ASAIHL Conference 2009

Enhancement of Graduate Employment

Conference Proceedings

20th to 22nd May 2009
Colombo, Sri Lanka.

Organized by
Association of Southeast Asian Institutions of Higher Learning (ASAIHL)
and University of Kelaniya, Sri Lanka
ASAIHL Conference 2009

Enhancement of Graduate Employment

Conference Proceedings

Edited by:

Professor Sarath Amunugama,
Vice Chancellor, University of Kelaniya

Professor K.D. Jayasuriya,
Former Dean, Faculty of Science

Professor N.K. Dangalle,
Dean, Faculty of Graduate Studies
Proceedings of the

ASAIHL Conference 2009
on
Enhancement of Graduate Employment

Organized by:  Association of Southeast Asian Institutions of Higher Learning (ASAIHL)
and
University of Kelaniya, Sri Lanka

Date & Place:  20th to 22nd May 2009 at Colombo, Sri Lanka.

Theme:  Enhancement of Graduate Employment

Sub-Themes:  A - Enhancing Employability through Quality Assurance
B - The Role of Professional Associations
C - Issues for Non-Professional Faculties
D - University Industry Partnership

Responsibility of the contents of the papers in this Conference Proceedings remains with the
respective authors.

Publisher:  University of Kelaniya, Sri Lanka

Web:  http://www.kln.ac.lk/asaihl2009/
Email:  asaihl2009@kln.ac.lk
Telephone:  +94(0)11 2914474
Fax:  +94(0)11 2911485
CONTENTS

Page

Contents

3-5

CR COUNTRY REPORTS

6 - 41

CR-1 MALAYSIA
Enhancing Graduate Employability: Malaysia Country Report
Nordin Kardi

7

CR-2 PHILIPPINES
The Employability of Graduates: A Determinant to Full Employment
Juliana Laraya

19

CR-3 THAILAND
Cooperative Education Management and Outcomes in Thailand
Guntima Sirijeerachai and Padungsak Suksa-Ard

26

CR-4 VIETNAM
Enhancing Graduate Employability at Vietnam National University, Hanoi: A Case Study
Mai Trong Nhuan and Hoang Van Van

35

A ENHANCING EMPLOYABILITY THROUGH QUALITY ASSURANCE

42 - 139

A-1 Enhancing a Departmental Database for Educational Quality Assurance using Malcolm Baldrige National Quality Award (MBNQA) Model
Amnart Pohthong and Atikorn Sing-Eiam

43

A-2 Continuous Quality Improvement at UGM: Enhancement of Graduate Employment
Edia Rahayuningsih and Harsono

56

A-3 Producing Resilient Graduate: UNITEN Experience
Ibrahim bin Hussein, Mohd Ariff bin Ahmad Tarmizi

65

A-4 Development of an Outcomes-based Curriculum Embedding Employability Skills, Institutional Goals and Values: A Sri Lankan Experience

72

A-5 Adoption of Quality Assurance Frameworks towards Enhancing Employability: Issues, Trends and the Way Forward
Mad Nasir Shamsudin and Aini Ideris

84

A-6 Student Teacher Aesthetic Role-sharing (STAR): An Innovative Approach to Build Graduate’s Character
Ika Dewi Ana, Harsono, and Edia Rahayuningsih

96
<table>
<thead>
<tr>
<th>A-7</th>
<th>A Study of Entrepreneurial Traits and Skills among University Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H.A.K.N.S. Surangi</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A-8</th>
<th>Graduates’ Employability Skills: Evidence from Literature Review</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Susima Samudrika Weligamage</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A-9</th>
<th>Directions and Challenges of Excellence for Private Institutions of Higher Learning in Malaysia: A Holistic Approach from the Perspective of Universiti Tenaga Nasional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mashkuri Yaacob, Mohd Ariff Ahmad Tarmizi, Bahisham Yunus, Zainora Abdul Ghani</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A-10</th>
<th>Enhancing Employability through Quality Assurance: The Centro Escolar University Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Erna V. Yabut</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B</th>
<th>THE ROLE OF PROFESSIONAL ASSOCIATIONS</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>B-1</th>
<th>Teacher Associations’ Roles in Sustainable Professional Development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Padmani Mildred Thiyagaraj</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B-2</th>
<th>The Role of Professional Association to Improve Graduate’s Employability: UGM Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wisjnu Martani and Harsono</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B-3</th>
<th>Forum of Communication and Consultation to Enhance the University-Stakeholder Networking System at Airlangga University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ni Nyoman Tri Puspaningsih*, Unggul Heriqbaldi, Soetjipto, M. Zainudin, Fasich</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C</th>
<th>ISSUES FOR NON-PROFESSIONAL FACULTIES</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>C-1</th>
<th>Rejuvenating and Restructuring the Discipline of English Studies: A Concept Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maithree Wickramasinghe</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C-2</th>
<th>Factors Affecting Employability of Graduates holding Non-Professional Degrees in Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E.R.K. Perera, and A.N.F. Perera</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D</th>
<th>UNIVERSITY INDUSTRY PARTNERSHIP</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>D-1</th>
<th>University-Industry Partnership</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Syed Asad Husain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D-2</th>
<th>University-Insurance Internship Partnerships in Bangkok</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Brian Lawrence</td>
</tr>
</tbody>
</table>
D-3  Customer Centric Service Leadership - Service Culture: Human Capital Transformation in Malaysia
Mohd Azam Nair and Mohd Sakarno Deris  209

D-4  Academy – Industry Interaction: KLE Perspective
Chandrakannt Kokate  243

D-5  Enhancing Graduating Employability through University-Industry Partnership
Stefanie Pillai  247

D-6  University-Industry Partnership: The Universiti Putra Malaysia’s Experiences
Tai Shzee Yew  255

D-7  Industry Partnership Program: A Comparative Study of FEU’s Current Program and Future Directions
Albert III R. Cabasada  266

D-8  Supporting the Development of Student-teachers’ Professional Competence through the ‘Whole School Mentoring Support Approach’ : A Demonstration of University-Industry Partnership
Tammy Kwan  275
Enhancing Employability Initiatives: 
Malaysia Experience

Presented by 
UNIVERSITI UTARA MALAYSIA
06010 UUM Sintok
Kedah, Malaysia

ABSTRACT
Graduate employability has been a global concern for all higher education sectors. The Malaysian higher education system is no exception. Currently, the country is experiencing a major education overhaul through the implementation of the National Higher Education Strategic Plan, which was officially launched in August 2007. The above plan delineates the strategic thrusts and critical agendas to enable our tertiary institutions to achieve world class status and at the same time support the national need for quality human capital. Notably, the first focus of this strategic plan puts emphasis on the development of human capital with first class mentality. This paper will share initiatives undertaken by the Malaysian government to enhance graduate employability. A case of a university in Malaysia will be presented to demonstrate how such initiatives are embedded into the university curriculum. These initiatives can be broadly summarized under three themes: academic, co-curricular activities, and industry link. The presentation will conclude with issues and challenges faced in implementing these initiatives.

INTRODUCTION
Expectations of higher education (henceforth HE) have changed remarkably due to the global market changing environment and the changing landscape of HE. At the same time, the increase global market competition demands that HE equip graduates with more than just the declarative knowledge in specific domains but also the functional skills or work readiness skills to prepare graduates for the world of work. Thus, graduate employability has been a global concern for all higher education sectors, whereby HE is expected to revitalize the learning environments to suit current job demands. HE is expected to foster learning outcomes that are valued by the employers. The Malaysian HE system is no exception. Building on the premise that HE should provide rich environment to encourage student engagement and to stimulate complex skills, this paper will share some of the initiatives undertaken by the Malaysian HE to enhance graduate employability. A case of a university in Malaysia will be presented to demonstrate how such initiatives are embedded into the university curriculum. These initiatives can be broadly summarized under three themes: academic, co-curricular activities, and industry linkages. The presentation will conclude with issues and challenges faced in implementing these initiatives.

Redefining Graduate Employability
Employability is often defined as “…a set of achievements- skills, understandings and personal attributes- that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy.” (Yorke & Knight, 2003, p.7). However, this definition is inadequate when we view individuals as an investment in human capital development. Afterall, what is the purpose of

1. This paper is prepare jointly by Nordin Kardi, Rosna Awang Hashim, Nurahimah Mohd. Yusoff, Shahizan Hassan, Nor Hayati Ahmad, Hanizan Zalazilah, Azlan Yahya & Izham Shafie. Presented at The 2009 ASAIHL Conference, University of Kelaniya, Sri Lanka.
university education? Are we preparing university education for ‘useful’ knowledge or for knowledge for its own sake? (Newman, 1947, cited in Levin, 2000). With the increasingly challenging economic situation, HE may have succumbed to capitalist consumerism, focusing on the vocational education that emphasizes ‘usefulness’. Kirp’s (2000) observation on American universities echoed the following:

“While the public has been napping, the American university has been busily reinventing itself. In barely a generation, the familiar ethic of scholarship-baldly put, that the central mission of universities is to advance and transmit knowledge-has been largely ousted by the just-in-time, immediate-gratification values of the marketplace. The Age of Money has reshaped the terrain of higher education... Gone... is any commitment to maintaining a community of scholars, an intellectual city on a hill free to engage critically with the conventional wisdom of the day.”

Has university education become a test for employment? How can we strike a delicate balance between this useful knowledge and philosophical knowledge, i.e., the cultivation of mind? “The idea of a university” has been immensely debated since the middle of the 19th century. McVeigh (2002) in his critical analysis of Japanese higher education forewarned educators about the consequences in allowing HE system to be too influenced by the corporate world. HE ought to strive to retain the quintessential feature of a university, i.e., being a center of excellence. It follows then, that if the philosophical education is good, it must be ‘useful’ too. This concept of usefulness bodes well with employability. Our views of employability should concern the opportunities afforded for the development of complex learning skills that enable graduates to be resilient, knowledgeable and ethical human beings. In recent years there seems to be global consensus about the importance of graduate employability due to the increasingly competitive and volatile graduate employment market, especially during this economically challenging period. Thus, HE is challenged to provide opportunities to advance the frontier of knowledge and yet useful to the market.

Methods of Embedding Employability

To strike a balance between useful knowledge and philosophical knowledge, employability has to be associated with ‘good learning’, i.e., learning experiences that support co-construction of knowledge between learners and the environment. Since learning cannot simply come from direct instruction alone, HE should provide a stimulating environment that fosters learning as a collaborative journey. Years of concerted effort at all levels are needed as it takes beyond classroom level to enhance employability. HE is expected to maximize graduates career potential while they are on campus. There are several ways in which HE may be able to incorporate employability into the existing curriculum: employability through the whole or the core or the related modules within the curriculum, and employability through work-based learning. The former concerns curriculum development and/or reform, and the later concerns the university-industry linkages. The HE in Malaysia has afforded both opportunities as evidenced later in this presentation.

NATIONAL HIGHER EDUCATION STRATEGIC PLAN (NHESP)

The main aim of Malaysian HE is to produce professionals for nation building and also to provide facilities for the knowledge advancement through research and consultancy services. Currently, Malaysia has 20 public universities to cater for the diversified needs of the citizens, business and industry, and about 600 private higher learning institution that cater for the varying needs of the nation.

Currently, the country is experiencing a major education overhaul through the implementation of the National Higher Education Strategic Plan (henceforth, NHESP). In 2007 and 2008, the NHESP and National Higher Education Action Plan (henceforth, NHEAP) were launched respectively intended at transforming the higher education in Malaysia. The above plan delineates the strategic thrusts and critical agendas to enable our tertiary institutions to achieve world class status and at the same time support the national need for quality human capital. Notably, the first focus of this strategic plan puts emphasis on the development of
human capital with first class mentality. Among other things, the plan aims to produce graduates who are knowledgeable and competent in their academic fields and at the same time possess living skills. Graduates are expected to be able to transfer knowledge into practice; innovative and possessing critical thinking and problem solving skills; multilingual and able to communicate effectively; technology savvy; possessing good values and able to contribute to the wellbeing of the society, nation, and the global community; and possessing the necessary generic (soft) skills required for the employment market.

Graduate unemployment recorded a special mention in this action plan. The plan has provided for a Graduate Training Scheme under its critical agenda. One of the initiatives under NHESP is the exchange programme where top students are given the opportunity to spend a minimum of a semester in selected top foreign universities to enrich their learning experience.

COUNTRY RESPONSE TO UNEMPLOYMENT

The Establishment of the Graduate Employability Division

In an effort to enhance graduate employability, the Ministry of Higher Education Malaysia (MOHE) has responded to this growing unemployment trend among tertiary graduates by focusing on the following programs: internship, apprenticeship, finishing schools and entrepreneurship. In early 2009, a graduate employability division was set up in the Ministry of Higher Education (MOHE) under the project management office (PMO) to facilitate the Thrust 2 of the Strategic thrust of the NHESP, i.e., pertaining to graduate employability and materialization. The division aims to foster activities to ensure that graduates:

1. Obtain suitable job
2. Become very enterprising and able to create jobs
3. Have high competencies
4. Have added values in terms of soft skills, as needed in the job market.

The number of graduate unemployment almost doubled from 2000 to 2004. An estimated 42,500 graduates were unemployed in 2000; the number had increased to 68,000 and 74,182 in 2003 and 2004 respectively (http://www.psptn.net/caps/graduateemployability/default.aspx, retrieved April 1st 2009). Concurrently, all institutions of higher learning (henceforth IHLs) have made special provisions for the inclusion of employability skills in the teaching and learning process. Feedback from industry players is also encouraged to reduce the gap between graduate job-seekers and employers. This continuous feedback is essential for HE to ascertain the kind of gap and provide appropriate interventions.

The Establishment of the Malaysian Qualifications Framework (MQF)

Universities respond to unemployment issue by modifying existing curriculum to meet the demand of current labour market. More dialogic discussions are taking place between the industry and the university resulting in the development of new courses and teaching methods.

On November 1st, 2007, the Malaysian government established a new entity, the Malaysian Qualifications Agency, known as MQA. This newly established entity is basically a merger between the National Accreditation Board (LAN) and the Quality Assurance Division (QAD). Being responsible for quality assurance of higher education for both the public and the private, MQA comes up with the Malaysian Qualifications Framework (MQF) and this instrument acts as the reference point for the criteria and standards for national qualifications. The MQA is responsible for monitoring and overseeing the quality assurance practices and accreditation of national higher education. Apart from the above responsibilities, other functions of MQA are to: “develop standards and credits and all other relevant instruments as national references for the conferment of awards with the cooperation of stakeholders; facilitate the recognition and articulation of qualifications; and maintain the Malaysian Qualifications Register (MQR).” (http://www.lan.gov.my/eng/introduction.cfm). With a vision to be a credible and internationally recognized higher education quality assurance body, it is
hoped that MQA will benefit the Malaysian higher education, in general, and the development of human capital, specifically. Its mission is purely to inspire the level of confidence of its stakeholders through best practices.

