JOINING HANDS: The Graduate Employability Blueprint has led to the formation of the Industry Centre of Excellence (ICoE), a collaborative effort by institutions of higher learning and industries. Higher Education director-general Prof Datuk Dr Rujhan Mustafa whose ministry is in charge of this initiative, shares with Koi Kye Lee how the centre can optimise the employability factor and ensure graduates secure jobs upon graduation.

Question: How significant is the establishment of the Industry Centre of Excellence (ICoE) towards the issue of graduate employability in Malaysia?

Answer: The objective of ICoE is to address the issue of graduate employability through human capital development and enhancement of technology sharing between higher learning institutions and industries. It is driven by “anchor companies” in the industry and lead by a “lead university”, which is handpicked by the companies themselves. The collaboration is supported by supply chains of the multinational companies and institutions of higher learning to ensure the centre’s sustainability. The keyword to realising this initiative is strategic collaboration and that being said, the involvement of small and medium enterprises (SMEs) as part of the supply chain of the big companies will be a stepping stone for them to uplift and be competitive at district, regional and national levels. Also, in line with the aspirations of the Rural Transformation Programme, the enhancement of these SMEs will in return increase existing and create new employment opportunities for graduates. The lead university also plays a vital role at this juncture, as the coordinator to implement this programme with the support of other higher learning institutions. Strong collaboration between industries and higher learning institutions will increase graduate employability and enhance the academician workforce, especially with the vast exposure and experience within the industry’s environment. In addition to technical skills, students will also be instilled with soft skills based on the needs of industrial clusters involved.

Question: Can you share with us the background of ICoE?

Answer: To date, five ICoE clusters have been established namely “ICoE Wholesale and Retail” led by Universiti Utara Malaysia (UUM); “ICoE Oil and Gas” led by Universiti Teknologi Malaysia (UTM); “ICoE Automotive” led by University of Malaysia Pahang (UMP); “ICoE Electric and Electronics” led by Universiti Tun Hussein Onn Malaysia (UTHM), Universiti Malaysia Perlis (UNIMAP) and Universiti Teknikal Melaka, which are all part of the Malaysian Technical University Network (MTUN); and “ICoE Biotechnology” led by University of Malaysia Pahang (UMP) and Manipal International University. We aim to launch two more clusters by the end of this year — “ICoE Information Communications and Technology” and “ICoE Construction”.

Question: How is the progress of the ICoEs so far?

Answer: Since its establishment in December 2011, a total of 1,362 students and 120 lecturers have been trained from the automotive, wholesale, and the electric and electronics clusters. The implementation of these clusters received both financial and non-financial assistance such as training modules, field expertise and infrastructure from industries and other government agencies. For 2013-2014, a total of 20,000 students comprising 9,000 from universities, 7,000 (polytechnics) and 4,000 (community colleges) will be trained based on the project being given by the industries. They will be trained through a structured internship programme, industrial training and talent development, with polytechnics students receiving theirs as early as during their first year. For university students, it will commence during their second semester only that, 2,012 lecturers from universities, polytechnics and community colleges will also be trained under the training of trainers programme by the industries. Under the ICoE, graduates will be exposed to the real working environment during their studies and will also be able to apply the knowledge they have gained upon entering the workforce. Through this, industries will be able to shorten the assimilation process of new graduates as they will be better prepared and not only will this benefit the industries, it will also help to reduce problems related to underemployment.

Question: What’s the response from those involved in the ICoE?

Answer: It has been amazing. The initiative has managed to create various successful strategic collaborations since its initial establishment. For example, the wholesale and retail cluster which is led by UUM has attracted tremendous interest and support from five other universities — Universiti Teknologi MARA (UTM), Universiti Malaysia Kelantan (UMK), Universiti Malaysia Sabah (UMS), Universiti Malaysia Perlis (UniMAP) and SEGi University, two polytechnics in Perak and four community colleges in Kedah and Perlis. The anchor companies for this cluster are Mydin Mohamed Holdings and Malaysian Retailer Chains Association (MRCA). The associate partners involved in supporting the implementation of this cluster are Malaysian Islamic Development Department (Jakim), Federal Agriculture Marketing Authority (Fama), Malaysian Agricultural Research and Development Institute (MARDI), Majlis Amanah Rakyat (Mara), Standards and Industrial Research Institute of Malaysia (Sirim), Pembangunan Sumber Manusia Berhad (PSMB), Talent Corporation Malaysia Berhad (TalentCorp), SME Corporation Malaysia (SMECorp), Malaysian Technology Development Corporation (MTDC), and the ministries of Health, Rural and Regional Development and Human Resources.

