

## **TVET in Malaysia: Current Situation, Challenges and Recommendations**

*By Fauwaz Abdul Aziz (Projects Researcher, Penang Institute) & Nadya Subramaniam (Programme Manager, Asia Foundation)*

### **Executive Summary**

- Technical and Vocational Education and Training (TVET) has interestingly been touted a ‘game changer’. A research project by The Asia Foundation and the Institute of Public Policy & Management at Universiti Malaya, in which Penang Institute personnel is involved, has reviewed the situation of TVET in the country, and proposes the following for its improvement, framed in terms of five areas: Governance, Industry, Quality Assurance, Funding/Finance, and Branding/Perception.
- An audit of the TVET system that covers all ministries is required, following which rationalisation of the institutional framework should be carried out. This is to enhance: collaboration between ministries and industry; shared responsibility and autonomy for state, district, and local authorities to engage in TVET; engagement with regional economic corridors, and: inter-ministry data-sharing to support effective decision-making.
- Industries should be accorded a more prominent role in steering the national TVET agenda. Expansion of partnerships with industry (beyond student internships) and of the TVET curriculum is needed, alongside innovative methods such as student mentorship, project-based learning and guest lectures.
- A single quality assurance system can strengthen the quality of TVET graduates and mainstream TVET pathways. A revision of the current remuneration scheme and training opportunities to attract and retain well-qualified personnel as TVET trainers will also be critical.
- Funding from the government should be performance-based to spur more result-driven and collaborative actions between TVET providers, the local community and industries.
- Collaborative community projects being held at TVET institutes can help create linkages to improve public perceptions of TVET.

# TVET in Malaysia: Current Situation, Challenges and Recommendations

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## Introduction

Technical and Vocational Education and Training (TVET) in Malaysia is an area that is receiving increasing attention, with time, energy and resources dedicated to TVET development having consistently grown over the last decade. With the recognition that TVET has the potential to drive the economy and social development to new heights, TVET has been touted a ‘game changer’ by various stakeholders, and efforts for improvement of the TVET system in the country have been well underway.

This paper provides an overview of what a research project by The Asia Foundation and the Institute of Public Policy & Management at Universiti Malaysia (TAF-INPUMA) found in terms of the current situation and challenges facing TVET in Malaysia, and the recommendations for its improvement. These are framed in terms of five areas: Governance, Industry, Quality Assurance, Funding/Finance, and Branding/Perception.

## The Current Situation

### *Governance*

The increased focus on TVET in recent years are reflected in TVET’s increased role and prominence in the 11th and 12th Malaysian Plans (2016-2020 and 2021-2025, respectively). For many decades, the Ministry of Education, Ministry of Higher Education and Ministry of Human Resources have often been the public faces in all matters TVET. A dozen other ministries and as many as 20 government bodies, however, have also long had their own TVET programmes that they operate independently and with different standards (such as for capacity planning, recruitment and training, and curriculum development). These range from the Ministry of Youth and Sports and the Ministry of Agriculture and Food Industries to the Ministry of Works and Ministry of Rural and Regional Development—and the plethora of sub-ministry bodies such as the Rubber Industry Smallholders Development Authority (RISDA) and MARA. This is in addition to the hundreds of private TVET providers about whom very little information about their operations, performance and standards have been gathered.

In other words, a major challenge facing the governance of TVET in Malaysia is the spaghetti-bowl of overlapping jurisdiction and standards and the lack of one lead agency to champion and coordinate

the national TVET agenda. In such a situation, each TVET institute tries to offer a wide variety of courses, resulting in a duplication of offerings, which is especially apparent in situations where there are TVET institutes from differing ministries within close geographical proximity to each other. Although the National Occupational Skills Standard (NOSS) is available to provide a framework for the recruitment and training of TVET instructors and trainees, some ministries prefer to operate independently and to keep their existing standards. There is also a lack of a sound and coherent information management system across all ministries involved. In some cases, the bodies operate in silo while in other cases, they work in competition with each other. Furthermore, important political actors such as state governments and district and municipal/town councils, and economic programmes such as the five Regional Economic Corridors, have yet to be clearly and systematically integrated and engaged in the project of developing national TVET.

### ***Industry***

TVET in Malaysia originated from the colonial and early post-colonial governments' need for trained technicians and administrators for state agencies and projects. Over the last few decades, the TVET system has shifted notably towards collaboration with industry players and incorporating and integrating the latter's needs and goals into TVET planning. The Human Resources Ministry's Department of Skills Development (DSD) regularly engages with industry to gain input on programmes. The Sistem Latihan Dual Nasional (National Dual Training System, SLDN) was established to increase collaboration with industry and provide work-ready TVET graduates.

