of strengthening Technical and Vocational Education and Training (TVET) has been acknowledged by several countries and unions, as brought out by Razzaq et al. (2019). Historically, efforts to meet Malaysia's industrial needs have laid the groundwork for technical and vocational education and training (TVET), which places equal emphasis on theoretical and practical knowledge. Given Malaysia's ambition to establish itself as a prominent participant in several industries at both regional and global levels, such as technology, manufacturing, services, and innovation, the significance of Technical and Vocational Education and Training (TVET) becomes crucial. The identification of these factors is influenced by the profound influence of technical innovation and globalization (Saini et al., 2023), the desire for increased wealth (Rasul et al., 2015), and the subsequent alleviation of poverty (ILO, 2012). A reform of the technical and vocational education and training system is necessary to enhance civil society and adapt it to the demands of a diverse and expanding market economy (Wolf, 2017).

TVET in Malaysia serves as more than just a platform for vocational skills development. It plays a vital role in cultivating a comprehensive and versatile workforce that can effectively address the requirements of the Fourth Industrial Revolution. In this era of rapid technical breakthroughs and disruptive global trends, it is crucial to comprehend the role and influence of Technical and Vocational Education and Training (TVET) in order to maintain the nation's competitiveness in the worldwide arena. The Economic Planning Unit (EPU) predicts a substantial surge in labor demand, namely in the Technical and Vocational Education and Training (TVET) sector, following the establishment of the National Key Economic Area (NKEA). By 2020, the NKEA is expected to require a workforce of around 3.3 million individuals, with around 1.3 million of these individuals being TVET graduates. The importance of an improved Technical and Vocational Education and Training (TVET) system in meeting Malaysia's economic goals and long-term vision is emphasized. The target is to transition to a high-income economy between 2024 and 2028.

However, a notable challenge within the Technical and Vocational Education and Training (TVET) landscape in Malaysia is the absence of a unified authority overseeing the entire system. This decentralized structure, characterized by the presence of various institutions, has resulted in an organizational framework that is deemed inefficient. The consequences are two-fold: the duplication of efforts and the dispersion of training initiatives across different entities. Furthermore, this fragmentation has given rise to a lack of a cohesive framework for formulating comprehensive policies and fostering collaborative efforts within the TVET sector (Cheok & Chen, 2022). The inefficiency within the organizational structure of TVET is underscored by the absence of a singular governing body, leading to challenges in standardization, coordination, and the overall coherence of the system. Unlike centralized models in some other countries, Malaysia's TVET governance is distributed across multiple agencies and ministries, each responsible for specific aspects of the educational and training spectrum. This decentralized approach has inadvertently contributed to a lack of synergy and harmonization in the strategic direction and implementation of TVET policies. There was criticism voiced by 21st-century progressives regarding the current British Columbia's Industry Training Approval (ITA) system. According to these critics, there is a perceived hierarchy within the curriculum development process, wherein the influence and input of industry representatives are given more importance compared to that of educators. The progressives argue that this practice results in an imbalance, asserting that the voice of industry stakeholders holds more significant weight, possibly leading to the marginalization of educators in the decision-making process (Vinden, 2020). Essentially, the critique implies that educators, who possess significant insights and expertise about teaching and learning, are not being sufficiently acknowledged or taken into account in the process of developing the curriculum. The prioritization of industry perspectives may be perceived as favoring practical, job-specific competencies over larger educational ideals. This may underestimate the importance of educators, disregarding their expertise in teaching methods and curriculum development, and potentially affecting the overall quality and comprehensiveness of the education offered.

The challenge faced by Technical and Vocational Education and Training (TVET) in Malaysia is further exacerbated by the prevailing negative perception of vocational education within the general public, as indicated by the research conducted by Amin et al. (2023). This study highlights that, despite the evolution of education, a substantial number of individuals still view TVET as a less preferable choice compared to traditional

educational pathways. The perception of TVET in Malaysia is intricately linked to the efficacy of its branding, which plays a crucial role in shaping public attitudes and influencing individuals' educational choices. In Malaysia, as in several other nations, TVET tends to carry a less favorable impression when juxtaposed with the more traditional or 'academic' education offered by mainstream institutions. The societal bias towards theoretical or academically focused education contributes to the undervaluation of TVET, possibly stemming from a historical preference for conventional educational routes. This bias is reflected in the perceptions of TVET as a secondary or less prestigious option, which can, in turn, affect enrollment rates and hinder the sector's overall growth and development.