All programmes of studies in all the Malaysian Universities are currently undergoing a curriculum review process. Generally there are three important elements in the MQF:

1. To ensure that the structure of the programme fulfills the number of credits allotted for each MQF level.

2. The emphasis is on the learning outcomes. With a paradigm shift from teacher-centred to learner-centred, the use of student-centred learning (SCL) activities is given strategic importance that requires an instructor to prepare the learning outcomes based on the eight learning domains namely: knowledge of discipline areas; practical skills; social skills and responsibilities; values, attitudes and professionalism; communication, leadership and team skills; problem solving and scientific skills; managerial and entrepreneurial skills; and finally, information management and lifelong learning skills. In addition, the course learning outcomes are tied to the cognitive, affective, psychomotor, and the soft skills elements.

3. The calculation of the student learning time (SLT). The calculation is not only based on face-to-face interaction between students and instructors but also include students' self-study time. SLT includes all learning activities ranging from sourcing for information, preparation for lectures and tutorial, discussion with peers, completing assignments and projects to the preparing for examinations.

The registration of academic programmes in the MQR will not only help all Malaysian Universities to obtain more students enrolled at the university, but also, to ensure the process of continuous improvement and accreditation by a certified professional body. Consequently, in achieving such recognition, the universities will minimize unemployability among the graduates as there will be more demand for such graduates who have completed their studies from a reputed higher learning institution.

Tracer Study

A further evidence of the country's growing efforts to address employability is the development of the tracer study. Each year since the year 2004, the Malaysian Ministry of Higher Education (MOHE) conducts studies on new graduates at the point of their graduation day. The study aims to provide a picture of graduate employability, graduate job market, job trend and job mobility. Historically, the National Graduates Tracer Study was first initiated and coordinated by the Economic Planning Unit (EPU), Prime Minister Department in 2002. However, from 2003 to 2004, the study was taken over by the Malaysian Ministry of Education (MOE) before it was later passed to the Ministry of Higher Education.

The tracer studies using online system called SKPG I was introduced in the year 2006 and in 2008, MOHE has moved one step further by making another new online system referred to as the Graduates Follow-up Tracer Study (SKPG II). The latter, which is an extension of the first study, was developed to conduct surveys on graduates who have completed their studies for more than six (6) months, while, the former, was mainly to get information on the job status of new graduates at the time they attend their degree awarding ceremonies. Both study systems were developed because the MOHE is always concerned and committed to continually improve the standards of higher education in the country. In general, the information gained from this study is useful to the government and higher education institutions in formulating effective policies and planning pertaining to human capital development. Specifically, the outcome of the study can also be used objectively by graduates to develop their career, based on facts and evidences.

Since 2002, the tracer study has been officially placed under the responsibility of the University Teaching and Learning Centre (UTLC). UUM has participated in every tracer study conducted since then. In general the findings have helped the institution to shape its academic curriculum, facilities and services provided for the students.

As a whole, the Minister of Higher Education, Dato' Seri Mohamed Khaled bin Nordin opines that “the Graduate Tracer Study has proven to be an effective method in
getting accurate and quick inputs for the purpose of ensuring the human capital produced by higher education institutions are at all times relevant and are able to meet the ever changing demand of the job market.” (http://202.186.86.252/kspgv/en2/members/login.php)

**Enhancing Generic Skills**

Generally various stakeholders have pointed that Malaysian graduates lack generic skills (Asma & Lim, 2000; Quek 2003), notably English language proficiency, communication and team-working skills (Shuib, 2005). The MOHE has responded to this issue by enforcing the generic skills module to be used by all IHLs beginning 2007. In 2006 the module was prepared by a taskforce led by the then deputy vice chancellor of academics and international affairs of University Putra Malaysia (now the director general of Department of Higher Education) that prioritized seven elements of soft skills deemed important in gaining employment:

1. communication skills (CS): ability to express ideas clearly, effectively, and with confidence, both in writing and speaking, verbal and non-verbal.
2. critical thinking and problem solving (CTPS): the ability to identify, analyze, justify and evaluate the problems in various situations, and the ability to initiate and expand ones‘ thinking process and creativity in solving problem.
3. team-working skills (TS): the ability to establish good rapport and interact with other people to achieve ones‘ goals, and the ability to understand other people’s needs, and expectation among members in a group.
4. leadership skills (LS): ability to understand the basic theories of leadership, and the ability to lead others.
5. lifelong learning (LL): the ability to solicit and manage the relevant information from various resources, and the ability to accept new ideas and keen for new knowledge.
6. entrepreneurial skills (KK): the ability to identify opportunities in business and the ability to plan, explore, and evaluate opportunities.
7. moral and professional ethics (EM): the ability to perform duties and responsibilities professionally, and the ability to analyze the impact economically, socially, and morally.

MOHE has published soft skills module (Modul Kemahiran Insaniah Untuk Pengajian Tinggi Malaysia, 2006) for use of IHLs in Malaysia. They have developed a taxonomy delineating the “must have” and “good-to-have” generic skills for undergraduates. The “must have” elements signify the minimum exit requirements expected from university graduates. Thus, all IHLs in Malaysia must strive to ensure these “must have” generic skills be infused directly or indirectly into the existing curriculum. It is hoped that by embedding generic skills into the existing curriculum, we can have improved matches between graduate job-seekers and employers.

**Finishing Schools**

The Finishing School is presently a final professional development course for final year undergraduates to upgrade their personal abilities and business needs before they can be confidently deployed into a real world. Finishing school programme is an example of the career development programmes that are aimed at enhancing university students’ soft skill. This programme was launched at Universiti Putra Malaysia (UPM) in 2007 as part of UPM’s structured co-curricular activities. The programme was designed specifically for final year students and will focus on two critical areas which are communication skills and professional writing. The medium of instruction for this course is English and the programme is conducted based on 70 percent practical work and 30 percent theory. The assessment for this course will be on four aspects which are attendance, participation, presentation, and written work. The programme is part of students’ preparation for workplace. The impact of this course is yet to be known as the programme has just started recently.

**THE UNIVERSITI UTARA MALAYSIA INITIATIVES: A CASE**
Situated in the northern region of Peninsular Malaysia on a 1,061-hectare campus Universiti Utara Malaysia (UUM) is the sixth public university in Malaysia. Set up on 16 February 1984 UUM was formed to develop and excel in management education.

**ACADEMIC INITIATIVES**

**MQF Training and Active Learning Initiatives**

As a leading Malaysian management institution of higher learning, UUM drives to live up to the new MQF requirements. To ensure that staff members are aware of the needs of the MQF accreditation process, a series of training were conducted by the University Teaching and Learning Centre (UTLC) beginning March 2007. Simultaneously documentation is rigorously prepared to ensure the domestic system adhere to the MQF guidelines.

UUM recognizes the need for academics to unlearn their philosophy of teaching and learning and how it can be constructively aligned to the ever challenging demand of the education and training in the 21st century. Thus, beginning 2005 UUM via UTLC has developed a series of continuing professional development workshop to promote the use of active learning such as project based learning and case study in teaching. These teaching approaches will allow UUM to align professional working knowledge and the program learning outcomes. By doing this, UUM aims to build capacity for enquiry-based learning among its students.

**Self Development Group (SDG)**

Recent studies into postsecondary educational outcomes have found student engagement to be an important predictor of student success and measure of institutional quality (Kuh, 2001, 2007). These student engagement theories promote the idea that students who put forth time and energy into worthwhile educational activities will grow academically and socially (Gonyea, 2006). In their book *Seven Principles for Good Practice in Undergraduate Education*, Chickering and Gamson (1987) identifies seven indicators of student engagement: student-faculty contact, cooperation among students, active learning, prompt feedback from faculty members, time on task, high expectations, and respect for diverse talents and ways of learning. While student engagement measures the time and effort student put into their academic work, student growth also depends upon the quality of experiences and opportunities offered by a university.

UUM responses to this challenge via six credited Self Development Group (SDG) courses. The SDG taps on the seven effective educational practices (Chickering & Gamson, 1987) that help define a university's contribution to the actual educational experiences of undergraduates. Applying the concept of mentoring, a lecturer and his ‘disciples’ will meet for 14 hours each semester for six consecutive semesters. Six modules were developed to guide SGD activities:

1. high touch communication
2. thinking skill
3. personal financial planning
4. volunteerism and patriotism
5. management ethics
6. entrepreneurship

The SDG which is conducted in English aims to improve learners’ English and other generic skills that could help maximize their potentials for employability. The small group discussion provides students the space to grow and mature with their mentor,
CO-CURRICULUM INITIATIVES

The Role of UUM Co-curriculum Center

A structured co-curriculum activities as part of the academic programs in UUM has existed since the earliest days of the University. Just as students’ classroom experiences are coordinated within the framework of a management university, so are the varieties of the co-curriculum courses offered.

While the academic curriculum and the co-curriculum address different developmental needs, together they provide a cohesive, well-conceived experience to ensure that UUM students will be well prepared to meet future challenges.

Specifically, the objectives of the co-curriculum program in UUM are as follows:

1. To supplement the university’s curriculum that aims at providing a balanced and all round education to all students with the view of producing graduates of caliber.

2. To instill leadership qualities among students with the emphasis on discipline, team work and organizational skills.

3. To foster cooperative spirit and racial integration.

Various continuous efforts have been made to improve and strengthen the co-curriculum structure at Co-curriculum Center, UUM. Presently, there are about 75 co-curriculum courses offered which are categorised into groups or units such as Leadership, Music, Visual Arts, Self Defence, Media Technology, Agro-Business, Living Skill, Mechanics Corps, First Aids, Community Services, Sports and Recreation (such as golf, horse riding, paramotor and water sport), Entrepreneurship, Police Volunteer Corps and Reserve Officer Training Unit (ROTU).

The wide range of co-curriculum activities on offer encourages not only the development of individual talents but also the important skills of teamwork and cooperation, positive attitudes, self discipline and commitment. Active participation in this credit-bearing co-curriculum activities provides indispensable opportunities for UUM students to cultivate a very much needed soft skills. This in turn would be very useful in enhancing their employability when they finish their study.

Amongst the co-curriculum courses offered at UUM, ROTU and University’s Police Volunteer Corps need special mention. For students who successfully completing this course, a special attention will be given by the hiring body if they choose to join the military service or the police force. This is also true for other uniform groups such as Red Crescent Society, St. John Ambulance, Fire Brigade and Civil Defence Force.

UUM’S LINKAGES WITH INDUSTRY

The sophisticated needs of customers and stakeholders in today’s markets require graduates who will be potential employees, to be well-informed with the current market developments and be conversant with the industry practices, products and services. Prospective employers often look for graduates with certain attributes that match with their industry requirements. These attributes are primarily the “soft skills” such as the ability of oneself to express thoughts clearly; which could be gauged from his or her communication and presentation abilities; leadership, decision making, teamwork, negotiation and selling skills and job knowledge.

The strategies used by UUM to increase the employability of its graduates are (i) by harnessing the “soft skills” of the students through an industry-based “experiential learning” program and (ii) to create an on-line platform to “market” the graduates to the potential employers. The two strategies are being carried out successfully through partnership and collaborations with the industry players. In this section of the paper, let’s see the success stories of UUM on three cases:
**Online Practicum Student Placement (OPSP)**

OPSP allows companies to register, view available students for industrial training by academic programmes they undertake, select potential students for training according to their preference (e.g. academic results, race, language proficiency, hometown, co-curricular activities), and confirm the selection of students electronically through the Internet within minutes. Due to its potential impact on UIL management of the industrial training, OPSP receives the Malaysia Civil Service Innovation Award in 2007 (AIPA 2007). Figure 1 below shows the industrial training management process that has been computerized and integrated into OPSP.

**The D’ Graduates**

A well received and popular D’graduate programme is the online reality show that is aimed at identifying a star graduate (refer to figure 2). In this event, students are competing between each other by showcasing their talents in a series of assignments and business simulations. Participants are assessed in terms of individual performance as well as their ability to work in a team in solving business problems. Soft skills such as communication skills, leadership, attitude, positive mindset, and confidence are some of the attributes that are taken into consideration in the assessment. This event was jointly organized with private company, MyPath Sdn Bhd, in collaboration with several corporate organizations including Star, Jaring, International, Horne Penang, and MIRC.

![Figure 1: Detail Flow of Industrial Training Management Process in OPSP](image-url)
A program called “UUM-PERIBUMI INVESTMENT CAMP 2008” was designed as an industry-based “experiential learning” to harness the soft skills of the graduating students. This program is a collaborative effort between UUM and two industry partners: the Persatuan Remisier Bumiputra Malaysia (PRIBUMI) or the Association of Bumiputra Remisers and Airgate Media Networks Sdn. Bhd. (the system provider on the stock market). UUM is presented by the College of Business and the University Industry Link.

A total of 76 UUM students participated in the program as part of their final year practicum or industrial attachment program. The mode of operation encompasses 3 stages: 1) investment and trading competition 2) leadership and personal skill developments and 3) 3-month attachment trainings with investment houses and corporate bodies.

The students went through a 3-week intensive training on the mechanics of financial markets using the facilities in the Trading Room. As far as it is known, UUM is the only university in Malaysia that has built a trading room. In between the sessions, participants were also exposed to various self-development programs that develop their personal skills. The activities include market report presentations, team-building, communication and identification of one’s strengths and weaknesses for specific job alignments. In other words, students’ skills and personal attributes are identified and match with jobs suitable to such personalities and skills. All those training were conducted in UUM.

From UPIC 2008, we obtained amazing results in terms of personality transformations. Participating students can then talk freely, gained poise and confidence and ready to assume leadership roles. The practical trainings plus the renewed confidence enable the students to gain better job knowledge and techniques practiced by the industry.

The second achievement is that out of the 76 students, 13 of them were shortlisted for another month of a comprehensive training that prepares them to sit for professional examination “Dealer’s Representative License” to become remisiers. 12 of them have passed the examination and have obtained the professional dealer’s license, issued by the Securities Commission of Malaysia. For these 12 students, they obtained 2 qualifications; their bachelor’s degree and professional qualifications from the Malaysian Securities Commission. With this qualification, one can easily pursue a career as a licensed remisier in Malaysia. Six of them are employed by RHB Investment Bank and the remaining six by
AmInvest Bank. The remaining 54 students have secured employment as financial advisers and executives in corporate bodies. Through UPIC 2008, the 76 students have obtained employment within 6 months after they finished their studies (and before their official graduation day).

