

# Integrating the Industrialist and the Educationist: Learn from the Experts

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## Abstract

Engineering education need to be progressive in order to face the challenges of requirements and market demands for human resources in industry. One of the methods in meeting these demands is that universities have to recruit educationists or lecturers from the industries, or with industrial background. By doing this, the gap between the two sides is bridged, and students will benefit from the sharing of experience of their industrialist-educationist lecturers. In addition, the experienced lecturer will able to equip and cater among the students some generic attitudes and attributes expected by industries in employees. In the end, students will be more industry-orientated and marketable, due to high rate of absorption into the working environments. This paper will share some of the experiences by the two industrialist-educationists in performing their role in managing the technological gap. In the fast developing era of technology, subject content taught in educational institutions requires continuous update and modification. Failure in doing so will render the education incompatible with the industrial requirements. Thus, UniKL approach in recruiting industrialists as lecturers will fulfill its motto of 'Learning from the Experts'.

*Keywords: Industrialist, Educationist, Technology, Engineering, Education.*

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## 1. Introduction

Tertiary education is very important for students looking for employment. However current trends show that it does not apply any longer. Lately, it was reported that more than 80, 000 graduates were unemployed [2]. Why has this occurred? Is it due to problems in our education system, or is it because the recruitments factors for employees have changed?

In the competitive market, customers are demanding lower costs for products while the industries are trying to reduce the overall operation cost in order to fulfill customer needs and at the same time secure profits. Moreover, industry needs to invest on latest technology to produce more products at lower cost and shorter product development. Industries are no longer able to spend lot of time and money to train fresh graduates to perform their duties. The industries are profit-driven and will not playing the role of service or welfare provider [1].

Moreover, the industries have to catch-up with the

fast changing technology, and thus more funds are channelled into research and development activities. Employers demand that graduates have creative and innovative skills, are able to generate new ideas, work in a team and have entrepreneurship skills [3].

On the other hand, the traditional educational entity still focuses on producing human resource development in various fields, regardless of its marketability. The reason is to provide strategic manpower to all fields of employment. Some cited 'for the sake of academic and intellectual freedom', while some say this is to continue knowledge dissemination in that field. Therefore some of the courses offered are totally cut-off from the industrial point of view.

Hence, fresh graduates need to be exposed to industry requirements, latest practices in technology and industrial environment. These needs can be furnished by educators who experienced it themselves. One of the approaches by some educational institutions to prepare today's students for tomorrow's workforce is by recruiting engineers as educationist, to bring practicing

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engineers into the classroom [4].

## 2. Author's background

Both the writers started their engineering career after graduation, as an engineer in Quality Assurance Department, in one of Sony Corporation factory in Selangor. After a few years in the factory, the second writer was promoted as a Senior Engineer responsible for Quality Assurance section with more than ten support staff. The jobs involved were inspecting quality characteristics in products, performing process audit, evaluating new product quality conformances and handling customer complaint. Then after nine years with the factory the second author was offered a post as Quality Assurance Assistant Manager in one of a Japanese factory producing parts for plastic injection moulding and metal stamping and components assembly. In the department he had about seventy supporting staff performing the overall quality activities from the incoming inspection, in-process inspection, out-going inspection and customer relation.

The opportunity working in the industries gave him valuable experience that was not only related to technical and technology matters but also the handling of human resources. These are the assortment of knowledge and experience that the normal educationist lacks.

As comparison, the first author worked with the same industry for four years, before making decision to join the academia in one of the leading public university in the country. He pursued his study in Master of Science, but still maintained his professional activities. This entitled him to sit for the professional engineer qualifying examination and interview with the Board of Engineers Malaysia (BEM). Throughout his career, he emphasised the relationship between academic and industry linkage, especially in instilling professionalism in engineering students through seminars, visits and industrial attachments.

Now both of them are with Universiti Kuala Lumpur (UniKL), one of the leading in Engineering Technology education provider. UniKL's niche is to provide courses that are industrial-based and industrial-driven, with massive collaboration with the related industries for each of its institutes, e.g. British-Malaysia Institute, Malaysia-France Institute, Malaysia-Spanish Institute and Malaysian Institute of Aviation Technology. Each institute has their focus programs, and works closely with the respective technology provider, that supplies state-of-the art technology.

This kind of technology education requires the educationist to have some industrial background, so the process of transferring the industrial experience will be part of the enrichment activities for the students.

## 3. Technology Gap

Industry and Academic are moving on parallel tracks. Academic that do not comply with the requirements of industry are producing graduates that are not marketable. Careers requiring specialized or technical skills now comprise the fastest growing segment of workforce. Students need to understand the skills required for a specific job. Educators need to learn skills required by industries. Having industrialists as educators is a part of education system development to prepare future graduates geared up for their potential employers.

## 4. Role of Industrialist – Educationist

This new breed of educationists is capable in bridging the parallel tracks gap by improving the academic curriculum and delivering their hands-on experiences to the classroom. Students able to learn real world application from the curriculum designed. The educationists understand what types of job skills and requirements for a competent workforce needed by employers through their work place experiences. Educators also can bringing relevant case studies to their classes and education systems and provide greater opportunities for student's career and future learning. They are also able to share their experiences to enhance the value of career and technical education and foresee future workforce needs so that students will be able to compete and survive in the comprehensive marketplace.

## 5. UniKL Strategy: Learn from the Experts

Realising the importance of blending the experts from the industries and academia, Universiti Kuala Lumpur has taken up the strategy of recruiting lecturers and trainers from the related industries to join the university. Experienced lecturers from other universities are also brought in to boost the university capability in doing research and consultancy works. The major recipients for the benefits are our students. They will have the chance of tapping the expertise of the industrialists, and knowledge of the educationists. This niche is coined in our motto of 'Learn from the Experts'.

## 6. Conclusion

For the benefits of our future graduates with regards of the current unemployed graduate's scenario, the academic should understand the recruitment requirements that industries need. By having an industrialist becoming an educationist, the gap between industries needs and graduates performance can be bridged. This type of educationists is able to expose students to training and education that will prepare them to fill, compete and successfully perform in tomorrow's workforce.

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## Biographical information

Ir. AHMAD JAIS ALIAS started his career as an Engineer with Sony Video (M) Sdn. Bhd. for 4 years, an experience which qualifies him to attain the Professional Engineer title. Then he joined Universiti Kebangsaan Malaysia as lecturer for ten years, before recently moved to Universiti Kuala Lumpur. UniKL is known for its industrial-based fields of study, and he is now sharing his experience to train the future aviation industry workforces.

MR. SUHAIRI HASAN also started his career as an Engineer with Sony Video (M) Sdn. Bhd., before moving to Nidec-Copal Sdn. Bhd. as an Assiatant Manager. After more than twelve years in the industries, he decided to join UniKL as a lecturer, bringing with him the rich experiences with industries, to be shared and benefited by the students.