Public Private Partnerships
For TVET in Malaysia

A case study for the Dakchyata: TVET Practical Partnership project

May 2018

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1. Summary

### Key Features

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<th>In 2010 there were 270,000 students in the TVET system with 70% of those in government funded institutions</th>
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<td><strong>Main Policy Drives</strong></td>
<td>A national agenda on human capital development, aiming to create over 1.5 million new jobs by 2020 and to increase the percentage of skilled workers to 35%</td>
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<td><strong>Strength of link between TVET and growth and industrial strategy</strong></td>
<td>TVET and skills are formal policies with targets in the 2020 plan and Economic Transformation Plan</td>
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<td><strong>Level of Centralisation</strong></td>
<td>Multiple ministries oversee TVET programmes and each of the thirteen states also has TVET institutes under its jurisdiction</td>
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<td><strong>Level of public trust</strong></td>
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<td><strong>Quality of monitoring and evaluation</strong></td>
<td>The existence of two different accrediting bodies has led to confusion and concerns about the varying quality of the programmes and the mobility of TVET graduates</td>
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<td><strong>Areas where PPP applied</strong></td>
<td>Policy, initiatives and implementation attempts at PPP have been widespread</td>
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<td><strong>Primary source of public funds</strong></td>
<td>Central government. A levy system exists for large firms that benefits SMEs also. This is the main support for PPPs</td>
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<td><strong>Effectiveness</strong></td>
<td>The curricula of colleges, technical schools and polytechnics still has little industry perspective or up-to-date industry knowledge</td>
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2. Social and economic landscape and key challenges

- Malaysia is a federal state made up of 13 states and 3 federal territories. It is divided into two parts, East Malaysia and Peninsular or West Malaysia. The population of Malaysia as at 2015 is 31 million. The GDP per capita of USD10.2k makes it a rapidly developing middle-income economy in Asia, emerging into a multi-sector economy. Malaysia has a predominantly rural population, with under 40% living in the urban areas. Industrialization has been rapid since independence in 1957. Rural-urban migration has responded to this, but skill shortages have always been perceived as a problem.

- A reliance on labour intensive industries has created a labour shortfall that has been made up by foreign contract labour. Foreign labour has come to account for a sixth of total employment.\(^1\)

- At the federal level, multiple ministries oversee TVET programmes run in institutes under their control, and each of the thirteen states also has TVET institutes under its jurisdiction. In addition to these public sector institutions, there is added an unknown number of private

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\(^1\) World Bank SABER COUNTRY REPORT | 2013
sector institutions regulated by the Ministry of Education, giving rise to an overall system that is highly fragmented.2

2.1 Skills crisis
In 1991, a strategic vision was launched to transform Malaysia into a knowledge-based economy by the 2020. With less than four years to go, Malaysia remains largely reliant on unskilled and semi-skilled workers with labour productivity that lags far behind that of most developed economies. Like many other economies, Malaysia also faces the conundrum of high youth unemployment in the midst of skills shortages (World Bank, 2014). Although an estimated 60% of new jobs will require skilled labour, the Ministry of Education (MOE) (2013) states that technical and vocational education and training (TVET) will continue to play a subordinate role to academic education. Malaysia has also been dried out by the brain drain, as qualified and highly skilled workers flock overseas to seek better career opportunities, which arise because they are considered relatively well trained.

While the government has been trying to raise the skills level of the labour force by broadening access to TVET, the take-up rate has been low. According to Malaysia’s Economic Planning Unit, only 10% of students enrol in upper-level secondary technical and vocational education.

3. Policy environment, current TVET Structure and PPPs
- Malaysia’s Human Resource Development Fund (HRDF) has a national agenda on human capital development, which aims to create over 1.5 million new jobs by 2020 and to increase the number of skilled workers to 35% of the total labour force by 2020.

- Quantitatively, Malaysia suffers from a shortage of labour, while qualitatively the skills of the country’s labour force leave much to be desired. There has been high demand for labour resulting from years of rapid economic growth and there is continued reliance on labour-intensive industries, which has created a labour shortfall that has been made up by foreign contract labour.