Therefore, this research paper is organized to present a thorough account, starting with an in-depth review of the fundamental principles of TVET in Malaysia. Following that, it will examine the present condition of TVET institutions, programs, and collaborations. The article attempts to provide a comprehensive and insightful depiction of TVET education in Malaysia by examining the difficulties encountered by the sector and showcasing examples of achievement.

LITERATURE REVIEW

Government Initiatives

The anticipated launch of the National Technical and Vocational Education and Training (TVET) Policy in June of 2024 marks a significant milestone. Contrary to being a completely new policy, it represents a concerted effort to align and harmonize TVET education activities across 12 ministries, streamlining coordination with 1,344 TVET institutions nationwide. As mentioned previously, a strategic initiative seeks to create a cohesive and unified approach to TVET education, fostering better integration and collaboration among diverse stakeholders. A key focus of this policy alignment is to enhance the market acceptance of graduates from TVET institutions. Recognizing the pivotal role of skilled workers in various sectors, the initiative aims to bridge the gap between the skills acquired through TVET programs and the demands of companies, government-linked entities, and multinational corporations. By ensuring that the skills imparted by TVET institutions align closely with industry needs, the policy aspires to enhance employability and contribute to a more agile and responsive workforce. At the forefront of these efforts is my next TVET initiative, an online platform developed by Talent Corporation Malaysia Berhad (TalentCorp). This platform represents a significant leap in talent management within the TVET sector. With a primary focus on creating an integrated and efficient talent information system, my next TVET functions as an online psychometric profiling instrument. Its purpose extends beyond mere data collection; it aspires to become the national repository for TVET talent, providing valuable insights into the skills, capabilities, and potentials of individuals within the TVET landscape. A noteworthy aspect of my next TVET is its potential as a robust tool for evidence-based decision-making. By serving as a comprehensive talent database, the platform equips the government with the necessary data and analytics to formulate strategic intervention plans. This approach ensures that policy interventions are grounded in factual evidence, promoting a more targeted and effective response to the evolving needs of the TVET sector.

There is also a notable change happening as courses in non-science subjects are scheduled to be transformed. The objective of this transition is to provide university students and those in Technical and Vocational Education and Training (TVET) institutions with specific and applicable skills that are designed to fulfill the needs of the future job market. This strategic maneuver highlights the dedication to closing the disparity between theoretical knowledge and practical implementation. The government has been prompted to reassess and reorganize courses in non-science subjects due to the awareness that the future workforce necessitates a diverse range of abilities. By doing this, there is a conscious endeavor to guarantee that students possess not only a comprehensive understanding of theoretical subjects but also possess practical, employment-ready abilities (Bernama, 2023a).

Pan our direction onto the state level, according to Bernama (2023b), the commitment of the Sarawak state government to complement the federal government's initiatives in technical and vocational training also underscores a strategic collaboration aimed at cultivating a workforce that is not only high-quality but also possesses the knowledge, skills, creativity, innovation, and competitiveness crucial for advancing the national development agenda. Looking ahead to 2030, the anticipated creation of more than one million new jobs signals both opportunities and challenges. Over 50 percent of these positions, exceeding 600,000 jobs, will demand

individuals with skills ranging from technical proficiency to semi-skilled capabilities. However, the current projection indicates a shortfall, with the capacity to produce only 500,000 skilled workers by the target year. This discrepancy emphasizes the pressing need for a substantial increase in training capabilities to bridge the gap between workforce demands and the available skilled labor pool.