At the level of individual TVET institutes and programmes, there are engagements with industry at different levels. Several small private TVET institutes, often with industry parent- or partner-organisations, provide skilled workers who meet industry needs, thus ensuring their students' employability. Such close ties enable the institutes to secure machinery well-aligned with current industry usage, sometimes donated by industry partners, further strengthening their trainees' competency. TVET providers that are successful in meeting industry's expectations, like the Penang Skills Development Centre (PSDC) and Germany-Malaysia Institute, attribute their success to high mutual accountability where industry is the main driver of curriculum design and delivery. Large-scale collaborations with industry have shown success in the past, for example, the Malaysian Plastics Manufacturers Association (MPMA) collaboration with the Economic Planning Unit (EPU) in 2012 and 2017 for talent development for the plastics industry, using both local and international expertise. Based on a recent Auditor General's Report, current employer satisfaction with TVET graduates' outcomes is 88.5%.

Among the feedback acquired from industry about these engagements, however, is the worry that industry players are seldom and unsystematically invited to engage in the development of TVET programmes, such as collaborating on institutes' initiatives.

On the other side of the coin, industry players often express not seeing clear returns on their investment if they collaborate with ministries and other stakeholders on TVET. Industries are especially wary about the complicated bureaucracy involved.

The lack of adequate collaboration with industry has led to a mismatch between the skills of many TVET graduates and the needs of the industry, causing employers to spend time and resources retraining their fresh hires. This in turn has led to the unwillingness of industry to offer high salaries to fresh TVET graduates.

There are also reports of a lack of facilities and amenities in public TVET centres, especially, perceived as being due to a lack of importance on equipping TVET providers with the training environments needed. Another challenge is that many public TVET institutes have not developed a customer-centric mindset as their core operating principle, contributing to a lack of emphasis on collaboration with industries.

### ***Quality Assurance***

Two accreditation bodies are primarily responsible for quality assurance of TVET programmes. The Human Resources Ministry's Department of Skills Development (DSD) performs accreditation for the skills sector, whereas the Education Ministry's Malaysian Qualifications Agency (MQA) accredits the vocational and technical sector as well as the academic sector. The Malaysian Qualifications Framework (MQF) combines both these accreditations into one cohesive framework with clear articulations and equivalencies. This revised MQF combines under the term TVET skills, vocational, and technical education, with accredited courses up to the undergraduate level.

In the last two years, there have been other efforts to align TVET under one coherent framework, such as the Code of Practice for TVET Programme Accreditation (COPTPA), which aims to ensure the quality of all TVET programmes, regardless if they are skills, vocational or technical programmes. The National Occupational Skills Standards (NOSS) outlines the curriculum framework for the whole country, although the actual syllabus for courses – while based on the NOSS – differ from one institute to another. Finally, clear frameworks have been established for the approval of any training programme.

Among the challenges of quality assurance, however, is that even with the accreditation of TVET as a single pathway under the MQF, there has not been a full integration between the skills education sector (governed by DSD) and the vocational and technical sectors (governed by MQA). There are also significant differences in perception of quality between programmes, depending on the awarding body. TVET programmes which should have received full accreditation at this point, for example, are still operating with partial accreditation. There is little sharing of best practices among governing bodies and individual TVET institutes. The lack of industry involvement in curriculum design has led to a mismatch of skills between TVET graduates and the needs of industry.

Furthermore, although TVET institutes refer to the NOSS, the standard only provides the competencies required, not the syllabus-specific details needed for each programme. Thus, there is a large disparity in the outputs of different TVET institutes, creating a situation where some employers have more trust in the individual TVET institute's internal standards than in the certification itself. In the higher-level (diploma and undergraduate) courses, there is often a tendency towards 'academic'

instruction, leaving students short of the practical skills needed by industry. Employers have reported lack of life skills and English proficiency among TVET graduates.

Meanwhile, training providers seldom track the employment destination of their graduates, and so are unable to take advantage of employer feedback to improve the quality of their training. There is a difficulty for institutes to secure suitably qualified instructors to lead niche courses.

As for TVET instructors, there is a significant variation of quality among them, caused by the lack of upskilling to meet changing industry needs. There is therefore a need for further professional development for these instructors to improve their pedagogical and educational management skills. The lack of career progression pathways deters high quality candidates from joining as instructors.

Another challenge is the moribund state of the data management system for assessing TVET staff competency and professional development, much of which have fallen into disuse. The existing system capability is such that it is unable to store more than one year's worth of data.