3.1 The Economic Transformation Program
The Economic Transformation Program is an initiative by the Malaysian government to turn Malaysia into a high income economy by the year of 2020. It is managed by the Performance Management and Delivery Unit (PEMANDU), an agency under the Prime Minister Department of Malaysia. The programme provides strong focus on key growth engines via the 12 National Key Economic Areas (NKEAs) – one of which is education. As part of this Entry point projects (EPPs) are projects that should generate big results fast. They are clearly defined initiatives that have potential investors already identified, a well-developed implementation plan and funding requirements clearly articulated. Entry Point Project 5 for Education is “Scaling Up Private Skills Training”. This EPP aims to reduce the percentage of low-skilled and semi-skilled workers from 76% in 2009 to 50% by 2020 by providing post-Sijil Peperiksaan Malaysia (SPM) students or school-leavers with more opportunities to pursue vocational education. To this end, the Government has allocated funding to the Skills Development Fund to spur quality training through private accredited centres.

TVET as well as skill training in Malaysia are offered by various types of educational and training institutions, but public institutions play the leading role. All skill training-related standards and certification are coordinated by the National Vocational Training Council (NVTC), which includes


3 Malaysia’s Education Crisis – Can TVET Help? Kee-Cheok Cheong*University of Malaya
representation from the government and the private sector.

TVET is offered by polytechnics, technical institutes or colleges, and community colleges. Vocational skills training is undertaken by institutions, both public and private. The graduates from these institutions take up employment in skilled and semiskilled occupations. This pillar is likely to contain providers outside the formal system and not licensed by, or registered with, the government.

3.2 Education Blueprint

Launched in September 2012, Malaysia’s Education Blueprint 2013 to 2025 is intended provide a comprehensive framework to support “the rapid and sustainable transformation” of the country’s education system to enable Malaysia “to compete with the best in the world. It proposes a comprehensive transformation programme built around 11 major “shifts”. These are to:

1. provide equal access to quality education of an international standard;
2. ensure every child is proficient in Malay and English;
3. develop value-driven Malaysians;
4. transform teaching into the profession of choice;
5. ensure high-performing school leaders in every school;
6. empower education agencies and schools to customize solutions based on need;
7. leverage ICT to scale up quality learning;
8. transform ministry delivery capabilities and capacity;
9. partner with parents; community and private sector;
10. maximize student outcome efficiency; and
11. increase transparency for direct public accountability.

(Source: Government of Malaysia (2012)

It should also be noted that strategies to have been drawn up in Malaysia Education Blueprint 2013-2025 supports the TVET agenda and the System Structure through enhancing the “Vocational Education Transformation Plan” within which “greater collaboration with the public and private sector” are stipulated.

4. PPP Frameworks

In Malaysia there are 5 types of models that are implemented in connection with PPP⁴. They are:

1. Transforming- e.g. Langkawi Hotel Management
2. Buying places/buying places – MIAT, RANACO
3. National Dual Training System (NDTS), KV, ILP
4. Apprenticeship scheme to reskill/up skill workers MIA
5. Work based learning programme (WBL)- PUO, PIS,CC

4.1 Policy

National Dual Training⁵

While the National Dual Training System mandates extensive industry involvement, collaboration between the public and private sectors exists in other areas. There is industry involvement in curriculum development and internships as well as the incentive for industry provision of training under the Human Resources Development Fund. The genesis of the National Dual Training System (NDTS) was the strategy envisaged in Vision 2020 and given substance in in subsequent plans. The philosophy behind this is a “dual” learning environment of classroom and workplace for the delivery

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⁴ [http://edglossary.org/learning-experience](http://edglossary.org/learning-experience)
⁵ ANSSR: Enhancing the Quality and Relevance of Technical and Vocational Education and Training (TVET) for Current and Future Industry Needs-Phase 1 2014
of training. It consists of a two-year programme prepared by employers in collaboration with a training institution with 70 – 80 percent of the training undertaken in the workplace.6

National Dual Training System
The National Dual Training System is an industry-oriented training programme that combines workplace and institutional training. School leavers or existing workers who meet the criteria can be offered as apprentices by a sponsoring company to undergo training. A contract is signed between the company and the apprentices prior to the training. Apprentices are given certain amount of allowance throughout the training by the company and are obliged to work with the company upon completion if they are offered employment. The Department of Skills Development (DSD) is an agency under the Ministry of Human Resources which provides assistance and guidance to ensure that all companies participate in the National Dual Training System.

Skills Advisory Committees7
In relation to Industrial Participation in Standard and Curriculum Development, within the prescribed process, the NVTC works with skill advisory committees for each industry sector, made up of employers, practitioners or ‘Industry Experts’ as a formal part of the Labour Market Analysis process feeding directly into the Skills Development Advisory Committees that are responsible for the Occupational Analysis.

4.2 The Future of PPPs
The Faculty of Technical And Vocational Education, UTHM Associate Professor, Former (UTHM), Coordinator for UNESCO UNEVOC Malaysia produced the following in 2017 in relation to scaling up PPP in skills training.