The key issue in Technical and Vocational Education and Training (TVET) is in the difficulty of attracting students, particularly at the basic and secondary levels, despite endeavors to enhance the employability of TVET graduates and the caliber of programs. TVET studies are often undervalued by parents compared to traditional academic paths, which hinders its popularity. The matter at hand pertains not only to the enhancement of TVET programs, but also to the alteration of the notion that TVET is a secondary option for individuals who may encounter difficulties in traditional academic pursuits. To address this issue, it is necessary to adopt a comprehensive strategy that encompasses the promotion of the various and fulfilling employment opportunities that Technical and Vocational Education and Training (TVET) may offer, as well as the rectification of misunderstandings through focused awareness campaigns. The objective is to alter the mindset and demonstrate that Technical and Vocational Education and Training (TVET) is a worthwhile and esteemed educational alternative.

Perpetual and Revolutionary Learning

Ensuring that learning within Technical and Vocational Education and Training (TVET) is transformative holds crucial significance. The transformation of TVET extends beyond economic growth to encompass aspects of social equity and sustainability, asserting that TVET systems should play a central role in the broader sustainable development agenda (Kanwar et al., 2019; Lambini et al., 2021; Marope et al., 2015; Shi & Bangpan, 2022). This sentiment is echoed by Majumdar (2011), who emphasizes that as a significant producer of the future workforce, the TVET sector bears the responsibility of preparing individuals to contribute actively to sustainable development. The UNESCO-UNEVOC (1999) emphasizes the multifaceted role of TVET. Apart from equipping individuals for the world of work, TVET is expected to act as an instrument for social cohesion and integration. This involves promoting flexible access to lifelong learning and training, as well as facilitating vocational guidance and counseling for all members of society.

In the context of rapidly advancing technology and an increasingly uncertain and complex work environment, the integration of lifelong learning into TVET becomes imperative for the attainment of sustainable development. However, despite the recognition that workers often engage in learning independently, within non-formal and informal settings, many TVET systems and models lack clear mechanisms for lifelong learning. UNESCO (2019) underscores the importance of encouraging, recognizing, and validating informal and non-formal learning for the transformation of TVET. The landscape of TVET needs to adapt to the evolving needs of the workforce, especially in an era of constant technological change. This adaptation requires a paradigm shift towards recognizing and embracing learning that occurs outside formal structures.

As outlined by Latchem (2017), encouraging informal and non-formal learning is essential for the comprehensive transformation of TVET. This approach acknowledges the dynamic nature of learning and positions TVET as a key player in fostering sustainable development through continuous, adaptable, and inclusive educational practices.

METHODOLOGY

This article illustrates findings to help readers understand the scenario of TVET in Malaysia presently. Research using the constructivism paradigm since we recognize that, depending on the participants and their subjectivities, there are several realities and methods to the issue being studied (Denzin & Lincoln, 2011). Following this paradigm, a qualitative descriptive study was used. Understanding the gaps between the knowledge and practice of six TVET educators was essential to comprehending their approaches to describing TVET scenarios in Malaysia. In choosing the unit of analysis, consideration was given: regulated formal education, occupational training, and teaching experience. The TVET educators who were chosen had a minimum of five years of experience, ranged in age from 25 to 47, and had participated in initiatives specifically designed to empower TVET.

The area of specialization of informants encompasses a diverse range of technical and vocational areas such as food crop sector, plantation (estate), livestock, fisheries and agriculture-based food processing. In addition, the majority of them are involved in few integration projects, training companies, governmental organizations and others. Finally, and based on the aforementioned criteria, the TVET institutions chosen are Malaysia Agriculture College, Bukit Tangga, Kedah, Sultan Nazrin Muizzudin Shah Fisheries College, Agricultural Institute of Serdang, Selangor, Fisheries Academy Malaysia, and Institute of Poultry Technology. An email summarizing the goal and methodology of the study and requesting assistance in finding study's subject were sent to the TVET institution following contact with the management of the institutions. The study participants will then be contacted via phone call or email to discuss the study's purpose in greater detail, confirm their suitability, and arrange for a focus group session. The focus groups dealt with: (1) the scenario and quality of TVET in Malaysia; (2) critical challenges of TVET in Malaysia; and (3) appropriate recommendations of TVET in Malaysia. Six TVET educators participated in the focus group, with a member of the research team acting as rapporteur and moderator. The most appropriate method for gathering data was thought to be the semi structured interview. Using a pre-written set of questions, this method, on the one hand, enables the interviewer to concentrate the discussion on the subjects that the subject finds significant in relation to achieve the research objective. On the other hand, it gives interviewees the flexibility to go into greater or lesser depth on the issues they consider of greatest interest (Leavy et al., 2014; Malterud et al., 2016). A pilot test with volunteer TVET educators who were not involved in the study was used to validate the script of questions, which was created based on a review of related studies in the literature (Creswell, 2013). One-on-one interviews will take place since it will facilitate the interviewer's ability to successfully steer the discussion in the direction of the research interests (Leavy et al., 2014). Two team members will lead the meetings, which will take place via video calls utilizing the online zoom platform. They will take on the roles of interviewer and observer. With video conversations, we'll be able to lessen or do away with the drawbacks of traditional interviews, like time and budgetary restrictions or geographical dispersion (Creswell, 2013; Janghorban et al., 2014; Leavy et al., 2014). The interviews will go for 45 to 60 minutes each. 45 semi-structured interviews will be conducted initially; however, the total number will depend on whether data saturation is reached. The research team will then stop gathering data at that point. With the participants' previous written and verbal consent, the interviews will be videotaped, and the transcripts will be verbatim.