The success of the first pilot run has gained the confidence of the Ministry of Higher Education to award UUM-Pribumi-Airgate team a RM 3 million to introduce UPIC 2009 with 20 public universities. UUM has been entrusted by the Ministry to manage the funds for the 20 universities. UPIC 2009 is currently being held at the national level, with a gathering of the final 500 students selected from the top 25 students from each of the 20 universities. Many corporate bodies will be participating in this program and they will be offering job placements for these 500 students.

**Apprentice Entrepreneurship Development Model - Co-operative and Entrepreneurship Development Institute (CEDI)**

The CEDI-UUM apprentice entrepreneurship development model was based on the Consulting Based Learning for ASEAN SMEs (CoBLAS) which was introduced by a Group of Entrepreneurship researcher from Japan, Thailand, Malaysia, Cambodia, Laos and Indonesia headed by Professor Takeru Ohe from Waseda University of Japan. The CEDI-UUM team has adopted and enhanced the model by focusing on three phases of entrepreneurship development which is comprised of:

a. Self Development
b. Business Exposure, and
c. Industrial practical training (which also includes preparation for running a real business).

The Objectives of the program are as follows:

1. to train and expose student on a continuous basis during his/her stay in UUM on the issue of hands-on business management
2. to collaborate with a pre identified business entity to develop potential student entrepreneur
3. to take entrepreneurship as an alternative career choice for UUM student
4. to assist the country in developing more entrepreneur among the graduates

The three-year program is a tri-partite arrangement between UUM, Student and Business Entity. For a smooth implementation and monitoring of the program a joint working committee comprises representatives of UUM and Business Entity is being established.

In the **first phase** of the program the students are introduced to the following concepts:

1. the role of student, CEDI and Business entity in the program
2. the concept of entrepreneurship and the background information of all parties involved
3. basic business topics such as marketing, account, communication etc.

In the last two months of the first phase the students undergo a practical training at the business entity identified. During this session the students will have a hands-on exposure of what they have learned.

In the **second phase** the students undergo the following processes:

1. learn the process of business opportunity identification
2. register a business on campus under the supervision of CEDI
3. visit various businesses related to the Business Associates of the program
4. prepare and present a report of the second phase activities
In the **third phase** of the program the students:

1. undergo workshop conducted by business entity and
2. undergo a workshop on business plan
3. prepare and present a business plan
4. apply for a loan from Business Fund Provider to set up a business upon graduation

The overall outlook of the UUM entrepreneur apprentice model is as per the diagram below. As of March 2009, the apprentice entrepreneurship development program has involved two business entities including SME Bank and Bank Rakyat of Malaysia. The program has also involved 40 students from various disciplines of study at UUM.

CEDI-UUM Apprentice Entrepreneurship Development Model

---

**CONCLUSION AND CHALLENGES AHEAD**

The paper has presented various responses by HE in Malaysia in their efforts to enhance graduate employability, from academic initiatives to extracurricular and university industry linkages. HE has to make more explicit efforts to enhance graduates’ generic skills to enable graduates to move self-sufficiently within the volatile labor market via sustainable employment. However, in doing so HE in Malaysia recognizes challenges in ensuring the success of these initiatives. Among other things, HE should address the following:

1. The increased diversity among undergraduates requires different interventions at various levels. Some skills require time to mature; thus, university must be able to address skills development in a progressive manner. There is no one size fits all solution to tackle any issue.
2. It is difficult to buy out academics’ time for curriculum development or reform especially when rewards and recognition are significantly based on research and publication. To convince academics to give serious thoughts to employability is a huge task when their career prospect primarily depends on their research productivity. It is time for the university management to begin to address the various scholarship of teaching and due recognition is to be given to each accordingly.

3. Logistics to conduct active learning: university intake has doubled than expected in the last few years. Mass lecture is still abundant. With the kind of student background presently available (product of exam-oriented secondary schools) it is hard to expect active class participation. The challenge is to reduce the number of student-lecturer ratio and, thus, reducing the class size.

4. The decline in English language proficiency among undergraduates: Recognizing that English today is the language of knowledge, universities in Malaysia have to undertake remedial work to bridge the gap between post-secondary limited language and numeracy proficiency and university readiness skills.

5. Financing for co-curriculum activities: the needs to hire professionals as trainers in the various fields of co-curriculum activities demand a high cost allocation. Furthermore, the cost of conducting such activities is also increasing. This is particularly true for outdoors activities that require special skill such as kayaking, repelling and mountaineering.

References


The Employability of Graduates: A Determinant To Full Employment

Juliana Laraya, Ph.D
Assistant Dean
School of Accountancy & Management
Centro Escolar University
Manila, Philippines

Introduction

Two popular schools of economics, the Classical and the Keynesian, presented their theories pertaining to employment in two different ideas.

The Classical economist theory of employment placed emphasis in obtaining a maximum output of goods and services through proper balancing of economic resources. The Keynesian economist, on the other hand, placed emphasis on attaining and maintaining full employment. The Classical emphasizes productivity, while the Keynesian emphasizes jobs for all.

Both theories contributes to the validity of the statement that when economic resources, like human resources, are fully employed and are properly allocated, it will result to high productivity which, in turn, allows consumer to satisfy his demand to the maximum level.

The main concern of the study is to determine how human resources maybe developed and trained to attain full employment. Answers to specific questions will be sought as to what factors may determine employability, competencies/skills that should be developed, and identify the most responsive on demand courses based on waiting time. From the obtained data, the study will draw policy implications and recommendations that may be used as inputs to enhance the effectiveness and responsiveness of the curriculum/programs to be developed.

Background of the Study

In the desire of the Commission on Higher Education (CHED) to establish a Labor Market Information System to ascertain the destinations of the graduates of higher education institutions in the Philippines, the Commission sponsored trainings of trainers on Graduate Tracer Study. The aim of the training is to standardize the conduct of Graduate Tracer Studies (GTS) and ensure data compatibility across all higher education institutions in partnership with all higher education institutions (HEIs) in the country.

The Centro Escolar University is one of the higher education institutions that responded to the call of CHED to become an active partner in the endeavor to support the goals of higher education and to improve the internal operations of the institutions, and placements of its outputs.

Procedure/Methodology

The study, a descriptive research, used the stratified sampling technique to determine the sample size of the respondents. The statistical treatment applied includes the frequency distribution, the chi-square and cross tabulation. Data processing was done using SPSS for Windows version 11.0. The main source of data was CHED’s accomplished graduate tracer instrument. Other sources of data included the alumni directory, university registrar’s records, and the industry/employer, both from the government and non-government institutions.
Results and Discussions

Results of the study revealed the following findings:

1. Personal and Academic Background that can Determine Employability

What can be inferred in the resultant data is that employers are looking for people who have the greater capacity to be committed in work, one example pertains to one’s civil status. Generally, employers prefer employees who are single specially for those whose nature of work would require constant updating of data or work that would necessitate frequent travel. Figures in Table 1, Profile of the Respondents, presents an overwhelming majority of the respondents, 85.00%, are single. Also the same table revealed that gender is another factor that can determine employability. Majority of the respondents, 77.60%, are female, an indication that females are more preferred over that of male based on the data obtained. This is validated also by the fact that female employees are most preferred to occupy positions generally related to public relations, product promotions, and office managers/consultants.

<table>
<thead>
<tr>
<th>Civil Status</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>425</td>
<td>85.00</td>
</tr>
<tr>
<td>Married</td>
<td>74</td>
<td>14.80</td>
</tr>
<tr>
<td>Single Parent</td>
<td>1</td>
<td>2.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>500</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1
Profile of the Respondents

As regards place of residence data showed that majority of the respondents were city-based. This is attributed to the fact that respondents’ employment are situated within the mega Manila belt. The domicile, home or abode, is equally important consideration as revealed in the findings. Tabular presentation in table 2 showed that 68.40% of the respondents are residing in the city where they are also employed. Respondents prefer to reside in the community where their place of employment is situated. Majority of the respondents attributed this to the fact that far residing prospects may regularly be tardy at work, either by willfully being one or just considering the urban community traffic condition. The obtained data is presented in Table 2, Frequency of Respondents as to Place of Residence.

<table>
<thead>
<tr>
<th>Category of Residence</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>342</td>
<td>68.4</td>
<td>1</td>
</tr>
<tr>
<td>Municipality</td>
<td>158</td>
<td>31.6</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>500</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 2
Respondents Category of Place of Residence
The age factor is, likewise, as revealed in the study, a very important consideration since there is a cut-off age when hiring employee in the Philippines, especially for the rank and file.

For the academic background, the popularity of the area of specialization and degree earned is one factor that could determine employability. In this study, commerce or business related courses was ranked 1 in terms of popularity among the respondents’, and most sought for by the employers/industry. Comparison of courses with biggest number of graduates, thus considered most sought for, is presented in Table 3.

Table 3
Comparison of Courses with Biggest Number of Graduates
2001-2004

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Commerce</td>
<td>1459</td>
<td>1123</td>
<td>1172</td>
<td>1800</td>
<td>5554</td>
</tr>
<tr>
<td>Doc. of Dental Medicine</td>
<td>549</td>
<td>422</td>
<td>493</td>
<td>479</td>
<td>1943</td>
</tr>
<tr>
<td>Tourism</td>
<td>513</td>
<td>408</td>
<td>396</td>
<td>267</td>
<td>1584</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>481</td>
<td>280</td>
<td>356</td>
<td>376</td>
<td>1493</td>
</tr>
<tr>
<td>Medical Technology</td>
<td>341</td>
<td>264</td>
<td>324</td>
<td>271</td>
<td>1200</td>
</tr>
<tr>
<td>Psychology</td>
<td>223</td>
<td>169</td>
<td>187</td>
<td>201</td>
<td>780</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3566</strong></td>
<td><strong>2666</strong></td>
<td><strong>2928</strong></td>
<td><strong>3394</strong></td>
<td><strong>12554</strong></td>
</tr>
</tbody>
</table>

The relevance of the curriculum to the job is another factor that could also determine employability, and majority of the respondents, 70%, agreed that curriculum content is an important factor in the graduates’ jobs. It could be implied that the curriculum content was instrumental to the development of competencies and skills by the respondents, like competencies in communication and skills in human relations. These competencies and skills turned out to be the most demanded by the employer/industry. Table 4 presents the data pertaining to the competencies learned by the students found relevant in their first jobs.

Table 4
Competencies Learned in College Found
Most Useful in the First Job

<table>
<thead>
<tr>
<th>Competencies/Skills</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>298</td>
<td>59.6</td>
<td>1</td>
</tr>
<tr>
<td>Human Relation</td>
<td>258</td>
<td>51.6</td>
<td>2</td>
</tr>
<tr>
<td>Entrepreneurial</td>
<td>103</td>
<td>20.6</td>
<td>6</td>
</tr>
<tr>
<td>Information Tech</td>
<td>133</td>
<td>26.6</td>
<td>4</td>
</tr>
<tr>
<td>Problem solving</td>
<td>128</td>
<td>25.6</td>
<td>5</td>
</tr>
<tr>
<td>Technical</td>
<td>140</td>
<td>28.0</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Competencies and Skills that should be Developed

The presentation in Table 4 revealed that the most useful skill applied in their first job is communication. The ability to express one’s ideas through good command of English is, in most cases, a primary factor that influence prospective employers. The second in rank is
human relation. Relating to the data presented, the most-looked-for competencies are actually inherent to the very personality of the person, and not merely to the technical and academic competencies that one learns conventionally at the institution. Employers actually look more on the graduates’ personality, especially in matters relating with other people, and their ability to express themselves well.

3. Programs Most Sought After by Employers

The period when which the respondents enrolled in college and subsequently graduated saw the great global rise of the Information and Communication Technology (ICT or IT) sector as well as industries auxiliary to its operations, including business process outsourcing. The same period also saw the rise of the allied health industries.

Table 5
Degree of the Respondents/Most sought after course by Employers

<table>
<thead>
<tr>
<th>Degree/Course</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting</td>
<td>5</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Banking</td>
<td>8</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>5</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>40</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>5</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>63</td>
<td>12.6</td>
<td>4</td>
</tr>
<tr>
<td>Medical and Allied</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental Medicine</td>
<td>48</td>
<td>9.6</td>
<td></td>
</tr>
<tr>
<td>Medical Technology</td>
<td>29</td>
<td>5.8</td>
<td></td>
</tr>
<tr>
<td>Nursing</td>
<td>25</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>Optometry</td>
<td>5</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>58</td>
<td>11.6</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>165</td>
<td>33.0</td>
<td>1</td>
</tr>
<tr>
<td>Natural Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>3</td>
<td>.6</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>2</td>
<td>.2</td>
<td></td>
</tr>
<tr>
<td>General Science</td>
<td>1</td>
<td>.2</td>
<td></td>
</tr>
<tr>
<td>Physical Science</td>
<td>1</td>
<td>.2</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>1</td>
<td>.2</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>8</td>
<td>1.4</td>
<td>6</td>
</tr>
<tr>
<td>Social and Behavioral Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>42</td>
<td>8.4</td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>5</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>1</td>
<td>.2</td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td>14</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>62</td>
<td>12.4</td>
<td>4</td>
</tr>
<tr>
<td>Educational Teacher Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>5</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>SPED</td>
<td>1</td>
<td>.2</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>6</td>
<td>1.2</td>
<td>7</td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>1</td>
<td>.2</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masscom &amp; Documentation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mass Communication</td>
<td>41</td>
<td>8.2</td>
<td></td>
</tr>
<tr>
<td>Math &amp; Computer Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>1</td>
<td>.2</td>
<td></td>
</tr>
<tr>
<td>Computer Science</td>
<td>70</td>
<td>14.0</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>113</td>
<td>22.6</td>
<td>2</td>
</tr>
<tr>
<td>Home Economics</td>
<td>3</td>
<td>.6</td>
<td></td>
</tr>
<tr>
<td>Service Trade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Service</td>
<td>2</td>
<td>.4</td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td>14</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>Tourism</td>
<td>51</td>
<td>10.2</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>70</td>
<td>14.0</td>
<td>3</td>
</tr>
</tbody>
</table>
This relates well with the resultant data, as presented in Table 5, regarding the most enrolled programs which at the time translated also to high prospects of employability. The most sought after was the Computer Science program, classified under commerce, followed by the Pharmacy program, and then by the Tourism program. The succeeding “popular” programs were also related to the two industries, i.e. ICT/IT and business process outsourcing. The remaining non-IT nor Allied Health-related programs were sustained for their own domestic, conventional, and basically perennial demand (business course, the liberal arts, education, and the empirical sciences). Combined however, the Allied Health industry comprises the largest sector in the study to have the highest demand. The Computer Science program, though the highest in raw score terms is more a stand-alone without any complimentary programs in its primary sector.

4. Programs Most Responsive on Demand

Based on Waiting Time

To determine how long a graduate for a certain course land in their first job, a cross tabulation was presented in Table 6.