Also, the following concepts are currently activated in order to build and sustain and PPP for TVET Trade Board

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6 Malaysia Workforce Development, SABER Country Report 2013
7 National Vocational Training Council
The construction industry is represented by a public-private Construction Industry Development Board, which has established skill standards for many trades and offers certification to domestic and foreign workers. However, this is the only industry sector that has created an independent organization; other sectors work through the Skill Advisory Committees, which are the main formal links between TVET and industry.

**SME scheme**
The HRDC has targeted SMEs with Training Needs Analysis (TNA) workshops and clinics to answer questions about different schemes across the country as well as assistance in the purchase of training aids and for setup of training rooms. More recently, it introduced the Joint Training Schemes (JTS) to promote group training for SMEs, and on a pilot basis, a Group Training Scheme (GTS) to encourage employer associations to play a greater role in developing training programmes for their members.

**Double Deduction Incentive for Training**
The Double Deduction Incentive for Training (DDIT) enables firms to deduct from their income tax returns a sum equal to two times their allowable training costs. Training may be conducted either at approved specialist or local institutions or by firms themselves as a part of in-house programmes subject to a rigorous approval procedure by the Malaysian Industrial Development Authority (MIDA). Since 1992, eligibility for the DDIT has been restricted to small manufacturing firms (employing fewer than 50 workers).

**Work Based Learning - Diploma Programmes in Community Colleges**
Work-based learning began with the rebranding of the regional Community Colleges where 33 companies including Government Linked Companies consented to sign memoranda of understanding with the Department of Polytechnic and Community College Education to collaborate in areas of mutual benefits. Among the areas of collaboration are participation in curriculum development, curriculum implementation and student assessments. There is a one year industrial experience which is incorporated into the curriculum structure. The industries were involved in designing the assessment methodology and more significantly, the implementation of the curriculum itself. The companies participating in the programme are given priority in employing the graduates.

**‘B40’ Training**
Through the education and training programmes implemented at TVET Institutions, the government plans to train 300,000 Malaysians from the B40 (Bottom 40% income) Group by 2025. Public-private partnerships are being used to develop a skilled workforce will be strengthened through strategic collaborations. For instance, the industry can contribute expertise or machinery and equipment, for the training of skilled manpower in areas that are important from an industry and market perspective.

**SkillsMalaysia**
In 2011, the Department of Skills Development, under the purview of the Ministry of Human Resources, launched the SkillsMalaysia5 campaign to raise interest in TVET. As part of SkillsMalaysia, action has been taken to promote TVET through various media channels and skills competitions at both local and international levels. Additional initiatives seek to pave clear further-education pathways for TVET graduates. With the establishment of the Malaysian Technical University Network (MTUN) in 2006, graduates of public training institutes are able to pursue their studies at a higher level in four public universities and other selected universities in the technical field.
5. Funding

Malaysian Qualifications Agency (MQA) and Department of Skills Development are agencies under Ministry of Higher Education and Ministry of Human Resources (MoHR), respectively. Also the Human Resources Development Act (1992) funds the Human Resource Development Fund, known as Pembangunan Sumber Manusia Berhad (PSMB)) whereby the Human Resource Development Council distributes money to firms which they can use to train incumbent workers. Money is transferred by to the fund manufacturing firms, and the budget is subsequently spent by firms on apprenticeships and other training activities.

5.1 Human Resource Development Fund (Levy)

The Human Resource Development Council distributes money to firms which they can use to train incumbent workers. The Council is composed of a fixed number of employers’ representatives, governmental representatives, and independent members. The council collects a levy from employers and provides the money back to companies to pay for training in the workplace. Eligible employers with 50 employees and above are required to contribute 1 percent of payroll to the HRDF. The major sectors covered under the HRDA (PSMB) Act are manufacturing, services, and mining and quarrying, along with 19 sub-sectors. The HRDF provides its registered employers with various services in order to encourage them to retrain and upgrade the skills of their employees, apprentices and trainees.

5.2 SME Scheme

In 2014 after the HRDF found that there was an increasing amount of funds generated by the levy going unused, Malaysia launched a new programme to collect the unused portion of the monthly levies and to split this, with 70% invested into employer-led training and 30% to be invested into strategic training initiatives. Consortia of firms in the private sector (some, such as the Penang Skills Development Centre, involving collaboration of more than 50 firms) have emerged in response to the needs of industry.