Researchers will conduct the data analysis in three stages using the thematic analysis methodology (Leavy et al., 2014). Firstly, sentences from the transcripts will be divided into meaning units which are text segments containing a single idea (Colorafi & Evans, 2016). First-level coding, which will be mostly descriptive in nature, will apply one or more highly descriptive codes to each meaning unit. Conceptually comparable codes will be arranged into emergent categories in the second stage of data analysis (Levitt et al., 2018; Vaismoradi et al., 2013). Finally, a cross-analysis of the developed categories relative to the entire dataset will be carried out. From these categories, themes pertaining to the educators' interpretation. The informants who took part in this study did it voluntarily and freely. They signed an informed permission form in which they were advised of the data's confidentiality and anonymization. They were directly informed of the research's ethical principles and that participants could use their rights to access, correct, delete, and oppose their personal data. Finally, the results were conveyed through the same ways that the initial contact with each educator was created.

RESULTS AND DISCUSSION

To explore the concept of TVET among educators/ instructors in Malaysia, four themes emerged from the data: i) TVET as a skill of survivability, ii) Malaysian TVET is comparable to developed countries, iii) The importance of stakeholders' role and iv) TVET tailoring to special needs students.

Table 1. Themes, sub themes and sources investigated

Theme	Sub theme	Source
TVET as a skill of survivability	TVET empowering self-reliance TVET creates opportunities	Online zoom interview

	TVET generates substantial income	
Malaysian TVET is comparable to developed countries	TVET curriculum aligns with the needs of the industry Employability and Industry Relevance of TVET Graduates Diversifying Skills Through Value-Added Courses	Online zoom interview
The importance of stakeholders' role and iv	Promotional approach Alumni Platforms Involvement of the industry	Online zoom interview
TVET tailoring to special needs students	Interviews Strategies	Online zoom interview
Recommendations towards improving technical and vocational education in Malaysia	Empowering the issue of student competency in communication and mathematical skills Mastering technology skills among educators Improve the system of job management	Online zoom interview

TVET as a skill of survivability

TVET as the skill of survivability was one of the themes to emerge from the interviews with TVET educators. TVET is essential for career growth, providing practical skills for professional resilience (Subrahmanyam, 2020). TVET is also seen as the skill of survivability, promotes self-reliance, opens up career possibilities, and boosts income through valuable practical skills.

TVET empowering self-reliance

The informants have also asserted that the field of TVET studies is a fundamental requirement for life skills to achieve self-reliance. These skills are deemed essential for everyone and this statement reflects the informant's perspective. This situation parallel with study by Bakar (2011) the goal of TVET as a system of education focused on the workplace and specific occupations are to increase students' employability, flexibility, mobility, and productivity

In my perspective, the real success is transforming these trainees into independent individuals. For example, rather than engaging in traditional fishing activities at sea, they are contributing to the maritime and agro-tourism sectors, representing a notable success

Informant 1 and 3

TVET creates opportunities

The TVET certificate is also crucial for advancing studies to the highest levels. This situation makes the TVET certificate highly valuable for both employment and further education. As stated by the informant:

The TVET program should be continued as an opportunity for youth who are unable to pursue higher education and could be a path to institutions like Universiti Malaysia Terengganu and Universiti Sultan Azlan Shah.