From the data presented it could be gleaned that majority or 44.76% of the respondents were able to land in their first job in less than a month while for the 35.74% it took them for more than a month to 6 months to land in their first job. For some respondents, 9.39% of them were able to land in their first job from 7-11 months; 7.59% for others took them 1 year to less than 2 years waiting time. Still for a smaller group of 2.52% was able to find their job in less than 3 years.

This is only an indication that majority of the respondents were qualified for the employment that they applied for, which could also be interpreted that demand for their programs during the conduct of the research was high. The data indicated also that demand for business-related course, based on their waiting time, was high. There is another revelation that there are demands for science-related courses even with their small number of graduates.

Table 6

<table>
<thead>
<tr>
<th>Degree</th>
<th>Total respondents</th>
<th>Less than a month</th>
<th>1-6 months</th>
<th>7-11 months</th>
<th>1 yr to less than 2 yrs.</th>
<th>2 yrs to less than 3 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>4</td>
<td>2 (50%)</td>
<td>2 (50%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banking</td>
<td>7</td>
<td>4 (57%)</td>
<td>2 (29%)</td>
<td>1 (14%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>2</td>
<td>1 (50%)</td>
<td>1 (50%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Degree</th>
<th>Total respondents</th>
<th>Less than a month</th>
<th>1-6 months</th>
<th>7-11 months</th>
<th>1 yr to less than 2 yrs.</th>
<th>2 yrs to less than 3 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science</td>
<td>60</td>
<td>20 (33.33%)</td>
<td>25 (41.67%)</td>
<td>8 (13.33%)</td>
<td>1 (16.67%)</td>
<td></td>
</tr>
<tr>
<td>Dentistry</td>
<td>6</td>
<td>3 (50%)</td>
<td>2 (33.33%)</td>
<td>1 (16.67%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic</td>
<td>5</td>
<td>2 (40%)</td>
<td>2 (40%)</td>
<td>1 (20%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>5</td>
<td>2 (40%)</td>
<td>3 (60%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>4</td>
<td>4 (100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food service</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 (100%)</td>
</tr>
<tr>
<td>Home economics</td>
<td>3</td>
<td>1 (33.33%)</td>
<td>2 (66.67%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 (100%)</td>
</tr>
</tbody>
</table>
### Management
- Graduates: 26
- Employed: 10 (38.46%)
- Not employed: 16 (61.54%)

### Marketing
- Graduates: 2
- Employed: 1 (50%)
- Not employed: 1 (50%)

### Masscom
- Graduates: 34
- Employed: 14 (41.18%)
- Not employed: 20 (58.82%)

### Mathematic
- Graduates: 1
- Employed: 1 (100%)

### Med Tech
- Graduates: 23
- Employed: 14 (60.87%)
- Not employed: 9 (39.13%)

### Nursing
- Graduates: 20
- Employed: 11 (55%)
- Not employed: 9 (45%)

### Nutrition
- Graduates: 11
- Employed: 3 (27.27%)
- Not employed: 8 (72.73%)

### Optometry
- Graduates: 5
- Employed: 4 (80%)
- Not employed: 1 (20%)

### Pharmacy
- Graduates: 47
- Employed: 22 (46.80%)
- Not employed: 25 (53.20%)

### Political Science
- Graduates: 7
- Employed: 3 (42.86%)
- Not employed: 4 (57.14%)

### Psychology
- Graduates: 34
- Employed: 14 (41.18%)
- Not employed: 20 (58.82%)

### Science
- Graduates: 1
- Employed: 1 (100%)

### Social work
- Graduates: 11
- Employed: 3 (27.27%)
- Not employed: 8 (72.73%)

### SpEd
- Graduates: 1
- Employed: 1 (100%)

### Tourism
- Graduates: 40
- Employed: 17 (42.50%)
- Not employed: 23 (57.50%)

### TOTAL
- Graduates: 277
- Employed: 124 (45.03%)
- Not employed: 153 (54.97%)

#### 5. Types of Graduates Most Employable

Table 6 presentation revealed also that the computer science program posted the most employable, owing partly to the rising demand in the industry needing it during the covered period, as well as the rising integration of IT products and processes in almost every industry. Note that many of the Allied Health programs don’t promise immediate employment. One answer to this could be attributed to the general trend among Filipino health professional to establish their own clinic rather than be member of large medical institutions, particularly in the case of dentists.

As for the other conventional programs, one must also note that several of the industries employing the graduates of such program have not considerably matured in the years that followed their inception. One such is the mass communication industry of the country, where for half a century there were never more than five TV networks to absorb the increasing number of mass communication graduates.

**Conclusions**

1. The competencies and skills required and the need or demand of the industry is a determinant factor in the employability of the graduates.
2. Communication skills in English and skill in social/human relation were identified as an important characteristics by the graduates as positive factors in employability.
3. The content of the curriculum as well as the competencies and skills that should be acquired by a graduate is influenced by the demand and supply relationship of the employee and the employer/industry.
4. The most employable graduates are generally graduates of popular courses/programs.
5. The popularity and employability of the program is determined by the demand of the industry.
Recommendations

1. To develop the desired competencies and skills of the graduates, the industry/employer and the educational institutions should establish a close coordination in developing/revising the curriculum of a program.

2. Upgrading of the curriculum should be regularly done not only as reaction to the economic environment but particularly, in anticipation of future developments.

3. Results of a standardized tracer study conducted and assessed by the HEIs be utilized as criteria in approving application for new programs by CHED.

4. Policy could be formulated to limit the opening of new course/programs based on the demand and availability of opportunities/industries willing to absorb its graduates.

Develop a continuing education curriculum from secondary education to tertiary to determine student’s potential skills that could be honed.

Establish linkage with industry as regards training programs, and placement of graduates.

Conduct regular review of curriculum content and monitor implementation vis-à-vis the quality of institutions’ outputs by CHED/DepEd.
The Thai Association for Cooperative Education: TACE

by

Dr. Guntima Sirijeerachai* and Assistant Professor Dr. Padungsak Suksa-Ard**

* Suranaree University of Technology, 111 Suranaree, Nakhonrachasima 30000, Thailand
** Walailak University, 222 Thaiburi, Thasala, Nakhon Si Thammarat 80161, Thailand

(E-mail: guntima@g.sut.ac.th or spadungs@wu.ac.th)

Abstract

Thailand first integrated Cooperative Education into its tertiary curricula at Suranaree University of Technology in 1993. Five years later, in 1998, Walailak University adopted Cooperative Education as one of the university's major mechanisms in the production of graduates. Integration of Cooperative Education into the tertiary curricula has been active and continuous at both universities since then. Cooperative education has proved to be a method of work-integrated learning that maximizes potential of university graduates; thus, it is extensively adopted at various tertiary institutes based on evidence that students who have undergone Cooperative Education have a better chance of job offers and employment. As a win-win activity, the workplaces benefit from the projects assigned to students during their Cooperative Education and use it to recruit students as prospective employees, which is found to be an effective job recruitment process. Cooperative Education can therefore be seen as a process of producing graduates with employability skills.

Keywords: Cooperative education, work-integrated learning

Introduction

The major role of Thailand's tertiary education is to produce personnel, build the nation, raise the development and the competitive edge of the country and produce graduates that match the needs of the job market both in quantity and quality. However, feedback from the users of Thai graduates indicates that Thai graduates are well-versed in theories but weak in their practical knowledge. They have good knowledge in their fields of study but lack the determination to work hard. Moreover, they do not have workable English and need to be further trained by the workplaces in order to handle the jobs assigned. Thai tertiary education has tried to solve these problems by integrating work-integrated learning into the curricula but some problems in terms of management and the learning process continue to exist. It is found that there are not enough workplaces to absorb the number of Cooperative Education students. Another problem is the experience learnt in the workplace, in many cases, does not match the academic and the professional knowledge desired. Besides, the period of Cooperative Education in the summer is too short and supervision by advisors at the workplace and advisors of the fields of the study appointed by the university is poor, while assessment of Cooperative Education outcomes is found to be substandard and unsystematic (Srisaan, 2008).

Thai tertiary education in the past focused on the knowledge of theories more than practical knowledge with the exception of certain fields of study that require professional experience as part of the professional standard such as medicine, nursing and teaching. Previously, practical experience would be gained from laboratory experiments or practical training within the campuses. Out-of-campus experience would be learnt from study visits or
short training programmes in the format of extra-curricular activities. In brief, Thai universities have long focused on theoretical knowledge as the learning outcomes of Thai graduates.

However, industrial development, the domestic service industries and the employment market require graduates who have both theoretical and practical knowledge. This is an impetus for the universities and prospective employers of graduates to change the direction of graduate production by integrating the learning of university courses with practical work outside the campuses in the format of internship and Cooperative Education. Many Thai universities have adopted internship as a way to improve student practical knowledge to provide an extension of the theoretical side of learning but they have faced a number of problems as mentioned earlier. At present, tertiary education institutes are experiencing the value of Cooperative Education learning. Thai universities have adopted Cooperative Education for about 10 years but it is years behind western universities and many other countries in the Asia-Pacific region, which have used Cooperative Education for more than 50 years (Srisa-an, 2008).

The system of education that integrates classroom learning and work-integrated learning both in the formats of internship and Cooperative Education enables students to apply their academic knowledge in their workplace assignments. This will eventually lead students to the discovery of their potential and areas needing improvement, knowledge which students use to improve themselves for their job readiness. It can be said that this system prepares students for job offers and employment more successfully than the system that does not have a built-in mechanism of work-integrated learning. Take for example the setting up of training of Mahidol University. Most of the science-based Bachelor of Science degree programmes at Mahidol University have four-year curricula. During this four-year period, students who may be interested in pursuing future industrial careers normally have several opportunities to prepare themselves accordingly. Usually, in some courses, there are several field trips and industrial visits where students will have chances to understand industrial settings. Although these visits are relatively short period, half a day or a full day, students will be able to visit many different industries in a semester. In most curricula, students are encouraged to spend the summer period between the 3rd and 4th years in a factory of their choice. During these two summer months, students will be able to learn more about particular factories and perhaps use experiences gained during this period as criteria in selecting their future careers. Also, the supervisor in each factory will also have the opportunity to know more of a particular student, and judgement for future employees can be made. Both the academic staff from the university and supervisors in the industry will act as joint supervisors for the summer training period. Following the training, the university staff usually organizes a one or two-day seminar to allow each student to share his or her experience during the training period in the industry. Thus, students will be able to understand a number of industrial settings and will be able to know the strengths or weaknesses of a number of industries. All these exercises, of course, will not only allow students to understand the nature of a number of industries but also will provide very useful information when they begin to search for future employment in the industrial sector. It is often evidenced that a training programme leads to an increase in the opportunities for students to be employed by the industry after graduation (Chaiyaroj et al., 2009).

However, a short training period may not sufficiently reflect all the potential ability of students to work and learn from actually working. Cooperative education, thus, stands out as another alternative to remedy the limitations of job training. Thailand first integrated Cooperative Education into her bachelor’s degree programmes at Suranaree University of Technology in 1993. Five years later, in 1998, Walailak University, became the second university in Thailand to adopt Cooperative Education as a compulsory part of its curricula by devoting a trimester to Cooperative Education which alternates between other regular trimesters. Since then, the Cooperative Education integrated approach to curricula implementation has become widespread to both state and private universities in Thailand, all of which realize the true benefits of work-integrated learning of students as employees. It is hoped that in this way, students will be able to gauge their ability and decide whether they can make use of what they know academically into their jobs and to what extent that knowledge can be applied. More importantly, after their Cooperative Education stints, continuation at the university before graduation is a way to the fuller acquisition of the academic knowledge and practical skills that students are still lacking to achieve job readiness. It can be concluded that
the system of Cooperative Education is a practical device to develop and prepare students who will leave the university with job readiness skills.

The Thai government policy on Cooperative Education began in 2002. In that year the Ministry of University Affairs allocated a supportive budget based on the number of individual students to 17 educational institutes that integrated Cooperative Education into their curricula. In 2004-2005, the Thai government, through the Commission on Higher Education Ministry of Education, extended the network by continuing its support in the budget format to 60 educational institutes with the total number of 10,044 students and 2,000 participating workplaces. After that, the project was evaluated by the Commission on Higher Education with the finding that the main problem of cooperative management is that involved parties lack the knowledge and understanding of Cooperative Education. However, it is also found that both the participating workplaces and the involved educational institutes agreed that Cooperative Education is a beneficial educational system and an alternative means of further developing the potential of students and graduates. The Commission on Higher Education has thus made a commitment on the basis of analysis of the past operations and strategic planning for future Cooperative Education management for the sustainability of the project. Educational institutes will therefore operate the project independently with the Commission on Higher Education acting as a major participant on behalf of the Thai government.

At the initial stage, Cooperative Education was managed in the bilateral format. That is, educational institutes dealt directly with the workplaces without the support of the government. Private organizations such as the Federation of Thai Industries, the Thai Chamber of Commerce and Board of Trade of Thailand and a few others gave their support to the launching of the Cooperative Education systems of Suranaree University of Technology and Walailak University. Later in 2002, Cooperative Education entered the phase of a multilateral format with agencies from various different sectors taking Cooperative Education as their shared responsibility. These agencies include educational institutes, workplaces and a state representative, namely the Commission on Higher Education, which is trusted with overseeing related policies and financial support. Private organizations such as the Federation of Thai Industries, the Thai Chamber of Commerce and Board of Trade of Thailand, the Thai Academic Council, the Thai Association for Cooperative Education (TACE) and an international academic organization, the World Association for Cooperative Education (WACE) are also involved. To conclude, at present, various different participating agencies from all sectors have worked together in the format of multilateral participation.

Currently, according to the questionnaires sent to 133 educational institutes in the survey in 2006 by the Commission on Higher Education of the number of educational institutes that adopt Cooperative Education in their curricula, it was found that Cooperative Education had been adopted by 88 institutes (66.17 %) and had not yet been adopted by 45 institutes (33.83 %). The number of participating workplaces was 5,810 and the number of students participating in Cooperative Education totaled 13,630. The increase in the number of participating educational institutes and workplaces is a considerable increase on the 60 participating educational institutes and 2,000 participating workplaces in the year 2004.