Question: Earlier on, you have mentioned how the ICoE had managed to garner massive interest from the stakeholders. What has the collaboration led to?
As I have mentioned earlier, the collaborations have been both strategic and successful. From the perspective of human capital development, 1,143 students have been trained in 2012, of whom 543 are university students, 401 (polytechnics) and 228 (community colleges). More companies such as Econsave, Giant, KK Mart and AEON have also offered to join the wholesale and retail cluster. In addition, as a spin-off to this cluster, there has been a new development in the tourism and hospitality sector, focusing on the food and non-food sub-sectors. The collaboration with Emkay Group through the ESTE (Economic, Social, Technology and Environment) project, for example, had given students the opportunity to work closely with the indigenous people in Pulau Banding, Perak. The project, focused on training indigenous people to be forest guides and entrepreneurs, has provided a platform for students to enhance their technical and soft skills. On technology sharing, which is another focus in the ICoE, it has helped enhance productivity and the establishment of identified SMEs based on specifications and criteria given by the industries. To date, 10 SMEs have managed to market their products at the local, national and regional levels in less than three months after the ICoE was launched.

Q: It seems that the ICoE has achieved the objective of its establishment. However, the current trend in graduate employment could present a huge challenge for the centre to remain successful. What is its next step forward?

A: Moving forward, the ICoE has charted its future path through recent collaborations with SMECorp, AEON and the United Nations Industrial Development Organisation (UNIDO) via the implementation of an entrepreneur development programme known as the “Supplier Sustainable Development” programme. Students studying food technology will go through the structured internship programme in food safety programmes and will be placed in 100 identified SMEs. They will guide the SMEs involved to get the recognition internationally with the supervision of UNIDO and AEON. For the automotive cluster led by UMP, which is supported by Universiti Sains Malaysia (USM), Universiti Malaysia Terengganu (UMT), Universiti Kuala Lumpur (UniKL), Kolej Kemahiran Tinggi Mara (KKTM), Terengganu Advanced Technical Institute (Tati) and National Youth Training Institute (IKBN), they have successfully helped Sapura improve its design process and shorten the development of a suspension system from three months to two weeks. The design is proprietary in nature, unavailable in the market and is not being shared by other automotive companies. This innovation produces an intellectual property that is shared with the higher learning institutions. The second anchor company in this cluster is Miyazu, a subsidiary of Proton Holdings Bhd. Herein, the ICoE is a platform for knowledge and technology sharing for the steel-making process of hot forming with Miyazu’s supply chain. If it goes according to plan, the products from this process will be used for the new Proton car model which is expected to be launched in 2015. With strong support from agencies and supporting industries such as Malaysian Automotive Institute, Proton, Perodua, Hicom and Sirim, a total of 107 students comprising 75 from universities and 32 from community colleges have been trained in 2012, and 11 of them have been offered jobs. The electric and electronics cluster led by the Malaysian Technical Universities Network (MTUN) has trained a total of 112 university students last year while the oil and gas cluster, launched in December 2012, is targeting to train 3,950 students this year and 2014. Biotechnology, the newest cluster, was launched on March 15.

Q: How is the ICoE sustainable?

A: To ensure its sustainability, the ICoE is supported by economic regions namely the Iskandar Regional Development Authority (Iskandar), East Coast Economic Region (ECER) and Northern Corridor Economic Region (NCER). Involvement and cooperation of the economic regions help to prepare graduates to meet the characteristics and needs of the industry by sectors and they are molded accordingly to the economic region. With the involvement of the supply chains, SMEs will benefit by leveraging through the ICoE initiatives. It has also received strong support from agencies such as TalentCorp, the Science, Technology and Innovation Ministry as well as Malaysian Technology Development Corporation (MTDC) and Human Resource Development Fund (HRDF). This collaborative effort does not solely depend on the “lead university” chosen by the “anchor company”, but also on efforts that cut across all institutions of higher learning such as polytechnics and community colleges. The implementation of this initiative, I believe is the best platform in developing skilled human capital that accurately meets the current needs of the ecosystem.