Informant 1, 2, and 6

TVET generates substantial income

The promotional approach to the TVET field should also be directed toward future salary prospects. Most people who work in TVET can get a high salary if they take their jobs seriously. In order to achieve human goal of turning its economy into a high-income economy, Zain et al. (2017) state that Malaysia should increase recruitment at TVET and improve the general quality of training. This is what the informant said;

We need to share success stories, showcasing those who have succeeded in this field. This will help people see the potential in this sector. Nowadays, everyone is looking at income, and this field is known for its high earning potential. In this situation, with a good income, this field becomes a popular and practical option, eliminating the dependence on a fixed salary.

Informant 2, 4, 5 and 6

We should tell the success stories of our past students who were successful in agriculture. "Starting an agriculture business can earn a good income, around RM20,000 to RM30,000." It's important to convey to parents that TVET, especially in agriculture, is a valuable field and should be noticed.

Informant 3 and 4

Malaysian TVET is comparable to developed countries

TVET curriculum aligns with the needs of the industry

The majority of informants believe that the TVET curriculum in Malaysia is highly aligned with the needs of the industry. This collaboration aims to prepare graduates to work in the industry with the skills they have acquired. Few crucial elements such as employability, graduate pay rates, industry collaboration, and the implementation of social initiatives, will increase with improved TVET acknowledgment through accreditation, recognition, and certification advancements (Chitsa et al., 2022). Informant statement;

Just to let you know, when developing our syllabus (i.e. agricultural college), we'll have joint meetings with industry panels. We'll be gathering insights from the industry for creating our syllabus.

Informant 1, 2, 3, 4, and 5

Firstly, the syllabus was developed together with industry panels. What the trainees learn here aligns with the current needs of the industry. Moreover, we revise the syllabus every 5 years, taking into account the use of technology and other aspects.

Informant 5 and 6

Our curriculum has undergone discussions with the industry, as we collaborated with the Department of Skills Development. So far, there haven't been any issues with the curriculum

Informant 1, 2 and 6

I feel that the agriculture program is just like other programs. We develop the syllabus together with industry professionals and technical experts from our department. The curriculum we created considered all aspects. For example, in our agricultural certificate, we have six specializations. So, during the students' industrial training, we will send them according to their respective specializations. When we supervise our students during industrial training, the response from employers is indeed very positive.

Informant 2, 3 and 6

Employability and Industry Relevance of TVET Graduates

According to the informant, the majority of students in TVET studies are directly absorbed into the industry

upon completing their industrial training. Furthermore, these students possess the skills and expertise required by the industry. The informant's statement is as follows:

Okay, based on my experience during student internships, industries often give positive feedback. The trainees who go through industrial training have the skills to handle various tasks. As a result, many of them get hired and receive job offers after completing their studies.

Informant 1, 2, and 4

After finishing the agricultural certificate program, job opportunities are in line with the chosen specialization. For example, if someone focuses on landscaping, they might work with city councils or nurseries. There is still a high demand for TVET graduates with agricultural certificates.

Informant 1, 2, and 3

Yes, because I also received comments from the industry indicating that they prefer skill-based students over university graduates. From their perspective, there are fewer issues with tasks that involve dirty work. For example, in fisheries, there's a need to clean tanks, deal with shrimp waste, and handle leftover food that can sometimes have a strong odor. They mentioned that skill-based students are more willing to perform these tasks compared to university students who might be reluctant.

Informant 1, 3, 5, and 6

Diversifying Skills through Value-Added Courses

Additional courses are introduced for TVET students to broaden their skills beyond their main area of study, aiming to boost the acknowledgment of their certificates. According to the informant:

"We also have value-added courses. In the operational syllabus of our fisheries program, there is a section on maritime operations. In this maritime field, we cover boat handling and similar aspects. For example, basic training is essential for those who want to work on ships, whether in fishing vessels, merchant ships, and so on. The certificate is acknowledged, providing them with better job opportunities.