Educational institutes that have adopted Cooperative Education into their curricula for more than 10 years like Suranaree University of Technology and Walailak University have adopted a trimester system of education to accommodate the Cooperative Education system. Each year Suranaree University of Technology sends about 1,200 students on Cooperative Education to more than 400 workplaces, while Walailak University sends about 800 students to more than 400 participating workplaces (Table 1). These participating workplaces may or may not cooperate with the universities as MoU partners. Most participating workplaces have not yet signed an MoU agreement to be Cooperative Education partners but the joint projects have been carried out continuously. The participating workplaces that have signed MoUs to be in partnership with the two universities tend to be multilateral partners. For instance, on 11th September 2008 a MoU was signed by the Commission on Higher Education, the Thai Association for Cooperative Education, the Thai Logistics Association, the Thai Logistics and Production Society, the Thai Chamber of Commerce and Board of Trade, and the Thai National Shippers’ Council. This event is considered the first multilateral MoU signing for Cooperative Education, involving a total of 9 workplaces and 25 educational institutes.
The Process of Cooperative Education

In the management of Cooperative Education, the key factor of success is working in partnership between educational institutes and the participating workplaces. The guidelines for the successful operation of Cooperative Education in order to achieve the goals of student development are as follows:

The Process of Cooperative Education within an Educational Institute

1. The Pre-Cooperative Education Process

In order to ensure that Cooperative Education students can perform effectively in the workplaces, the preparation process needs to be given the utmost attention. The process includes the preparation of students in academic and professional aspects, recruitment of students who are ready for Cooperative Education, publicizing the goals and practices of Cooperative Education so that all involved parties will have the same understanding, meticulous job search for qualified positions that match Cooperative Education practices, advertising available jobs to the students, conducting job applications for Cooperative Education, and matching students and the workplaces and delivering students to their workplaces.

2. The While-Cooperative Education Process

Because Cooperative Education practice is like learning outside the classroom, supervision process or advice while working and measurement of the learning outcomes are the main factors for success. Supervision by full-time staff of the curriculum programme at the workplaces is a necessary mechanism. The academic supervisors’ jobs include giving advice or suggestions on how to work in the assigned workplaces which can be both academic or professional, following-up on the progress of report writing as well as assessment of students’ workplace performances, and presentation of students’ working outcomes to the workplaces in order to acknowledge the opinions and suggestions of the workplaces given on and for the students, this last activity being most beneficial to the students themselves and the workplaces.

3. The Post-Cooperative Education Process

Table 1. The number of Cooperative Education students and participating workplaces between academic year 2001 to 2008*.

<table>
<thead>
<tr>
<th>Academic year</th>
<th>Suranaree University of Technology</th>
<th>Walailak University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The number of Cooperative Education students</td>
<td>The number of participating workplaces</td>
</tr>
<tr>
<td>2001</td>
<td>869</td>
<td>393</td>
</tr>
<tr>
<td>2002</td>
<td>768</td>
<td>484</td>
</tr>
<tr>
<td>2003</td>
<td>698</td>
<td>450</td>
</tr>
<tr>
<td>2004</td>
<td>782</td>
<td>612</td>
</tr>
<tr>
<td>2005</td>
<td>888</td>
<td>484</td>
</tr>
<tr>
<td>2006</td>
<td>1,056</td>
<td>553</td>
</tr>
<tr>
<td>2007</td>
<td>1,105</td>
<td>598</td>
</tr>
<tr>
<td>2008</td>
<td>1,155</td>
<td>618</td>
</tr>
</tbody>
</table>

* Data collected from QA annual report of Cooperative Education of Suranaree University of Technology, and Walailak University between academic year 2001-2008.
In order that the assessment and the reflection of the potential of students’ performances will be complete, a seminar is organized after the Cooperative Education period as an occasion for students to receive the feedback from their academic advisors and their workplace supervisors. Students need to look carefully at this feedback and use it to develop themselves further, noting especially their weak areas. The workplaces will also receive the evaluative reports from the educational institutes in order to develop the process of Cooperative Education in the workplaces for maximum effectiveness. These stages of the main process are considered highly essential.

The Process of Cooperative Education within a Workplace

1. The Pre-Cooperative Education Process

This is a process used to recruit students who have the qualities that match the business of that workplace. Accurate recruitment of the right students for the matching workplaces triggers the effectiveness of the personnel development process through the Cooperative Education programme. At this stage, the workplaces must identify the qualities required of the students and recruit the most appropriate ones, state the job descriptions and job details including the projects to be assigned to the students, indicate the number of positions and the periods of Cooperative Education in the workplaces. Besides, the workplaces should consider offering some wage payments and welfare benefits as they consider appropriate.

2. The While-Cooperative Education Process

This is a process that needs preparation within the workplaces before students are offered assignments. This process should help to fully reflect students’ potential. Recommended practical guidelines are; first: an orientation should be organized to inform Cooperative Education students about the rules and regulations, work guidelines, as well as corporate culture and organizational structure; second: students should be treated as temporary employees there, while workplace supervisors should be appointed to support students by giving advice and suggestions during their Cooperative Education periods. The workplaces should also organize a meeting/session in which Cooperative Education learning outcomes of the assigned students are presented to involved parties and the executives of the workplaces for useful feedback towards students’ self-improvement.

3. The Post-Cooperative Education Process

For effectiveness in overall management of Cooperative Education within the workplaces and for strengthened partnership in providing jobs for future Cooperative Education students, the workplaces should organize a meeting to evaluate the effectiveness of the Cooperative Education process within the workplaces. Then, the feedback will be sent back to the educational institutes, especially indications of problems and obstacles. The process includes a meeting with the educational institutes to look for directions in maximizing outcomes of Cooperative Education or other facets of cooperation. The participating workplaces should collect data on whether students’ assignments/projects have been used and if so, what benefits are eventually rendered to the workplaces.

The Learning Cooperative Education Outcomes of Educational Institutes that Integrate Cooperative Education into their Curricula

In the Cooperative Education programme evaluation by the Commission on Higher Commission in 2006 for the country’s level of achievement, it is found that Cooperative Education is most useful in the development of students’ potential despite problems and obstacles in the operations and management non-readiness at both the educational institutes and the participating workplaces. However, participants on both sides have expressed the opinion that the Commission on Higher Education, on behalf on the Thai government, should continue to support educational institutes that would enable the programmes to continue.
Examples of positive learning outcomes can be found in the management of Cooperative Education at Suranaree University of Technology and that of Walailak University, where the Cooperative Education programmes have been in place from the establishment of both universities till now. Concrete evidence on beneficial outcomes for students and participating workplaces are:

1. Potential of Students and Graduates

Interviews of students of both universities while going through their Cooperative Education programmes and after graduation revealed that Cooperative Education enabled them to learn more outside the classroom. University courses are one way for students to learn but there is another perspective of learning which is not gained in the classroom; that is, learning from actually being in the job in the workplace as an employee. Cooperative education has taught students to live and work with other people. They need to develop their communication skills for successful cooperation and work achievements, learning how to live together and understanding the process of work, as well as working with people who have different educational backgrounds. Students need to be aware of the importance of careful planning. All these have helped students to become mature both in their mentality and personality. Students must clearly understand their roles and must be able to work. They must see themselves as members of the workplaces and create as much beneficial work for the workplaces as possible. Most importantly, the main benefit for students is they will be confident that they will learn how to work efficiently, effectively and professionally in their prospective workplaces after graduation.

2. The Rate of Employment of Graduates in the Curricula Integrating Cooperative Education Programmes

Information about the rate of employment of bachelor’s degree level graduates of both Suranaree University of Technology and Walailak University one year after their graduation from 2005 to 2007 in comparison with the rate of employment of all graduates of Thailand was obtained in a study by the Commission on Higher Education. It was found that the rate of employment of graduates from Suranaree University of Technology and Walailak University in the same years was not different from that of the whole of Thailand, although both Suranaree University of Technology and Walailak University are considered rather new universities which have started to produce only a few batches of graduates (Tables 2 and 3).

### Table 2. Rate of employment of Bachelor’s degree programme graduates of Suranaree University of Technology between academic year 2005 to 2007.

<table>
<thead>
<tr>
<th>Field of Study</th>
<th>Rate of Employment (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Academic year 2005</td>
</tr>
<tr>
<td></td>
<td>Got Jobs</td>
</tr>
<tr>
<td>1. Engineering</td>
<td>78.82</td>
</tr>
<tr>
<td>2. Agricultural Technology</td>
<td>71.31</td>
</tr>
<tr>
<td>3. Health Sciences</td>
<td>88.46</td>
</tr>
<tr>
<td>4. Social Technology</td>
<td>83.48</td>
</tr>
</tbody>
</table>

* The data about employment rate was collected at 3 to 6 months after graduation. (QA annual report of Cooperative Education of Suranaree University of Technology between academic year 2005-2007.)
Table 3. Rate of employment of Bachelor’s degree programme graduates of Walailak University between academic years 2005 to 2007.

<table>
<thead>
<tr>
<th>Field of Study</th>
<th>Academic year 2005</th>
<th>Academic year 2006</th>
<th>Academic year 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Got Jobs</td>
<td>In the Professional Fields of Study</td>
<td>Got Jobs</td>
</tr>
<tr>
<td>1. Physical Sciences/Biology</td>
<td>78.80</td>
<td>59.60</td>
<td>66.88</td>
</tr>
<tr>
<td>2. Engineering</td>
<td>78.70</td>
<td>50.70</td>
<td>52.14</td>
</tr>
<tr>
<td>3. Agricultural Technology</td>
<td>75.50</td>
<td>55.30</td>
<td>76.85</td>
</tr>
<tr>
<td>4. Health Sciences</td>
<td>86.70</td>
<td>82.80</td>
<td>91.26</td>
</tr>
<tr>
<td>5. Business administration/Commerce</td>
<td>73.10</td>
<td>51.30</td>
<td>65.74</td>
</tr>
</tbody>
</table>

* The data about employment rate was collected at 1 year after graduation. (QA annual report of Cooperative Education of Walailak University between academic year 2005-2007.)

3. The Benefits for the Participating Workplaces

The participating workplaces will benefit from assignments or projects assigned to students. If the workplaces have clearly specified the task types, plans and objectives of the projects, the projects will be beneficial to the workplaces. For example, Seagate Technology (Thailand) Co. Ltd., Korach Branch, which started to take in Cooperative Education students in 1996 has found that in the period of 8 years of participating as a partner in the Cooperative Education project (1996-2003), altogether 143 projects were assigned to students, classified as 71 projects related to quality improvement and manufacturing, 23 information technology projects, 12 industrial factory projects, 7 projects on safety management and 35 others. There were altogether 164 participating students from 8 educational institutes. Most of the students were from Suranaree University of Technology. All these projects helped Seagate Technology (Thailand) Co. Ltd., to reduce the budget for research and development totaling 100,000 US dollars, which the company had not expected. At the beginning, the company agreed to take in students because it hoped to pay something back to society by taking a share in student development; it never thought of the profits gained. Cooperative education is certainly a programme that all parties can benefit from. There are a number of projects that can be adopted for use by the company.

In addition, supervisors of Cooperative Education at the workplaces have reported that academic findings and new technology have indeed been transferred through the work of proactive Cooperative Education students, helping to develop the production process and increase work efficiency in the workplaces. Accepting students on Cooperative Education programmes truly benefits the workplaces. Moreover, the workplaces have a better chance to continuously consider the knowledge and skills of these students while at work and recruit them as new employees, which proves to be better than the traditional interview system commonly used. There have been cases of students being offered jobs at those workplaces or called for interviews immediately after graduation or when there are vacant positions. Each year, 30 % of the participating workplaces recalled the students to take work positions. However, only 10 % of the students went back to their Cooperative Education workplaces because they had already got a job. The opinions of the workplaces towards Cooperative Education students are shown in Table 4. As shown, the workplaces have rated the potential of students from both Suranaree University of Technology and Walailak University as high and very high.
Table 4. The opinions of the participating workplaces between academic years 2005 to 2007*.

<table>
<thead>
<tr>
<th>Item</th>
<th>Opinions of the participating workplaces based on academic years</th>
<th>Suranaree University of Technology</th>
<th>Walailak University</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Discretion and decision making</td>
<td></td>
<td>4.17</td>
<td>3.83</td>
</tr>
<tr>
<td>2. Ability to learn and application of academic knowledge</td>
<td></td>
<td>4.33</td>
<td>4.17</td>
</tr>
<tr>
<td>3. Management and planning</td>
<td></td>
<td>4.17</td>
<td>3.89</td>
</tr>
<tr>
<td>4. Responsibility and reliability</td>
<td></td>
<td>4.43</td>
<td>4.32</td>
</tr>
<tr>
<td>5. Ability to initiate work</td>
<td></td>
<td>4.33</td>
<td>4.07</td>
</tr>
<tr>
<td>6. Self-discipline and respect of corporate culture</td>
<td></td>
<td>4.57</td>
<td>4.45</td>
</tr>
</tbody>
</table>

* Data collected from QA annual report of Cooperative Education of Suranaree University of Technology, and Walailak University between academic year 2005-2007.

4. The Benefits for the Educational Institutes

The main objective of an educational institute or teaching staff involved in graduate production is that graduates should have similar and not poorer potential than graduates from other institutes, that the rate of employment should be high and the unemployment rate low, and that graduates should advance in their professional life. When students come back from their Cooperative Education stints where they have experienced the real working world, they are expected to have found their weaknesses or to have discovered that they lack certain abilities which are necessary in their future careers. They will come back to further their education in those areas. It is found that Cooperative Education has helped students to secure jobs more easily than students from other universities who have never experienced workplace learning. Students have developed their potential considerably. Although there has been no concrete evidence from studies in Cooperative Education, most Cooperative Education teaching staff at their department meetings have expressed their agreement that there have been signs of positive changes in the students and support the promotion of Cooperative Education.

Besides, it is found that when academic advisors make their visits to the workplaces while their students are at the workplaces, they have a chance to exchange opinions in terms of the curricula, and those opinions or suggestions can be brought back to improve the teaching and learning of courses in the programmes or improve the curricula. A further point is that Cooperative Education helps to widen the outlook of the teaching staff, especially those who did not have experience working in the industrial, government or business sectors.

Discussion and Conclusion

The resulting outcomes of the operations of Cooperative Education projects at Suranaree University of Technology and Walailak University have revealed that Cooperative Education benefits all parties concerned if each party seriously manages the process and adheres to the standards required of Cooperative Education operations. In order that Cooperative Education may be successfully managed, the Commission on Higher Education has set the Cooperative Education standards, with quality assurance as part of education quality control. Great care has been taken by the Commission on Higher Education in drawing up the framework and guidelines for each educational institute to follow.

Preparation in terms of fully understanding students’ roles is a major factor for success. When students are aware that they are going to take up new roles in their workplaces, they will try to perform their best. When the workplaces obtain students’ work that can be used, they will be confident and see the benefits of the programme. This will enhance cooperation among involved parties that will continue and expand to cooperation in other areas. As a result, the main drive of Cooperative Education success comes from the educational institutes which must take the initiative from the beginning in establishing a
network of participating workplaces without waiting for support from other participants. This is what Suranaree University of Technology and Walailak University have done in developing today’s format of cooperation of multilateral participants from that of bilateral participants at the beginning.