5.3 Matching Grants

To boost collaborations, in Budget 2017, the government has allocated RM20 million (USD 4.7 million) for the purpose of making Matching Grants, where the government will contribute the equivalent value of contributions received from the industry for high impact TVET programmes that can be developed by individual organisation or collaborations. These grants can be utilised in joint ventures between public agencies and private sector. Also, industries are being encouraged to use the training facilities and expertise available at TVET Institutions for further developing their employees’ skills and competencies.

6. Implementation

The public sector’s engagement with industry remains superficial. The ad hoc nature of collaborations poses challenges to any effort to integrate the private sector into an inclusive national training framework that reflects genuine public-private partnership.

6.1 National Skills Development Council

The National Skills Development Council is the appointed body for approval of the National Occupational Skills Standards (NOSS). It has a codified 19 members of which “6 are members
representing the private sector”. Although the Council approves standards, the sectoral standards themselves are not developed using a set formula and have varying relationships with curricula in schools.

National Occupational and Skills Standards (NOSS)
NOSS are developed through a DACUM process based on occupational and job task analysis. NOSS can be developed the DSD or by external consultants, however, the development processes require a committee panel consisting of ‘industrial practitioners representing the major players in the respective industry, relevant authorities and professional bodies in the development of the Standard Practice (SP) and Standard Content (SC)’. The development of the Curriculum of Competency Unit (CoCU) should also include additional panel members who are involved in the training line of the respective industry.

Programme Standards
Programme standards are developed through a panel convened by the MQA. Panel members include MOHE, higher education providers (both private and public) and related industry or government agencies. Programme standards are informed by existing programme design, provider educational standards, and industry needs - as described by representatives - plus any professional bodies, or licensing and/or regulatory requirements.

6.2 Quality Assurance

Accreditation
There are two accreditation bodies responsible to assure quality of TVET programmes. The Department of Skills Development (DSD) performs accreditation for the skills sector and Malaysian Qualifications Agency (MQA) performs accreditation for the vocational and technical sector as well as academic sector. Both accreditation bodies refer to Malaysian Qualifications Framework (MQF) for the qualifications accredited. The existence of two different accrediting bodies has led to confusion and concerns about the varying quality of the programmes and the mobility of TVET graduates.

Qualifications
Participation by employers in quality assurance varies. It can include involvement in the development and review of standards, providing feedback to TVET providers on the preparedness for work of graduates, providing assessment contexts for work simulations, providing access to equipment and specialist workers, providing advice on assessment, and participating in evidence collection for assessment purposes.

Qualifications and industry qualification
For sectors such as the welding, electrical and some parts of the construction sectors and Non-destructive testing (NDT) sector, as well as for a few other skill sectors, the NOSS document in Malaysia provides employers the guideline in terms of training and examination requirements for their employees in order to be qualified and certified personnel in accordance to related standards and practices.

Assessment
In Malaysia, Technical and vocational providers are the qualification awarding bodies. For skills programmes based on NOSS standards, the Department of Skills Development, Ministry of Human Resources is the main awarding body. Assessments are undertaken by individual providers. For programmes accredited through MQA, assessments are internally developed and subject to codes of
practice (COPPA and COPIA), which requires student assessment processes to have external scrutiny (enhanced standard).

**Competence Development**

The National Development Planning Committee also established the Industry Skills Council (ISC), which enhances quality and delivery of TVET programmes to improve graduate employability by enabling industry-led programmes to reduce skills mismatch. The ISC, in collaboration with industry players, identifies relevant competencies for each sector and sub-sector. The Industry Working Group also recommends policies, strategies and action plans for the development of skilled and competent human resource for industry to ISC.

**Recognition of Prior Experiential Learning Scheme (RPEL)**

Introduced and implemented by the HRDF in 2009, the RPEL scheme allows eligible employers to apply for financial assistance in getting recognition for their employees’ skills and experiences according to the competency level of the employee. The Scheme enables workers to get recognition on their skills and competency according to the level determined by the Department of Skills Development (DSD). The RPEL is certificated through Approved Training Providers such as the Penang Skills Development Centre (PSDC).

7. **Lessons Learned**

There is a currently a mismatch between labour supply and demand in Malaysia because the labour supply lacks job readiness. The curricula of Malaysian universities, colleges, technical schools and polytechnics has little industry perspective or up-to-date industry knowledge. However, TVET and Skills are separate sectors with distinct accreditation in Malaysia. There is limited coordination and duplication of tasks spawning confusion amongst students and employers as to the value of different sets of diplomas.