Informant 1, 2, 3, 4, 5, 6

The importance of stakeholders' role

Promotional Approach

One method to change the negative perception of TVET is through early promotion in schools. This approach aims to engage parents in understanding the significance of TVET and assists students

in planning their educational progression effectively. As stated by the informant:

"In my opinion, promoting TVET at schools is crucial because sometimes parents may not fully understand TVET. Most of us tend to think that after SPM, the next step for our children is matriculation, a diploma, and so on. However, when it comes to TVET education, many parents may not be familiar because there is a lack of exposure to the various TVET programs available. In my view, schools should actively engage parents by inviting them to school events, as parental support plays a key role in encouraging students to explore skill-based fields."

Informant 3, 4, 5, and 6

To change the mindset of the community, we need to approach them directly. One way is by actively promoting our institution, namely TVET. In our Kolej Pertanian Malaysia, we also go out to promote our college. If the community perceives agriculture as tricky or difficult, we alter that perception during

promotions. For instance, during the state-level Farmers' Day in Kedah, we showcase the technological advancements in agriculture.

Informant 1, 2, 4, and 5

Alumni Platforms

Alumni play a crucial role in diminishing negative perceptions of TVET by sharing insights on becoming entrepreneurs. All the knowledge shared by alumni serves as valuable guidance for students in career planning, and some alumni even assist students in job hunting. As stated by the informant:

Okay, we leverage our own alumni platform because alumni are actually among the best examples. For instance, there's an alumni entrepreneur who ventured into poultry farming after graduating from the institute. Even when featured on TV interviews, they proudly mention their educational background here. With the knowledge they gained, they've become successful entrepreneurs."

Informant 1, 2, 3, 4, 5, and 6

Another approach we take is through our alumni network. All job opportunities and promotions related to employment are shared within the alumni community. From there, we assist former students who are still seeking employment. We connect them with potential opportunities. Sometimes, employers directly contact us, expressing interest in interviewing and offering positions to our students.

Informant 2, 4, and 5

Involvement of the industry

Furthermore, industry involvement is crucial in diminishing the perception that TVET is a secondary choice for education. The industry's active participation, backed by their experiences, serves as evidence that TVET is a commercially viable field.

"Conversely, we actively seek feedback from both our student body and the industry, which includes not only students but also farmers. Our instructors, who are industry experts, provide invaluable insights and comments, particularly for those seeking to enhance their skills in farming. These experts, being practitioners in the field, actively encourage fellow farmers to consider enrolling in our institution. By sharing their firsthand knowledge, our instructors serve as a compelling endorsement, making our institution a preferred choice for those looking to advance their expertise in agriculture."

Informant 1, 2, and 5

Recommendations towards improving technical and vocational education in Malaysia

Empowering the issue of student competency in communication and mathematical skills

According to the informants, students' communication and basic mathematical skills should be prioritized to become exemplary for TVET graduates. Based on the needs of industrial development, the skills and effectiveness of a country's workforce depend on the quality of its education and training (Stephen, 2020). Informant state:

"Student's confidence is quite important.... their communication needs to be improved..... when we want to ask them to speak in front of people who are not confident... so we have to do more public speaking"

Informant 1, 5, and 6

Our students lack self-confidence...that is indeed the main problem...so here we train our students in public speaking.... So, in every subject we have a session where our students compulsory to speak.

Informant 3 and 5

Mathematical skills are quite important and should be mastered if you want to become an entrepreneur

Informant 4, 5, and 6

Mastering technology knowledge among educators

TVET educators should be more aware of the latest technology applications so that they can help students carry out projects and meet the needs of industrial technology. Students nowadays seem very interested in technological developments and the TVET syllabus should adapt to the current technological developments. In addition, TVET, also known as skill-oriented education, became the focus of both developed and developing countries in order to meet the rising demand for a highly competent workforce with sophisticated skills (Yusof et al., 2020).