Currently, Cooperative Education is managed in the format of multilateral participants. Standards have been set and quality assurance has been outlined. The focus is on securing an in depth understanding of those responsible for Cooperative Education both at the university and at the workplace. A good start has been made. As time goes on, the management of Cooperative Education in Thailand will expand effectively and sustainably.

Acknowledgements

The authors gratefully acknowledge graduate students of Suranaree University and Technology, Walailak University, also Seagate Technology (Thailand) Co., Ltd., and Somboon Group Co., Ltd. for their supporting data. In addition, special gratitude is expressed to Asst. Prof. Anchalee Chayanuwat and Mr. David James Wertherby for proofreading this manuscript.

References


Cooperative Education and Career Development Project. 2007. QA Annual Report Academic Year 2006, Walailak University. 54 p. (in Thai)


1. Introduction

In modern time, the ongoing socio-economic integration and globalization process is making the world smaller, linking not only our fates to our social developments but also our fates to the advancements we make in science and technology. In the 21st century, this integration and globalization process is posing ever greater challenges that we must overcome if we are to progress further. The conventional wisdom is that higher education is playing a key role in such endeavors. However, for higher education to live up to its expectation, it needs to change and reform itself constantly to ensure its quality in knowledge creation (research) and knowledgeability (education) through furthering staff qualifications, creating a stimulating and favorable working environment, mobilizing and making resources available and accessible where they are needed, and above all forging linkages with industries and businesses to enhance the employability of its graduates.

The aim of this paper is to examine the ways of enhancing graduate employability at the largest and one of the most prestigious universities in Vietnam: Vietnam National University, Hanoi (VNU, Hanoi). As a way of start, we will first look at the notion of employability. Then we will discuss the relations between higher education and graduate employment. This is followed by a section in which we will provide a general picture of the Vietnamese higher education. Then, we will present the main activities we have been doing over the past few years to enhance graduate employability at VNU, Hanoi. The main argument of this paper is that in order to prepare graduates for the world of work, universities should constantly improve their education quality directing it toward the outcomes that are needed by the labour market and make close contacts with businesses, industries and employers via their functioning organizations such as alumni associations, centres for career development, etc. Details of these contents will be presented in the sections that follow.

2. The Notion of Employability

There are many definitions of the English term ‘employability’ and there is not a generally agreed upon definition. Hillage and Pollard (1998) and Harvey (2004), for example, define employability as the “capacity to acquire and maintain employment”. Wang (2008), on the other hand, maintains that the English term ‘employability’ encompasses a combination of characteristics such as personality, knowledge and skills a successful employee should possess. In Vietnamese, however, the term has been differently understood and has often been translated in two ways: either as khả năng có thể thuê được or as khả năng có thể kiểm được việc làm. The first version literally means “the ability to be employed” and the second, “the ability to find a job”. Given the diversity of opinions of the term, the following definition of ‘employability’ used by the authors involved in the Enhancing Student Employability Co-ordination Team (ESECT), a group funded by Higher Education Funding Council for England (HEFCE), is generally accepted. Thus, the term ‘employability’ refers to ‘a set of achievements – skills, understanding and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workplace, the community and the economy.’
This more holistic interpretation of employability has proved significant as the Vietnamese higher education continues to renovate and adapt curricula and pedagogies with the aim to improve the quality of education and to enhance the employability of university graduates.

3. The Relations between Higher Education and Employment

Much has been written about the relationship between academy and employment (e.g. Harvey, 1999; Goyal, 2006; and Sanyal, 2008). The match between university qualifications and the job requirements has been at the heart of the concern of the Vietnamese higher education in recent years. Critical issue is whether or not higher education has equipped students with good knowledge and specific vocational skills as demanded in the labour market of the day. The expansion of higher education has produced an increase in the number of graduates entering the workplace and the world of work that these graduates enter is undergoing rapid change. In an increasingly competitive and volatile graduate employment market, it is vital that students are equipped with skills that enable them to maximize their potential for a successful career. Further, the decline in the proportion of graduates following traditional career paths in large national/global organizations and the emerging trends of service sector employment, in small/medium sized companies have implications for the types of skills needed by graduates. The speed of industrial change and fluctuations in the economic cycles mean that graduates are likely to move jobs more often and will seek work in different industrial sectors. According to McNair (2003), successful graduates will need to have greater ownership of their employability skills and the confidence to cope with economic upheavals in order to identify and capitalize on career opportunities over lifetime. As the number of graduates entering the workforce increases, so competition for jobs intensifies. New technological demands are common and new types of job roles continue to emerge.

In our recent survey of 300 new VNU, Hanoi graduates to obtain the data for this report, we found that the new graduates have difficulty in finding jobs; only 13% of them said they were confident when looking for a job, most of them said had difficulty with verbal communication, time management, particularly English skills. We also found that transferable and critical reasoning skills are not taught at the university. These explain why students are unable to use these skills in their working contexts. And from these a clear need is identified. This need requires the development of curriculum interventions that enables students to make clear connections between their education and work and help them recognize the value of their studies in enhancing their employability. Apart from this, students must also learn how to present their achievements and skills to employers. And all these call for a clear awareness of the relation between higher education and employment.

Before 1986, the role of higher education in Vietnam was to transform students by enhancing their knowledge, skills, attitudes and abilities while simultaneously empowering them as lifelong critical, reflective learners. Since 1986, there has been increasing pressure on the Vietnamese higher education to contribute directly to national economic regeneration and growth. Increasingly national assessments of the roles and purposes of higher education indicate a need for higher education to contribute significantly to ‘meeting the needs of the economy’. This view has been endorsed by the Vietnamese Government. Nowadays the primary aim of higher education is not only to impart knowledge to students but also to prepare them for the world of work. This growing pressure also calls for a closer link between higher education and employers.

4. The Vietnamese Higher Education: a Brief Look

Like any other countries in the modern world, higher education in Vietnam is basic to achieving national goals in two ways. First, Vietnamese universities are responsible for producing the teachers and researchers — investigators in industry or academe who will lay the groundwork for the paradigms and products of tomorrow and who will in turn educate future teachers and researchers. Second, graduate scholarships and research are key contributors to meeting broad national goals of technological, economic, and cultural development. The increase in scientific and technological knowledge and the ways in which that knowledge is applied are fundamental to the pursuit of many national objectives,
including developing new technologies and industries, combating disease and hunger, reducing environmental pollution, developing new sources of energy and maintaining the competitiveness of Vietnamese industry.

The rapid expansion and development of higher education in Vietnam is well documented elsewhere. According to MOET (Ministry of Education and Training), in 2008, the number of universities (both public and private) in Vietnam is 154, the number of faculty members is about 43,000, of undergraduates about 1,200,000, and of graduates about 35,000.

Higher education in Vietnam has traditionally emphasized a fairly broadly based academic education with a focus on subject specialization and professional expertise. Today this tradition faces a number of pressures towards convergence, some economic and some political. The economic pressures lie in the features of the so-called “global knowledge of the society” and the increasing international economic competition which that society ‘heralds’. They include the role played by multinational companies and increasing trends of labour mobility, both within Vietnam itself and between Vietnam and other countries in the region and in the world.

Before 1986, Vietnam exercised a centrally planned economy. This had a very strong impact on higher education: we educated engineers, teachers, doctors, economists, etc. according to the Government’s plans. After graduation the student was supposed to be given a job as planned. As a result, tertiary institutions did not have to worry about the employability of their graduates. Since 1986, Vietnam initiated an overall economic reform, commonly known as “Doi moi” (Renovation). The aim of Doi moi was to restructure the economy of Vietnam and to raise the living standards of the people. We started to exercise the market-based economy. Together with “Doi moi”, higher education in Vietnam has also been renovated to reflect the needs of the market. Under the market-oriented economy, the student who graduates from the university is supposed to look for a job for himself. The implication of this fact is that in the market-based economy universities in Vietnam have to find ways to enhance their graduates’ employabilities.

One more thing to note is that in the market-based economy there is a high level of unemployment amongst graduates in Vietnam. In our recent study, we found that as many as 25 percent of new graduates are unemployed, although this proportion is lower at VNU, Hanoi and at other pivotal universities in Vietnam. Explanation for this high unemployment rate includes: a mismatch between supply of and demand for labour, graduates’ desire for work in urban areas at the expense of rural economy, and reluctant amongst graduates to accept lower level job. Their research also indicates that most graduates like to work in sectors such as IT and electronic and telecommunication, commerce, finance and insurance, petrochemical and power generation industries.

In 2006, the Vietnamese Government launched a Project called: “Renovation of Higher Education in Vietnam in the Period of 2006 - 2020”. The aim of the Project is to modernize Vietnamese higher education and to speed up its integration process into regional and world education higher education systems. Specifically, the Project reflected a prominent role of Vietnamese universities in achieving the government’s strategy for social and economic development, pursuing the development of science, technology and culture, and enhancing Vietnam’s overall capacity and international competitiveness (MOET, 2006).

5. Enhancing Graduate Employabilities at VNU, Hanoi

5.1. VNU, Hanoi: a Brief Introduction

Vietnam National University, Hanoi (VNU, Hanoi) is the first modern university ever established and one of the two national universities in Vietnam. Historically, VNU, Hanoi has undergone various stages of development: the University of Indochina (established on 16 May 1906); Vietnam National University (established in November 1945); the University of Hanoi (established in June 1956). And in December 1993, VNU, Hanoi was reorganized on the basis of amalgamating the University of Hanoi and other leading universities in Hanoi.
VNU, Hanoi is the largest comprehensive higher education and research center in Vietnam. It has been entrusted with the task of educating highly qualified and talented human resources for the industrialization and modernization of the country.

In terms of status, VNU, Hanoi holds a special position in Vietnam’s higher education system, operating according to a special regulation promulgated by the Prime Minister. VNU, Hanoi reports directly the Prime Minister and is given high level of autonomy in organization – in personnel recruitment, in developing education programmes, in initiating research and development projects, in planning its budget, and in developing international cooperation. VNU, Hanoi is entitled to work directly with relevant Vietnamese ministries, ministerial organizations, governmental bodies, people's committees of central cities and provinces concerning the issues related to VNU, Hanoi. Colleges and institutes under VNU, Hanoi maintain their juridical person status as a higher education and scientific research institution as regulated by the Law on Education and the Law on Science and Technology.

Due to its high status in the Vietnamese higher education system, VNU, Hanoi has the following missions: to achieve and sustain excellence in every area of teaching and research; to maintain and develop its historical position as a leading university, and as an engine of the national higher education sector; to provide advice on and participate in the formulation of national policies and strategies for socio-economic developments, especially for education, science and technology; to serve as a focal point for international scientific, educational and cultural exchanges for the country, and to enrich the national and international communities through the fruits of its research and skills of its graduates.

5.2. Enhancement of VNU, Hanoi’s Graduate Employabilities

There is no single way of enhancing students’ employability. It has been suggested that enhancing employability requires a holistic approach, integrating knowledge, work experience, and technical and interactive skills development and reflecting on how these can meet the needs of flexible organization. At VNU, Hanoi we have attempted to enhance the employability of our graduates via the following means: (1) Shifting from the traditional to a credit-based curriculum which is directed toward the outcomes needed by the world market of work; (2) expanding international academic cooperation; (3) educating according to the specific needs of the labour market; (4) increasing university support for graduates in their search for work; (5) making links with employers and alumni; and (6) integrating development of work-related skills in the curriculum.

5.2.1. Shifting from the Traditional to a Credit-based Curriculum which is Directed toward the Outcomes Needed by Industries and Businesses

Quality is the raison d’être of every tertiary institution. If there is a thing that a tertiary institution could attract industries, businesses, and employers, it is its high education quality. Higher education is expanding and universities are welcoming students from a broader cross section of the population. Also, the labour market is changing rapidly and the economy is increasingly knowledge-based and competitive. As a result, the nature of graduates’ work is being transformed and diversifying. Further, many students already work part-time throughout their courses, and are graduating into a wider range of jobs and career patterns than ever before. In the world of work which is changing that requires highly qualified graduates, what VNU, Hanoi has done to improve its education quality and to enhance the employability of its graduates is to shift from the tradition-based (or closed) curriculum to a credit-based (or open and flexible) curriculum which is directed to the outcomes that are needed by domestic as well as international the labour market.

Another step VNU, Hanoi has taken to enhance employability of its graduates is to launch a number of high quality programmes. At the moment, VNU, Hanoi is carrying out 16 undergraduate programmes and 23 graduate programmes (called The 16 + 23 Project), striving to make them become world class programmes by 2020. This project covers programmes of fundamental sciences, high technology, and key socio-economic studies. At the same time, methods of higher education management are upgraded. VNU, Hanoi’s academics and researchers are helped to acquire better skills in teaching and research to
reach internationally recognized standards. In teaching and research, VNU, Hanoi has promoted the policy of "teaching the existing courses enhanced by work-related activities". For example, in the teaching of chemistry or IT, students are set laboratory problems to work without being given directions. They are constantly encouraged to engage in scientific research and to publish papers.

5.2.2. Expanding International Academic Cooperation

One more step which VNU, Hanoi has actively taken to enhance its students’ employability is to expand international academic cooperation. International academic cooperation has become an objective requirement for not only higher education itself but also for the socio-economic development of a nation. Its aim is not only to support the development of education and research but also to facilitate the internationalization in these fields, to exploit effectively the research capacity of the scientists, to narrow the gap between a low-level tertiary institution and other advanced tertiary institutions in the region and in the world, and finally to make an active contribution to the enhancement of the graduates’ employability.

Over the past few years, international academic cooperation has been well developed and has played a very important role at VNU, Hanoi. A lot of joint education programmes have been launched with higher education institutions of the world. In these programmes Vietnamese students have more opportunities not only to familiarize themselves with the world’s advanced higher education systems but also to be able to get access to world knowledge right in their home country. Through these joint education programmes VNU, Hanoi has succeeded in developing advanced programmes for its students – a form of "delocalization of advanced foreign curricula"; mobilizing financial resources from the people to contribute to the cause of education of Vietnam in general and to the improvement of the quality of education and research at VNU, Hanoi in particular; and, more importantly, enhancing the employability of its graduates.

5.2.3. Educating according to the Specific Needs of the Labour Market

In the centrally planned economy, education which was based on the specific needs of the labour market did not seem to be at issue for a Vietnamese tertiary institution. This is because every student was supposed to get a job after graduation. In the market-based economy, the nature of graduate’s work is changing, after graduation students may get involved in different commitments. That is why if a tertiary institution does not show its concerns with what is happening in the market, its educated products will be out-dated and will become unemployed. Being aware of this problem, during the past few years, VNU, Hanoi has expanded its cooperation with various industries and businesses inside the country. In particular, VNU, Hanoi has signed a number of education agreements with ministries and industrial groups such as the Ministry of Natural Resources and the Environment, Petro Vietnam, Vinashin, etc. Under these agreements, VNU, Hanoi will help these industries and businesses to educate high quality researchers, engineers and business managers. In return, they will provide VNU, Hanoi with research and teaching and learning facilities. It is hoped that this form of joint education will be further developed to enhance the employability of our graduates.

