THE STAR
MONDAY, 20 JUNE 2016

RICH DIVIDENDS FROM VOCATIONAL EDUCATION TRANSFORMATION

The Star, Monday 20 June 2016

The Education Ministry's Vocational Education Transformation programme is elevating the prestige of technical and vocational education and training (TVET).

By MENG YEW CHOONG

THE transformation of vocational training in Malaysia through the Education Ministry's Technical and Vocational Education Division (BPTV) is slowly but surely yielding results.

The Vocational Education Transformation programme that began in 2012 to elevate the prestige of technical and vocational education and training (TVET) is in line with the thrust of the First Shift of the Malaysia Education Blueprint 2013-2025, which is about ensuring equitable access to world-class quality education.

This transformation reflects the Government's aspiration to produce competent manpower so that the country can be classified as a high-income nation by 2020.

Some of the measures undertaken by the ministry in producing technically trained people include upgrading 80 vocational secondary schools to be vocational colleges (KV). Since 2012, 15 KVs have been established, and the number ballooned to 80 by 2014. At the same time, six new KVs are currently being built under the 10th Malaysia Plan (2011-2015) at Kelantan (Pasir Puteh), Johor (Pagoh, Tanjung Piai, Pasir Gudang), Pahang (Pekan) and Terengganu (Kuala Berang).

Plans to build another five KVs have been submitted under the 11th Malaysia Plan (2016-2020).

According to BPTV director Zainuren Mohd Nor, the initial batch of pipe welders that the KVs are producing are highly marketable.

"I am proud of this success story, and wish to show to the world that we can produce highly competent welders who are fit to work in the oil and gas industry," he said at a press conference at his office last week.

Zainuren is not talking about structural welders who are often fabricators, such as those that merely join metal plates together, or those that make fancy metal gates and fencing.

"We are interested to produce graduates who are qualified to work in the oil and gas industry, where there is no tolerance for defects in the wells," said Roszida Othman, chief executive officer of the Vocational Education Training Academy Sdn Bhd (VETA), a private outfit that works together with the Education Ministry to uplift standards of vocational training.

In short, our KVs are now producing certified pipeline welders — people who are able to join and repair tubular products and metallic pipe components and assemblies as part of the construction of buildings, vessels, structures and standalone pipelines.

By deploying a variety of welding processes and equipment to suit a wide range of industrial and commercial environments, pipeline welders are versatile enough to join or repair pipes at difficult to reach positions as they have skills that are way superior compared to the typical structural welder or fabricator, enabling them to work in shipbuilding, automotive, construction, nuclear energy, and aerospace industries, as well as the armed forces.

Top guns in pipeline: (from left) Siti Sarah, Siti Nur Syamiza and Nurul Fatin Atikah have secured jobs as welders even before officially receiving their vocational diplomas in August.

My former students can earn about RM3,500 a month, excluding overtime, in an industry with a base pay of RM12 per hour.

Che Noorliati Said

However, pipeline welders are the most treasured in the oil and gas as well as power generation industry, which has a high requirement for safety above all else when they are called to work on oil rigs, gas pipelines (sometimes welding has to be done with gas supply running continuously) and refineries.

Welding is one of the most crucial operations in pipeline construction as getting it wrong can threaten the integrity of the entire pipeline and endanger the surrounding community.

Not anyone can be a pipeline welder as it takes time, intensive training and a lot of practice to produce the perfect weld — the kind of weld that positions someone at the high-end of the trade and meets the demands of industries obsessed with safety.

For starters, candidates must pass the industry standard 6G weld test. This is in an entirely higher plane compared to structural welding certification, with the latter being a "one position and rod angle at one time", while the 6G test combinates of all of the structural and pipe welding positions, with a full transition between them all. This means there is a "hard side" and easy side, depending on whether the person is left or right handed, as he will be thoroughly tested across the entire spectrum of dexterity and agility.