Many TVET students, meanwhile, struggle to transition from skills training to academic-stream higher education despite the existence on paper of articulation pathways. The Malaysia Technical University Network (MTUN) provides opportunities for TVET students to pursue tertiary education (such as the Bachelor of Technology programme). However, these courses are limited to a few disciplines and have graduated only a few hundred graduates since MTUN's inception.

### ***Funding/Financing***

Funding of TVET in Malaysia comes mainly from direct allocations from the government to public TVET institutes via the participating ministries. Alternate funding sources affect mainly the private TVET institutes, which leverage funding under the Human Resources Development Corporation (HRD Corp) and fee-paying students. TVET is funded by the government through allocations to the ministries of education and human resources, as well as the other ministries whose agencies operate TVET centres.

Private TVET institutions are funded through student fees as well as the HRD Corp. The HRD Corp, under the Ministry of Human Resources, operates a levy/grant system by which private employers are charged between 0.5-1% of payroll, and training grants are provided in return.

Students pursuing their Sijil Kemahiran Malaysia (Malaysian Skills Certificate, SKM) and Diploma Kemahiran Malaysia (Malaysian Skills Diploma, DKM) and Diploma Lanjutan Kemahiran Malaysia (Malaysian Advanced Skills Diploma, DLKM) receive federal funding, regardless of public or private pathways, through a loan covering their tuition fees and an allowance through the Perbadanan Tabung Pembangunan Kemahiran (Skills Development Fund Corporation, PTPK). PTPK was allocated RM1 billion under the 11th Malaysia Plan (2016-2020) to help students from the low-income (B40) group undergo skills training until the diploma level in private institutions.

Finally, the Sistem Latihan Dual Nasional (National Dual Training System, SLDN) incentivises trainees with an allowance during training. In this system, the company takes on a large portion of hands-on training, while the TVET institute focuses on theory. Companies that participate can utilise the HRD Corp for this training, and also qualify for income tax deductions.

Among the concerns that have been raised by stakeholders engaged by the TAF-INPUMA research project concern the funding model for TVET. Although allocations have been large, many claim that model is not cost-effective due to the redundancies mentioned above. As mentioned earlier, there is a lack of facilities and amenities in public TVET centres despite significant public funding allocated to TVET.

Only 10,000 students a year are trained through the SLDN system, thus leaving a large part of the TVET students funded in the traditional system.

The state and effectiveness of data management are also a concern, particularly on the issue of programme and financial performance. The lack of a sound information management system has hampered the government's ability to effectively monitor the allocations given under the PTPK. Late and non-repayment of loans by graduated students have put financial pressure on PTPK. Finally, a large portion of TVET students are in the lower-income group and have suffered from the insufficient allowances provided to them by the PTPK.

### ***Branding and Perception***

Branding of TVET is closely tied to the overall perception of Malaysians towards TVET. As in many (but not all) countries, TVET suffers from a lower or negative image compared to the more theoretical or 'academic' education in most universities. Through the years, there have been attempts by the government to mainstream TVET as a pathway of choice for youth. However, the perception perpetuates that TVET qualifications lead to lower prestige, earning potential and job satisfaction. More than 50% of the enrolment of TVET centres interviewed for our research were students from the 40% lowest earning segment (The 'Bottom 40', B40), further cementing the belief that TVET is for families with fewer options. There has been a notable positive shift, with recent surveys revealing that young job seekers view TVET as the most useful qualification in getting a good job. While there are no gender restrictions for TVET enrolment, there are attempts made toward gender equity and social inclusion through special programmes organised by the relevant ministries to encourage TVET participation among female students, disabled students and indigenous people. Racial quota systems for enrolment as well as minimum physical entry requirements remain.

Up until recently (with the set-up of the national-level TVET Council in 2021), there has been a lack of a national TVET branding strategy that cuts across all ministries. This has caused the fragmentation of perceptions towards TVET, as well as the absence of a national TVET identity or brand.

Furthermore, clear guidelines for the acceptance of a wide range of TVET graduates with the Sijil Kemahiran Malaysia (Malaysian Skills Certificate, SKM) qualification was only outlined by the

Jabatan Perkhidmatan Awam (Public Service Department, JPA) in 2011. Thus, there has been a lingering perception that there are limited options for TVET graduates as civil servants.

Although there are no gender restrictions in TVET enrolment, the proportion of women is significantly lower, except in certain niche courses.

