Home > Education

10 minute and above

E pry Assistant engineer, Khairul Anuar Othman, 25 at New Hong Fat, Klang. NSTP/Syarafiq Abd Samad

Industry-ready skills, technical knowledge for career progression

WHEN Khairul Anuar Othman, 25, sat the Sijil Pelajaran Malaysia (SPM) examination eight years ago, he never imagined he would one day become an assistant engineer.

All the young man from Kampung Meru in Klang, Selangor wanted was to get a job as quickly as he could.

"I am someone who just can't sit still with nothing to do. I knew that I just wanted to work after finishing school," he said.

And coming from a humble background, the SMK Meru, Klang school-leaver was adamant that he earned his keep and contributed to the family.

The fifth of six children whose father was a Pos Malaysia employee and mother, a housewife, had heard about Technical and Vocational Education and Training (TVET) at school during a talent recruitment initiative by New Hoong Fatt Holdings Bhd (NHF).

TVET encompasses formal and informal learning that prepares young people with the knowledge and skills required in the world of work.

NHF manufactures more than 3,300 automotive parts in-house and exports to more than 50 countries worldwide. It is located nearby Khairul's school and it frequently conducts TVET awareness programmes at schools in the area to develop its talent pipeline.

With help from NHF, Khairul embarked on his TVET journey — working while attending various apprenticeship programmes — and is currently employed by the company.

STEP BY STEP

Armed with a SPM certificate and guidance from NHF, Khairul applied and qualified for the Workers Technical Transformation Programme, an entry-level apprenticeship course.

Conducted by the Selangor Human Resource Development Centre (SHRDC) at its premises in Shah Alam, the six-month government-funded course comprises a learning approach that has both theoretical and technical aspects. Here, Khairul learnt the workings of pneumatic, hydraulics, electrical and mechanical systems which enabled him to obtain the Malaysian Skills Certificate Level 1 (Sijil Kemahiran Malaysia 1) and Level 2 (SKM 2).

With the qualifications and his SPM certificate, Khairul went to NHF for a job interview.

But instead of getting a job as a factory worker as he expected, Khairul was offered to join the NHF Auto Global Manufacturing Skill Programme which includes an opportunity to gain industrial qualification and experience in the manufacturing industry, preparing participants for a long-term career in the company.

"The programme comprises four months in the classroom and two months of practical training while earning a monthly salary at the company for two years. After discussing with my family, I felt that this was a great career opportunity for me," added Khairul.

He started his career at NHF as a production operator with a starting pay of RM1,040, which he felt was a good remuneration for a SPM school-leaver. After two years of work and project experience, he obtained SKM 3 certification with skills such as writing technical reports and was promoted to the post of junior technician and onto technician.

Khairul's dedication to his job and his eagerness to learn subsequently qualified him to join the first batch of the Malaysian Meister Programme (MMP).

Adapted from the German Meister (master craftsman) programme, MMP is a collaborative effort between SHRDC and the Federation of Malaysian Skills Development Centre aimed at improving opportunities for training and career advancement in the industry. SHRDC and NHF have been partnering on the MMP since 2015.

A two-year programme, there are two types of MMP — MMP in Mechatronics for Manufacturing which Khairul participated in, and MMP in Precision Machining. Both offer full-time employment with NHF, with in-training and industry-related training. The programmes offer career prospects as senior technician, technologist and associate engineer.

MMP instructors are highly qualified as they are trained by HWK Aachen, a leading vocational training centre in Germany.

During MMP, participants work on the shopfloor for four days and attend classes for two days. The students are guided closely with hands-on learning when working in the facilities, which exposes them to real-world work experience.

"Every week, the 16 of us in the first batch worked from Monday till Thursday while on Friday and Saturday, we spent in class. It was tough juggling work and studies as well as life outside work but well worth the knowledge and skills we acquired," said Khairul.

Upon completing the programme, he was awarded the Diploma Lanjutan Kemahiran Malaysia Level 5 certification. He was also promoted to assistant engineer at the laser department in NHF.

"When I was informed of the promotion, I was truly surprised. I always felt inferior to school friends who have gone on for studies at renowned universities in Malaysia and obtained diplomas and degrees.

"I never imagined I could get the position that required qualifications equivalent to theirs.

"Now I realise that success does not solely depend on obtaining a certificate, it also requires effort and fortitude."



Khairul Anuar Othman (left) taking on a managing role in his position as assistant engineer on the shopfloor of the Laser Unit at NHF. Pix by Syarafiq Abd Samad

NHF managing director Chin Jit Sin said the manufacturing facility's laser section has computer numerical control machines from Germany as well as robot lasers. The equipment is increasingly becoming more sophisticated in tandem with Industry 4.0 trends.

"As technology advances, we need people to know how to manage the progress. They must also know the machines — how to operate, maintain and maximise their efficiency.

"MMP has enabled the participants to further enhance their knowledge not only in class but also on the shopfloor," said Chin, adding that all 16 participants from the first batch are employed by NHF.

Khairul is an example of the quality of the MMP programme. He programmes the machines and manages production.

The second batch of MMP participants sat the final exam in May and the third batch that started in February 2018 has one more year to go before completing the programme.

TACKLING CHALLENGES

Chin said finding and retaining skilled talent are common issues faced by most Malaysian manufacturers.

"Specialised skillsets make some positions in the manufacturing industry hard to fill. The perception that a career in manufacturing is not professionally and financially rewarding makes it even harder for manufacturers to recruit talent. This is one of the many reasons why manufacturers in the country depend highly on foreign workers.

"NHF has been pro-actively managing these issues by collaborating with training development providers and has introduced its own apprenticeship programme to ensure it has the right and skilled labour force for the group of companies to grow," he said. Meanwhile SHRDC executive director Tan Beng Teong commented that the progress and the needs of the industry have typically outpaced the talent development by public higher education institutions.

"Simply put, there will always be gaps the between needs of the industry and the output from public institutions. It is not because public institutions are not good, but it is hard to keep pace with advancement in technology and other demands that the industry is facing.

"Demand-driven TVET education created through centres such as ours — which is a partnership between the federal government, state government and the industry — can help alleviate the issue of talent gaps in trainees that come from public institutions.

"This way, our investors can keep on investing and not worry about talent needs of the industry. And youths can acquire the necessary skills to gain employment and have careers that are financially rewarding," he said.

Going beyond MMP, SHRDC is in the midst of developing an apprenticeship programme that will enable participants to gain degree-level qualifications, specifically a Bachelor of Technology degree with Industry 4.0 capabilities.

"It will be a two-year programme and we hope to test the first batch at the end of the year or early next year," added Tan.

Also on the cards is tri-vocational training for polytechnic students to work with the industry, assisted by SHRDC, during semester breaks. Students will get a college education and workplace and industry competency certification upon completing their studies.

"We want to test this model going forward but in specific industries where it is more suitable."

Since its inception in 1992, SHRDC has trained more than 80,000 individuals. It has 30 institutional members in Malaysia, including NHF, Colgate-Palmolive, Texas Instruments and the Malaysian Investment Development Authority.



Malaysian Meister Programme students guided by a trainer on the proper technique to operate the machines.

https://www.nst.com.my/education/2019/07/501156/industry-ready-skills-technical-knowledge-career-progression