5.2.4. Increasing University Support for Graduates in their Search for Work

In many countries of the world today, universities and governments are concerned with the problem of graduate under-employments, whilst in Vietnam we seem to be preoccupied with the high level of graduate unemployment. Most of Vietnamese students are preoccupied with getting into university and give little thought to future career direction. That is why they often experience a lot of problems when finding a job after graduation. They often need support to guide them how to undertake the right programme and how to get a job after graduation. Our recent survey has shown that the number of students who obtained the bulk of their career information from the university is very small. To solve the problems, the VNU, Hanoi holds job fairs regularly to make them a chance for students to meet with their potential
employers. Further, students can also get information about future jobs through VNU, Hanoi’s Student Association whose clubs are supported either partially or fully by employers. These clubs meet regularly to discuss future careers, how to obtain a job successfully, how to become a good job-seeker, etc. Together with the Student Association, VNU, Hanoi has a student support institution which is called the Centre for Educational Technology and Career Development. The Center’s main activity is to provide students with career guidance, training, career planning classes, and guidance for relevance and better-targeted career education, helping students to develop their job seeking skills.

5.2.5. Making links with Employers and Alumni

The importance of graduates to the economy means that it’s high time employers played a role in helping to enhance degree courses and making mutually beneficial links with universities. The world of work has changed, and graduates cannot expect a job for life. Increasingly, graduates are joining small and medium enterprises, and entering into freelance work and self-employment.

In Vietnam nowadays, employers are looking for something more than a degree, and are becoming more and more sophisticated in identifying this in their recruitment procedures. For this reason, an understanding of the world of work and awareness business is desirable. Ultimately employers want graduates who can help them deal with change, and it is not sufficient for universities and graduate applicants to simply list the skills they have developed during study. Therefore, in order to enhance the employability of graduates, it is important that the university meet the needs of the students and employers. Employers have sometimes been critical about graduates and their preparedness for work. Our recent study has shown that over 30% managers surveyed believed that graduates are increasingly less well prepared for the workplace and over 35 percent of alumni reported that graduates lack interpersonal skills and, in particular English skills to be admitted to the jobs. Being aware of the importance of this aspect of employability, VNU, Hanoi has constantly asked employers and alumni make their contributions to the university’s efforts to enhance the employability of its graduates, considering them as part of the university’s ongoing evaluations of the impact of efforts to enhance employability to ensure that the university is delivering what businesses and public services need. Apart from these, VNU, Hanoi has asked employers to help by providing analyses of labour market information to identify business and public sector workforce needs.

5.2.6. Integrating Development of Work-related Skills in the Curriculum

There has been a growing tendency towards an integrated approach to employability development that includes embedding the development of student attributes within the subject curriculum. In order to enhance employability of its graduates, in its new credit-based curriculum VNU, Hanoi has integrated the development of work-related skills, qualities and understanding in degree courses. This has provided opportunities for work experience as part of degree courses, or alongside them. Apart from that, VNU, Hanoi has assigned the Department for Political and Students’ Affairs at VNU and the Centre for Educational Technology and Career Development with the task to work with departments to review their programmes of study to identify and enhance employability; has encouraged its member colleges, institutes and schools to implement a broad ‘vocational education’; and has attempted to include employability in the assessment and grading process: students’ work experience is recognized and counted toward students’ their final marks.

6. Conclusions

In this report, we have been concerned with some of the ways of how to increase the employability of the graduates at VNU, Hanoi. It is clear from our report that higher education must be well placed to respond. University disciplines must continue to maintain their core identity and values of traditional disciplines, but they must be complemented by continuing innovation in the curriculum. This is required if we are to produce university graduates that have the skills to sustain success in a globalized labour market. It is people, what they do, and how they learn from their actions that are, in the end, the most important things. VNU,
Hanoi prides itself on being interested and tuned in to the real world and its problems. As a result, its curriculum has been changed for a better understanding of the workplace, the employer and the student employability. Alongside with the shift in the curriculum, VNU, Hanoi has renovated its teaching methodology, building support units to help its students to be successful in both academia and work. In a fast changing world, more can and must be done. Universities should enhance employability of their students by constantly raising the quality of education and by developing a strategic institution-wide approach to employability to maximize the effectiveness of their links with employers.

References
Sub-Theme A

Enhancing Employability through Quality Assurance
Enhancing A Departmental Database for Educational Quality Assurance Using Malcolm Baldrige National Quality Award (MBNQA) Model

Assistant Professor Dr. Amnart Pohthong and Atikorn Sing-Eiam
Department of Computer Science,
Faculty of Science, Prince of Songkla University, Songkhla, Thailand
e-mail: amnart.p@psu.ac.th, satikorn@hotmail.com
Telephone: +66 7428 8580, Fax: +66 7444 6917

Abstract

Nowadays, most universities around the world are very concerned with their education products such as graduates, research and service outcomes. These products, like other industrial products, require quality assurance process to ensure that products are of good quality and satisfy their stakeholders. For education quality assurance, there have been several models introduced at national and international levels. The Malcolm Baldrige National Quality Award (MBNQA) Model has been introduced as a standard to achieve excellence in the United State of America and has been widely adopted in other countries.

Data management of departmental operations is one of key factors that can enhance the quality of education products including the quality of graduates, since academic departments in many universities take responsibility for teaching and learning activities. This also leads to more graduate employment. Therefore, the research reported in this paper has proposed a database structure for an education quality assurance program using the Malcolm Baldrige National Quality Award (MBNQA) Model at a departmental level. The case study was implemented at the Department of Computer Science at Prince of Songkla University, Thailand. An information system was also developed for data management of the database.

Keyword: education quality assurance, departmental database, MBNQA

1. Introduction

Nowadays, many countries around the world are very concerned with quality assurance (QA) since it can benefit all parties such as producers, customers, and assessors. Many business organizations and institutes involved with education have tried several QA frameworks or models to suit their needs. The products of education such as graduates, research and service outcomes, like other industrial products, require QA process to ensure that products are of good quality and satisfy their stakeholders. These education products can affect societies and communities in many ways. For example, graduates who lack practical skills may perform poorly in their work place and may lead to their unemployment. Poorly performing graduates may be caused by poor curricula or ill-organized teaching and learning process. Therefore, most education institutes have established QA systems as part of their missions to achieve their institutes' visions and facilitate their success.

In Thailand, education quality assurance programs have gained much attention from most education institutes and government agencies, partly because of their respect for Thailand King, His Majesty Bhumibol Adulydej who has expressed his concern for education in his speeches [1]:

“… Education is a major factor to create and develop a person’s knowledge, ideas, behavior and merit. Any society and country should provide good, complete and well-balanced education, covering all aspects, for the youth so that the society and country will have qualified citizens. They will be able to sustain the country’s prosperity and to develop the country progressively …”.

Two main organizations were set up as the QA taskforce for the country. The first one is the Office for National Education Standards and Quality Assessment (ONESQA)
established as a public organization in 2000 following the enactment of the National Education Act [2,3].

The objectives of ONESQA as declared in [3] are as follows:

(1) the development of the criteria and methods of external assessment;

(2) the assessment of the outcomes of educational provision in order to evaluate the quality of educational institutions.

ONESQA has to monitor the quality of all Thai educational institutions including schools, colleges, and universities.

The second one is the Office of the Higher Education Commission (CHE) which has a responsibility for education development in higher education [4]. For universities and institutes at higher education, external quality assurance (EQA) is carried out by ONESQA while internal quality assurance (IQA) is established by CHE as their parent organization. IQA seems to be the part of a continuous improvement process and EQA is the evaluation of educational achievements.

Therefore, QA models or frameworks have been developed by ONESQA and CHE. ONESQA suggests 7 standards with 31 indicators in its framework. These standards are as follows [5, 6]:

Standard 1: Graduate Quality
Standard 2: Research and Creative Work
Standard 3: Community Services
Standard 4: Preservation and Promotion of Art and Culture
Standard 5: Institution and Staff Development
Standard 6: Curriculums and Teaching and Learning
Standard 7: Quality Assurance System

CHE suggests a QA model that consists of 9 components with 44 indicators as follows [7]:

Component 1: Philosophy, Commitments, Objectives and Implementation Plan
Component 2: Teaching and Learning
Component 3: Student Development Activities
Component 4: Research
Component 5: Community Academic Service
Component 6: Preservation & Promotion of Art and Culture
Component 7: Administration and Management
Component 8: Finance and Budgeting
Component 9: Quality Assurance and Enhancement

Although the above quality frameworks have some guidelines for carrying out QA activities and the collection of data, these guidelines are normally derived by considering the key indicators of these frameworks together with the extra indicators specified by each institute. Many institutes still encounter the difficulty of collecting data and find it difficult to form their database for QA systems. Even within the same faculty of any university, different departments can have different patterns of data and different methods for collecting data. This also makes it difficult to design a central database at the faculty level.

Hence, we have been interested in adopting the Malcolm Baldrige National Quality Award (MBNQA) criteria of guidelines for database design at the departmental level since
academic departments act as the key units that operate universities’ missions. Moreover, the MBNQA framework has been well developed and has become popular worldwide. The Thailand Quality Award (TQA) [8] is also based on the MBNQA framework. The Department of Computer Science at Prince of Songkla University in Thailand, has been selected as a case study.

2. Malcolm Baldrige National Quality Award

The Malcolm Baldrige National Quality Award (MBNQA) [9] was created by Public Law 100-107, signed into law on August 20, 1987 and the Foundation for the MBNQA was established in 1988. The Award is named after Malcolm Baldrige, a former Secretary of Commerce during 1981 to 1987, in order to honor for his managerial excellence of government improvement.

The MBNQA program in the United States of America is aimed to help improve quality and productivity among American companies and to recognize the achievements of those companies, as well as to establish guidelines and criteria that can be used by business, industrial, and governmental organizations.

The MBNQA framework consists of 8 components as shown in Figure 1.

In addition to the organizational profile, education criteria for excellence of performance are classified into 7 categories, specified with the points (pts.) for assessment as follows [10]:

(1) Leadership (120 pts.)
   (1.1) Senior Leadership (70 pts.)
   (1.2) Governance and Societal Responsibilities (50 pts.)
(2) Strategic Planning (85 pts.)
   (2.1) Strategy Development (40 pts.)
   (2.2) Strategy Deployment (45 pts.)

![Figure 1 Malcolm Baldrige National Quality Award Framework (Source: [10])](image-url)
(3) Customer Focus (85 pts.)
   (3.1) Customer Engagement (40 pts.)
   (3.2) Voice of the Customer (45 pts.)

(4) Measurement, Analysis, and Knowledge Management (90 pts.)
   (4.1) Measurement, Analysis, and Improvement of Organizational Performance (45 pts.)
   (4.2) Management of Information, Knowledge, and Information Technology (45 pts.)

(5) Workforce Focus (85 pts.)
   (5.1) Workforce Engagement (45 pts.)
   (5.2) Workforce Environment (40 pts.)

(6) Process Management (85 pts.)
   (6.1) Work Systems (35 pts.)
   (6.2) Work Processes (50 pts.)

(7) Result (450 pts.)
   (7.1) Student Learning Outcomes (100 pts.)
   (7.2) Customer-Focused Outcomes (70 pts.)
   (7.3) Budgetary, Financial, and Market Outcomes (70 pts.)
   (7.4) Workforce-Focused Outcomes (70 pts.)
   (7.5) Process Effectiveness Outcomes (70 pts.)
   (7.6) Leadership Outcomes (70 pts.)

In order to achieve self assessment, the MBNQA framework has a questionnaire that consists of a number of questions for each category and each item. These questions can guide some QA activities and lead to data collection. For example, the following questions in Table 1 are for the Leadership category.
Table 1: Self-assessment questionnaire (the Leadership category) [11]

<table>
<thead>
<tr>
<th>Category / Item</th>
<th>No.</th>
<th>Question</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Organizational Leadership</td>
<td>1</td>
<td>Do senior leaders develop a school vision that incorporates quality value, performance expectations, and a focus on students and other stakeholders?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Do senior leaders set and communicate university directions, taking into account all key stakeholders?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Do senior leaders communicate and reinforce values, performance expectations, a focus on students and stakeholders, student learning, and commitment to improvement throughout the faculty and staff?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Do senior leaders maintain a climate conducive to learning, including safety and equity, in the university?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Do senior leaders participate in and use the results of performance reviews?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Do senior leaders evaluate and improve the leadership system, including how they use their review if the university's performance and faculty and staff feedback in the evaluation?</td>
<td></td>
</tr>
<tr>
<td>1.2 Public Responsibility and Citizenship</td>
<td>7</td>
<td>Does your university define policies, measures, and targets for regulatory, legal, and ethical requirements, and for risk associated with university's operations?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Does your university anticipate public concerns with its operations, assess potential impacts on society, and address these concerns in a proactive manner?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Does your university have a program to involve senior leaders, faculty, and staff in supporting and strengthening your key communities?</td>
<td></td>
</tr>
</tbody>
</table>

3. Research Framework

One essential assumption is that we expect a QA model or framework should guide QA processes and activities, as well as to identify the key data to collect for an organizational QA system. Thus, our research framework is shown in Figure 2. A business model would cover the aspect of organizational missions. When the organization employs any QA model, this would guide a business data model, and then data would be collected into a database.
4. System Analysis

4.1 Case Study

As we mentioned in the introduction section that academic departments act as key units in most universities to produce outcomes to their stakeholders, the Department of Computer Science (CS) at Faculty of Science, Prince of Songkla University in Thailand, was selected for our study. At present, the department offers two academic programs:

- Bachelor’s degree in Computer Science (BSc.(Computer Science)) commencing in 1991, recently has approximately 430 four-year full-time students
- Master’s degree in Computer Science (MSc.(Computer Science)) commencing in 1986, recently recruiting around 15 students each year.

The Department has 20 academic staff and 7 support staff. The department also employs around 20 teaching assistants each year. Around 300 personal computers (PCs) are provided for undergraduate students and around 60 PCs are provided for postgraduate students to carry out their research work.

4.2 Departmental Educational QA System

At present, the CS department adopts the CHE framework for its quality assurance. No complete database has been created for its QA system. Most data collections are in the form of a paper document or a MS-Word or Excel format file. Analysis of the system was carried out by using the MBNQA criteria. The data process for each category in the MBNQA framework was analyzed. Figure 3 shows a context diagram of the departmental QA system. More details were analyzed in the term of the input, process, and output using a data flow diagram (DFD) [12, 13].