With respect to the dimension of TVET system performance most papers used as a reference for this study suggest that Malaysia does not do well - indicating that policy formulation is not matched by implementation.

**Effective Partnership**

Building and sustaining a productive education-industry partnership requires commitment, time, effort and involvement. Some elements required for the effective partnership includes:

- Clear objectives
- Measurable outcomes
- Top management involvement and commitment
- Open dialogue and strategic discussions
- Effective sharing of resources
- Clarity of roles and mutual responsibilities, and
- Sharing achievements and challenges

**Constraints**

1. Reduce the project accountability
2. High risk relying on private sector
3. Very few schemes have actually reached the contract stage (aborted before contract)

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10 Constraints in implementing Public Private Partnership (PPP) in Malaysia Suhaiza Ismail and Fatimah Azzahra Haris Department of Accounting, Faculty of Economics and Management Sciences, International Islamic University Malaysia, Gombak, Malaysia
4. Lengthy delays because of political debate
5. Higher charge to direct users
6. Less employment positions
7. High participation costs
8. High project costs
9. A great deal of management time spent in contract transaction
10. Lack of experience and appropriate skills
11. Confusion over government objectives and evaluation criteria
12. Excessive restrictions on participation
13. Lengthy delays in negotiation
14. Lack of government guidelines and procedures on PPP
Annex

Case Studies

**INSTEP**
Established in 1981, INSTEP (*Institut Teknologi Petroleum PETRONAS*) was set-up with the aim to accelerate human capital development to support the growth of PETRONAS as well as Malaysia’s oil and gas industry. Currently, the training institute also serves international clients from more than 15 countries as part of its aspiration. INSTEP has since played a pivotal role in the oil and gas technical training services. One of INSTEP’s strengths lies in the customisation of learning programmes according to customers’ needs. Its flagship programme and instructors have accreditations from BTEC and OPITO, making INSTEP graduates globally marketable.

Other examples of such partnerships include a collaboration between PETRONAS and the Manpower Department’s (under the Ministry of Human Resources) Industrial Training Institute or ILP and Samsung Malaysia Electronics setting up Samsung Tech Academy at ILP to train skilled technicians.\(^\text{11}\)

**Penang Skills Development Centre (PSDC)**
The Malaysian-German Chamber of Commerce and Industry (MGCC) in cooperation with the Department of Skills Development of the Ministry of Human Resources (MOHR) and the German-Malaysian Institute (GMI) along with Penang Skills Development Centre (PSDC) implemented the German Dual Vocational Training (DVT) programme in Malaysia in June 2014 based on German training standards, a combination of 30% theoretical and 70% practical training in three commercial based programmes: Industrial Management and Logistics Operation Management; and Mechatronics.

**Work Based Learning (WBL) - Universiti Tun Hussein Onn Malaysia**
The Universiti Tun Hussein Onn Malaysia (UTHM) and others have a work based learning (WBL) programme. The programme aims to revitalise the TVET Teachers Training Systems in Malaysia through a PPP model, involving the private sector, public universities and the government. In cooperation with industry a new, integrated occupational-technical and academic curriculum has been developed, which contains elements of coordinated classroom and workplace learning.

**Proton (WBL) Scheme**
Since 2010 there have been two community colleges in Malaysia preparing students for the workplace in Diploma of Automotive courses: through a WBL programme with Proton Malaysia. Initially the Industry Advisory Committee was formed to establish a feedback system to further strengthen the establishment and implementation of the existing programme. The WBL course structure includes both guided lesson at the Proton Training Centre (PTC) and on-the-job training at Proton Edar Service Centres (PESC).

With this, stakeholders including students and lecturers in the two community colleges as well as training partners and employers (representing the Proton Training Centre and Proton service centres) collaborate to improve the programme. Using multiple techniques, including questionnaires, focus groups and individual interviews, stakeholders’ evaluations of the WBL programme are analysed. The analysis includes problems and successes in collaboration with industry, adaptations to the working environment, and anticipated technological changes in the Malaysian automotive industry.

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\(^{11}\) The Bourne Post online (2015)
Centre for Instructor and Advanced Skill Training (CIAST)
The Skills Development Advisory Committees is a process used by the Centre for Instructor and Advanced Skill Training (CIAST) which is under the aegis of the Manpower Department, Ministry of Human Resources of Malaysia and serves as a leading institution in the development and enhancement of skills training in Malaysia. The centre offers courses in Instructor Training, Supervisory Training and Advanced Skill Training for instructors, supervisors and skilled workers from the private and public sectors.
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