A major concern relates to the apparent lack of interest among non-Bumiputera students to take up TVET as a post-secondary occupation. Not enough is being done to attract students of minority races to consider a TVET qualification. Although there have been efforts to highlight inclusivity in recent years, public suggestions that TVET programmes are for dropouts and academically underperforming students contribute to the perpetuation of negative perceptions. This is compounded by the lack of recognition by the government, industry and Malaysian society in general of technologists and technicians as professionals. There is insufficient recognition, for example, (including by the government) for winners of national and international skills competitions.

## **Recommendations**

Having laid out the situation and presented the challenges facing TVET in Malaysia, we conclude with the recommendations on going forward.

Most generally, an overall audit of the TVET system should be undertaken that covers all ministries and that identifies how the system of governance system can be improved. The institutional framework should be rationalised to reduce the number of agencies engaged in managing TVET as well as to ensure that Malaysia's skills development efforts align with national socio-economic priorities. Strategic collaboration across ministries and support of industry will then hopefully improve. There is also a need for shared responsibility and more autonomy to be given to states and district and local authorities, as well as engagement with the regional economic corridors. A whole-of-government as well as whole-of-society approach should be promoted to forge partnerships and strengthen the TVET system. Increased inter-ministry data sharing would be important to support effective decision-making.

To tackle challenges relating to industry involvement in TVET, industries should be accorded a prominent role in steering the national TVET agenda, instead of merely being 'invited to collaborate'. TVET institutions should be empowered and incentivised to engage with their stakeholders, especially industry partners. Innovative approaches that would expand partnerships with industry beyond student internships and curriculum development should be promoted. Innovations should include, among others, student mentorship, project-based learning and guest lectures.

To improve quality assurance of TVET, a single quality assurance system, as recommended in the mid-term review of the 11th Malaysian Plan, should be promoted and implemented that would strengthen the overall quality of the graduates and subsequently, to mainstream TVET pathways



comparable to academic pathways. Beyond the Code of Practice for TVET Programme Accreditation (COPTPA) that was developed to operationalise the single quality assurance system for TVET programmes, a rating exercise should be undertaken on all TVET providers to enhance the overall management of TVET (besides providing feedback to the public on the quality of the TVET providers). A review of all approved TVET courses based on established protocols and end-user (industry) participation has been planned, but the tool for performing this review (e.g. balanced scorecard) has not yet been released. Audit reviews should be carried out, at the appropriate frequency, of selected TVET providers in order to assess, for example, course alignment with industry requirements.

The current remuneration scheme and training opportunities should be revised to attract and retain well-qualified personnel as trainers in TVET institutions. TVET providers' capacity could also be used to effect changes through strategy, leadership, organisational design and training of personnel.

On funding and financing, efforts should be made to explore the setting up a TVET system in which both industry and government play integrated and complementary roles and which can be more cost-effective and relevant than the current funding model and processes. Funding mechanisms should be created that are in alignment with national priorities, such as the development of capabilities in emerging and 'IR 4.0' technologies. Performance-based funding from the government should be undertaken to spur TVET providers to be more results-driven and collaborative with the local community and industry. Fund matching and other schemes should be implemented that would promote engagement with all stakeholders and enhance the relevance and effectiveness of TVET programmes. Lastly, there should be more efforts to collect loan repayments from graduated students who had received PTPK loans during their course of study.

All efforts to revamp the TVET system as the preferred education pathway must be accompanied by focused national-level branding initiatives targeting specific groups, such as students, parents and industry. TVET should be highlighted as a potential incubator for entrepreneurs in order to attract more high-quality students. Collaborative community projects at TVET institutes should be encouraged to create linkages with the local community and improve the perception of TVET. Finally, the participation of TVET trainees in national and international skills competitions should be promoted through new and traditional media to raise the image of TVET, thus motivating more youths to enrol into TVET programmes.

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THE AUTHORS have been involved in a research partnership formed in early 2021 between The Asia Foundation (TAF) and the International Institute of Public Policy and Management (INPUMA), University of Malaya, to understand the critical constraints and challenges facing TVET in Malaysia, in order to support the growth and improvement of the system. Funded by the Australian Department of Foreign Affairs and Trade, the research involved engaging with diverse stakeholders in the national TVET system in interviews, focus group discussions, a policy lab, and site visits. The stakeholders



ranged from TVET students, instructors and administrators to government officials, institutional representatives and industry players. The outcome was the publication, in January 2022, of Recommendations Towards Improving Technical and Vocational Education and Training in Malaysia, which assessed the national TVET ecosystem and proposed ways to improve that system.

The complete report can be downloaded at:

***<https://asiafoundation.org/publication/recommendations-towards-improving-technical-and-vocational-education-and-training-in-malaysia/>***

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