TVET syllabus should be in line with the industrial demand with technology adaptation.. technology adaptation should be acknowledged among educators..otherwise we can't give the real picture in the TVET arena and not up to date with the current technology

Informants 2, 4 and 6

Any program syllabus based on the latest technology nowadays.... students are attracted to technology...we apply it to our syllabus...an active discussion should be discussed with the related party such as the Ministry of Education, agriculture etc...

Informants 1, 2, 3, and 5

Improve the system of job management

According to the informants, governments should empower and strengthen the quality of primary factors of production especially in the agricultural sector. In addition, Tax exemption for industries that employ local workers should be introduced later because it can attract students' attention to working in the TVET sector. The impact is that local workers' salaries might increase. Lastly, the government should restore the payroll and financial system because few industries are still practicing the daily salary system. This situation is related to the study by Salleh & Sulaiman (2020) when TVET has reached a new height in the global context as one of the factors contributing to expanding businesses and employment opportunities in the global skills race in human resource development. Informants stated;

In agriculture this college already includes what the industry requires and they can become entrepreneurs... If the government does not monitor the factors of production, students will lose his interest to become entrepreneurs. Entrepreneurs related to the high quality of factors of production.

Informants 1, 2, and 6

These local workers have to have holidays, pay full salary, have SOCSO, EPF, etc... so the majority of the industry does not apply those things... there is no solid policy on the part the government itself...for example, in the electronic industry, the government pays a kind of pocket money to the workers, but in the agricultural sector there is no systematic method

Informants 5 and 6

Tax exemption for the industry itself that hires local workers... this is actually an opportunity, so they will increase workers' wages...

Informants 2, 3, 4, and 5

CONCLUSION

This result indicates the perspective of educators on TVET in Malaysia. These insights encompass identifying

areas that need reconstruction for improvement, enhancements to existing practices, and the removal of elements that may be hindering the effectiveness of the TVET system. The objective for restructuring/ rebranding should be to centralize the supervision of TVET under a cohesive governing body, promoting enhanced effectiveness, synchronization, and uniformity throughout the system. Through the establishment of a more integrated governance framework, Malaysia can improve its capacity to efficiently address the changing requirements of industries. Optimize the allocation of resources, and align Technical and Vocational Education and Training (TVET) projects with wider national development objectives. The existing challenges within the TVET organizational structure in Malaysia, as highlighted by the absence of a singular authority and the decentralized nature of governance, underscore the imperative for reform. This research delves into the complexities of the matter, drawing attention to the need for a more integrated and streamlined approach to TVET governance to ensure the sector's effectiveness and relevance in the rapidly changing landscape of education and industry. TVET has gained traction and is being promoted as a way to address both the current and future demands of the labor market (Chukwu et al., 2020).

In short, the upcoming launch of the National TVET Policy and my next TVET initiative represents a progressive move to enhance technical and vocational education in Malaysia. These initiatives focus on fostering collaboration, improving industry relevance, and leveraging advanced technology for talent management, all aimed at strengthening the TVET sector and cultivating a skilled, adaptable, and competitive workforce. Essentially, these reforms showcase the MADANI Government's strategic vision to align education with evolving workforce demands. The emphasis on practical skills alongside theoretical knowledge underscores a commitment to producing graduates well-prepared for the dynamic job landscape. The collaborative efforts between state and federal governments, coupled with proactive measures to boost TVET enrollment, highlight a forward-thinking strategy. This not only addresses immediate workforce needs but also contributes to long-term economic sustainability. Sarawak, through these comprehensive reforms, aspires to play a crucial role in shaping a skilled and adaptable workforce, making a significant contribution to the nation's overall growth and development.

Looking ahead, a future study is imperative to rebrand the image of TVET in Malaysia. This study can delve into innovative strategies for improving the perception of TVET, addressing the prevailing misconceptions, and highlighting the diverse and rewarding career opportunities it offers. The collaborative efforts between state and federal governments, coupled with proactive measures to boost TVET enrollment, highlight a forward-thinking strategy. This not only addresses immediate workforce needs but also contributes to long-term economic sustainability. From the discussion above, this study supports the National TVET Blueprint 2018–2025, which aims to give graduates pathways to employment or additional education by matching TVET degrees with industry requirements (Kamarudin, 2022)

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