The test is arduous as pipe welding jobs do sometimes require the welder to alternate hands, use mirrors and weld in dark or cramped spaces in all positions.

"After that, he or she has to go for the Lloyd's Register certification test for welders, a globally recognised certification that open doors to virtually any pipeline welding job in the world," said Roszida.

However, this is not the end of the story if one wants a piece of action in the oil and gas industry, as each client has their own specific tests to assess candidate suitability.

"Following certification from Lloyd's Register, there is the client's test, which takes place after a two-day course at the client's facility," said Roszida, who added that Veta Malaysia worked with SapuraKencana Petroleum Bhd, a leading Malaysian integrated oil and gas services and solutions provider with a highly skilled multinational workforce of over 13,000 people in more than 20 countries, for job placements.

In this regard, the ministry is proud of three young women who proved their mettle in a class full of males, with all three of them securing jobs as welders with SapuraKencana even before officially receiving their vocational diplomas this August.

They are Nurul Fatin Atikah Mohd Zuljabar, Siti Sarah Mohd Samsuri and Siti Nur Syamiza Azua Ahmad, all of them 20, and who joined the KV after Form Three.

The third among nine children in her family, Siti Nur Syamiza, who hails from Kuala Berang, Terengganu, is the only one who took on vocational studies so far. Her interest in welding came about as her father is a full-time welder involved in fibreglass boat construction.

For Siti Sarah, welding suited her character. "I was offered culinary studies when I applied, but I wasn't interested as I was after the tougher and more challenging fields. So I chose welding," said Siti Sarah, who acknowledged that working in the oil and gas industry is a high-risk job.

"If the opportunity comes for me to learn underwater welding, I will give it a try. So far, I have only been welding on land-based sites, and have yet to work offshore," said the second child among four siblings who also wanted to prove her elder brother wrong.

"He also learned welding in the vocational secondary school, but stopped halfway as he did not think he will get anywhere. I showed him otherwise, and my younger brother is also in KV," she said.

The ministry receives over 100,000 applications for its vocational colleges but can only accept 25,000 to study there.

Zainuren Mohd Nor

We are interested to produce graduates who are qualified to work in the oil and gas industry.

Roszida Othman

"I was just told that my former students can now easily earn RM3,500 a month, excluding overtime, in an industry with a base pay of RM12 per hour," said Che Noorliati Said, director of KV Sungai Petani 1, where Siti Sarah and Nurul Fatin Atikah studied.

In fact, 45 of the 64 welding technology students at KV Sungai Petani 1 have received job offers already. Nurul Fatin Atikah is the daugher of a retired soldier who learned welding as part of preparations for him to re-enter civilian life.

"I did help him out from time to time, and my interest in welding grew from there. After Form Three, I applied to KV to study welding technology," she said, adding that her male colleagues have generally been helpful so far.

"I am still learning from seniors and veterans. For every joint I make, I ask for feedback from the foreman and older welders. In my one month there, some already say females can weld even better than some guys, and that is one of the encouraging things I take to heart.

"I also exchange tips with father, from where I learned some things. And I believe that my father gained something from me," said the second child among five siblings

Lest anyone be mistaken, the KV is not a factory that churns out tradesman and craftsmen like a "degree mill".

"A student needs four years of studies (to get a diploma), followed by four months of on-the-job (OTJ) training. which is compulsory. It is a precondition for obtaining the Diploma Vokasional Malaysia (DVM) at all vocational colleges," said Zainuren, who revealed that every year, the ministry receives over 100,000 applications for its KV, which can only take in about 25,000 to study programmes ranging from culinary skills to fashion to automotive repairs.

"If I have my way, I would be showcasing different vocational success stories each month. For the moment, we all can see that welding is indeed doing well."

PERPUSTAKAAN
PUSAT LATIHAN PENGAJAR DAN KEMAHIRAN LANJUTAN (CIAST)
SHAH ALAM