By MENG YEW CHOONG

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

The Vocational Education Transformation programme that began in 2012 and forms part of the strategic areas in the 2013-2025 master plan on 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 enhancing equitable access to world-class quality education.

This transformation reflects the Government’s aspiration to produce comprehensive manpower via vocational education and training (VET) in all the sectors of the country. Since 2012, 15 KVIs have been established, and the number ballooned to 66 by 2014. At the same time, six new KVIs are currently being developed under the Malaysia Plan 2010-2015 at Kuantan (Pahang), Seremban (Negeri Sembilan), Kuala Lumpur (Selangor), and Terengganu (Pekan and Kuala Besar).

Pipes to hold another six KVIs have been submitted under the 11th Malaysia Plan (2016-2020). According to KVPIB director, Zainun Mohd Nor, the initial basic or school stage when KVIs are producing are highly marketable.

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

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

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

In fact, many KVIs 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 their career path. Weldings, vessels, structures and standalone pipelines.

By deploying a variety of welding processes and equipment to suit a wide variety of applications in both commercial environments, pipeline welders are versatile enough to repair, install or install pipes at difficult to reach positions as they have skills that are highly sought after in the petrochemical sector.

By engaging them to work in shipbuilding, automotive, aerospace, oil and gas, industries, as well as the armed forces.

However, pipeline welders are the most sought 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 reportedly). 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 work 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 an entirely higher plane compared to traditional welding certification, with the latter being a "one position and rod angle" at one time, while the 6G test combines 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.

"After that, he or she has to go for the Loydos Register certification test for welders, a globally recognized certification that opens doors to virtually any pipeline welding job in the world," said Rosedia.

However, this is not the end of the story if one wades into an action in the oil and gas industry, as each client has its own specific standards to pass candidate suitability. "Following certification from Loydos Register, there is the client's test, which takes place after a two-day course at the client's facility," said Rosedia, who added that Maxis works with Supagasanna Petroleum, a leading Malaysian integrated oil and gas services provider. It has a highly skilled multinational workforce of over 13,000 people in more than 28 countries, for job placements.

In this regard, the ministry is ensuring that its pipeline welders have passed a stringent test of merit in a class full of males, with all three of them securing jobs as welders with Sapparatrooma even before official training exercises were held in Pekan this August.

"I met with Nurlatif Alkiah Mohd Zulhab, Said Sarah Mohd Saman and Suzan Nor Syarina Arul who had joined the KV in Pekan," said Rosedia.

The third among nine children in her family, Suzan Nor Syarina, who hail 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 in stainless steel construction.

For Sarah, welding suited her character. "I often watched culinary studies when I was young, but wasn't interested as I was after the tougher and more challenging fields." She chose welding, said Sim 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 pursue her older brother's line of work.

We also learned welding in the vocational secondary school, but stopped halfway as he did not thank he will get anywhere. I showed him otherwise, and my younger brother is still very much interested in welding," she said.

"I was just told that my father students can now easily earn RM3,500 a month, excluding overtime, in an industry with a base pay of RM2 per hour," said Nurlatif, director of KV Stangai, Pekan, who has received job offers already.

Nurlatif, the daughter 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 teacher colleagues have generally been helpful so far.

"I am still learning from seniors and veterans. For every J une 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 same things. And I believe that my father gained something from me," said the second child among five siblings.

I must be cautious, the KV is not a factory that churns out tradesmen and craftsmen like a "negeri mukat." "A student needs four years of studies (to get a diploma) followed by four months of on-the-job (OTO) training, which is compulsory. It is a precondition for obtaining the Diplomas Vakassialan Malaysia (DVM) at all vocational colleges," said Zainun, 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.

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