![Figure 2 Research framework](image-url)
5. Database Design

After the system analysis, data and processes can be identified for each category in the MBNQA framework. Then, the database structures for all categories can be designed. Figure 4 shows the organization of these database structures. The database structure of each component or category is then designed using an entity-relationship (E-R) diagram [14] as shown in Figure 5 to Figure 11 respectively.
## Sub Theme A - Enhancing Employability through Quality Assurance

**ASAIHL 2009**

**University of Kelaniya, Sri Lanka**

| 1 | Database Structure of Leadership Component | 2 | Database Structure of Strategic Planning Component | 3 | Database Structure of Student, Stakeholder, and Market Focus Component | 4 | Database Structure of Information and Analysis Component | 5 | Database Structure of Faculty and Staff Focus Component | 6 | Database Structure of Process Management Component | 7 | Database Structure of Organizational Performance Result Component |

---

**Figure 4** The organization of database structures

[Diagram of database structures]

---

**Figure 5** The database structure of the Organizational Profile

[Diagram of database structure]
Sub Theme A - Enhancing Employability through Quality Assurance - ASAIHL 2009

Figure 6 The database structure of the Leadership component

Figure 7 The database structure of the Strategic Planning component
Figure 8 The database structure of the Customer Focus component

Figure 9 The database structure of the Measurement, Analysis, and Knowledge Management component
6. Discussion and Results
After the database structures for all components of the MBNQA framework were designed, we developed an information system for the organizational profile component in order to examine whether it can support the departmental QA system. From our study, we do realize that the MBNQA framework could guide the QA process and activities to some degree. However, we found that the details of the MBNQA categories and items together with its assessment questionnaire could not guide data collections well since they state what the department should have rather than how the department should operate. The data collection system can be improved if the department considers carefully what the department should have and how it should operate in terms of the input, process, and output. From our experience in working with QA systems at the departmental level, the faculty level, and the university level over nearly 10 years, most QA promotion agencies as well as institutes have continuously paid for their efforts to improve their QA frameworks, especially in terms of guidelines for QA processes and activities. Best practices from similar business organizations also have been frequently introduced. These best practices should be also considered for the departmental QA activities and its data collections. In future, the issues of a central database and a distributed database should be taken into an account in order to enhance data management for quality assurance systems at all levels in the organization.

7. Conclusion

The study reported in this paper produced the design of database structures for the educational quality assurance at the departmental level using the MBNQA framework. The department of Computer Science at the Faculty of Science, Prince of Songkla University in Thailand was selected as a case study. A prototype of an information system for an organizational profile component was also developed in order to examine the implementation of the designed databases. The study found that the MBNQA framework provided some ideas of what the department should have rather than how it should operate. This issue also affects the departmental QA activities as well as its data collections.

8. References


Continuous Quality Improvement at UGM: 
Enhancement of Graduate Employment

Edia Rahayuningsih and Harsono
Center for Innovation in Higher Education (CIHE)
Universitas Gadjah Mada Yogyakarta Indonesia
edia_rahayu@chemeng.ugm.ac.id

Abstract

By the emerge of new paradigm of education in Indonesia, it brings a significant changes at Universitas Gadjah Mada (UGM). This was stated by the raise of government regulation No. 153 of 2000, in accordance with the regulation in which Universitas Gadjah Mada has changed of its status from a State University to a State Owned Legal Entity University or to be an autonomous university. Those changes was accepted in a positive spirit because basically since the establishmen, Universitas Gadjah Mada (UGM) had a motto of “Ginong Prati Dino” that means improvement should be done everyday or Continuous Quality Improvement (CQI).

In 2003-2004 UGM had carried out a tracer study to evaluate the graduates quality. In general, the result shows that UGM’s graduates have excellent performance both in cognitive as well as in psychomotoric aspects. However, the graduates’ soft skills are still fair. Based on the tracer study result, the education system improvement in UGM have been done.

The education system in UGM has been developed to achieve several objectives which encompass; 1) have an in-depth understanding of science and technology as well as the instill superb values; 2) basing educational materials on five pillars, which entail i) suited to practical/real problems, ii) have relation with other disciplines, iii) oriented toward international paradigm but underpinned by an understanding of national excellence, iv) using information and communication technology, v) developing creativity, innovation, and leadership; 3) improving ‘soft-skill’ capability through the enhancement of leadership quality. To carry out these activities, a Quality Assurance Office, Center for Innovation in Higher Education (CIHE), dan Center for Information and Communication Technology Services were established. The quality improvement is facilitated by the Quality Assurance Office. Meanwhile the improvement of content and process aspects of education are facilitated by Center for Innovation in Higher Education (CIHE).

The application of the most recent methods in education activities has impacted positively on the education output. The recent average duration of study in undergraduate studies was 4.88 and 4.74 years for natural science and social science fields, respectively. The average GPA increased from 3.087 to 3.123 for Natural Sciences and from 3.205 to 3.298 for Social Sciences. UGM graduates occupy positions in all manner of services. This include in the military, government institutions (regional and national), overseas organisations, private sector, and private businesses (entrepreneur).

During its transition era from a State University to a PT BHMN, UGM has successfully registered some outstanding achievements, especially in the academic development area. In 2005, UGM together with Chulalongkorn University Thailand was awarded the highest rank in the application of Quality Assurance System, which is based on the European Union Quality Assurance System. UGM received a worldwide award as it was ranked 47th on The List of the World’s Top 100 Social Science Category, ranked 73rd on Biomedicine Sciences Category and ranked 70th on Arts and Humanities Category, in 2006. According to the THES rank, the position of UGM is in 341 on 2005, 270 on 2006, 360 on 2007, and 316 on 2008. Since 2008, several faculties holding the ISO 9001:2000 which focus on academic service, i.e.: Faculty of Biology, Faculty of Pharmacy, Faculty of Science, Faculty of Veterinary, Faculty of Agricultural Technology, Department of Chemical Engineering, and Department of Civil and Environmental Engineering.

Keywords: Academic quality improvement, Student-centered learning, Quality Assurance, Center for Innovation in Higher Education (CIHE).
I. INTRODUCTION

National Education Regulation

By issuing the Decree of National Education Minister No. 20/2003 of National Educational System, Higher Education in Indonesia changed into a new paradigm. The new paradigm required a totally new approach where issues of massive education, life-long learning, open learning, quality and relevance, accountability and autonomy, and equity become very important. The globalization impact causes a shifting role of higher education institutions, from traditional learning institutions to knowledge creators, a change from random planning to strategic planning, and a movement from comparative to competitive approaches. For a developing country such as Indonesia, there is a need to create a breakthrough for enhancing higher education development. It is no longer appropriate to conduct higher education programs as a business as usual. The Decree No. 20/2003 of National Educational System expressed the Vision of National Education is to create an educational system as a strong and authority social norm, to empower all Indonesian citizens to develop to be a high quality human resources in order to be proactive and to have the capability in dealing with the changes period.

To create that above vision, the national education has the missions as follows:

a) to effort the widen and distribution of opportunity to obtain a quality education to all Indonesian people

b) to help and to facilitate the whole potential development of people since the school age to the end of life in order to create a learning community.

c) to improve the readiness of input and quality educational process to optimize the morality personal building

d) to improve the professionalism and accountability of educational body as a center of scientific, skill, experience, attitude and value culture based on national and global standard

e) to empower the community’s role in educational implementation based on the autonomy principle in the Republic of Indonesia as a unity state context

Based on vision and mission of the National Education, a Vision of National Higher Education Republic of Indonesia of 2010 was then proposed. The vision as follow:

In order to contribute to the nation's competitiveness, the national higher education has to be organizationally healthy, and the same requirement also applies to institutions. A structural adjustment in the existing system is, however, needed to meet this challenge. The structural adjustment aims, by the year of 2010, of having a healthy higher education system, effectively coordinated and demonstrated by the following features:

a) education that effectively links to student needs, develops students’ intellectual capability to become responsible citizens, and contributes to the nation's competitiveness;

b) research and graduate programs serving as the incubators for the development of the capabilities to foster an adaptable, sustainable, knowledge-based economy; and integrating state-of-the-art technology to maximize accessibility to and applicability of advanced knowledge;

c) a system contributing to the development of a democratic, civilized, inclusive society, meets the criteria of accountability as well as responsibility to the public; and

d) Comprehensive financial structure nourishing participation of stakeholders (including local government) which directly linking new investment with recurrent budget in the subsequent years.

In order to implement the decree No. 20/2003, therefore in May 16th of 2005 a National Standard of Education (NSE) have been declared. In chapter 4 of NSE, it is stated that the
Sub Theme A - Enhancing Employability through Quality Assurance - ASAIHL 2009

aim of NSE is to assure the quality of national education. Therefore the fulfillment of the NSE by the higher education means that the higher education assures the quality of higher education that they conducted.

Overview on Universitas Gadjah Mada

Since the change of status from a State University to a State Owned Legal Entity (SOLE) in accordance with the implementation of Government Regulation No. 153 Year 2000, Universitas Gadjah Mada (UGM) has undergone several phases of change. Initially, the University owed its existence to the University Statute. Eventually, however, the demands emanating from the University's vision and mission statement made the change in status imperative. Regardless of the change, the atmosphere of UGM's ideal directions remains the same putting only some emphases on how to accommodate the global demands. The status transition process from a state university to a SOLE since 2000 is illustrated as follows. Re-arrangement of the University organization is necessary to support the transformation, development, and management of university operations. The re-arrangement refers to by-laws authorized by Board of Trustee. In addition, some new units have been established. These include Quality Assurance Office, Center for Innovation in Higher Education, Institution for Research and Community Services, International Affairs Office, and Internal Audit Unit. The Computer Center has been renamed as Center for Information and Communication Technology Services, which is responsible for the development and maintenance of telephone and ICT networks.

The development of organization image has been directed to both internal and external targets. Internally, the impressions have been developed through the improvement of service effectiveness and complaint response. At the same time, wider relationship developments as well as launching of website, bulletin, and information, are among efforts made toward the development of the organization image externally. Mass media is a medium for promoting achievement made such as the success registered by UGM was ranked 56 in international arts and humanities.

Academic quality assurance has been developed through the implementation of quality assurance system for higher education. This is in additional to competitive grants. The academic quality assurance is considered good at the ASEAN level. On the other hand, the administrative quality assurance becomes the responsibility of the directors and is initiated by the development of information systems to support administrative quality assurance.

UGM as a Trendsetter of Higher Education in Indonesia

As the oldest and the largest University in Indonesia, UGM has been developed to be a trend-setter in the higher education circles in Indonesia. The achievement has been attained through the development various programs tailored toward ensuring excellent academic performance at the University. These include 1) enhancement of education quality aimed at developing international reputation in research and technology through innovation in teaching methodology, 2) setting up a professional work environment equipped with an adequate information technology system, 3). To develop SCL-plus (Student Teacher Aesthetic Role-sharing/STAR), which is one of superior program of National Higher Education, 4) Student’s Community Outreach - Community Empowerment Learning Program as a superior program of National Higher Education as well. Such conditions, should enable UGM become a reliable source of inspiration for the whole country, and make the University a reputable source of highly qualified human resources with strong commitment to the community.

Strategic Plan of Gadjah Mada University 2008-2012

The vision of UGM is that to be a World Class Research University which is excellent, independent, dignified, inspired by Pancasila, the five-point ideology, and dedicated to the needs and welfare of the nation and the world. The general mission is to promote excellent teaching-learning opportunities and community service through research. The
special mission comprises 1) to promote excellence in educational activities, research, and community service with the interest of the Indonesian society and to participate in Indonesian socio-cultural building, 2) to thoroughly ensure completion of the transitional period of the university management to UGM as having a legal entity and good university governance.

The aims are, 1) to be a World Class Research University characterized by the interest of the common people and deeply-rooted in Indonesian culture and society. 2) to be a University as a legal entity having good university governance. The goals are to be a World Class Research University characterized by the interest of the common people and deeply rooted in Indonesian culture and society, by: 1). Implementing research-based learning; 2). Enhancing the international academic reputation and accreditation in Education, Research, and Community Service; 3). Improving international cooperation network; and 4). Strengthening the role of UGM in its participation to address national issues through bottom-up as well as socio-cultural approaches of Indonesia and promoting the local excellence to the global level.

II. ACTIVITIES

The Enhancement of Graduate Employement

The effort to improve the UGM graduate’s quality was comprehensively carried out. The efforts have tried to touch the field of education, research, and community service.

Tracer Study and labour Market Signal

In the year of 2003 – 2004 UGM had conducted a tracer study and labour market signal. The main objective of the tracer study is to identify the quality of graduates in their work place. The more specific objectives of such activity are as follows: a) to identify the graduates’ profiles, competencies and skills, b) to identify the relevance of curriculum with the real market needs, c) to identify the appropriateness of study program capacity and competence to the job description type and d) to determine the labour market signal and the competency required by stakeholders.

Targets of activity (respondents) were the UGM alumni’s who worked both in government and private sectors and stakeholders. The sample size of alumni and stakeholders were 3,000 and 100 respectively. The results of the tracer study are as follows:

a. The profile of alumni with high GPA are easily accepted by the employers
b. Most of the stakeholders (79.6%) were satisfy to the graduates performances
c. More than 50 % of UGM’s alumni worked in private sector, relatively much number in government sector and a little number worked as entrepreneur
d. The alumni’s desire to be a job creator were relatively low.
e. The graduates had a good major hard skill; they showed good commands in soft skills such as high commitment, loyalty and integrity to their work.
f. Other capacity and competencies of the alumni were diligent and skillful in working; they have ability in team working, self supporting, and problem solving.
g. The graduates had weaknesses in communication, entrepreneurship, creativity, initiative, innovation and leadership

Improvement and innovation in education

The results of tracer study and labour market signal were then used as strong feedback for improving the education quality through innovative efforts. The following steps were as follows:
A. Education Activities

The Objectives of education

Underpinned by the desire to promote quality, the education system at UGM has been developed to achieve several objectives which encompass 1) have an in-depth understanding of science and technology as well as the instill superb values 2) educational materials based on five pillars, which entail i) suited to practical/real problems, ii) have relation with other disciplines, iii) oriented toward international paradigm but underpinned by an understanding of national excellence, iv) using information and communication technology, v) developing creativity, innovation, and leadership; 3) improving the students' soft-skill capability through the Enhancement of Leadership Quality Development Program (ELQD Program).

ELQD Program

During 2003-2007, UGM using DUE-Like project funding is implementing programs tailored to a program which so-called Enhancement of Leadership Quality Development Program. The main objective of the program is to enhance the quality of UGM graduates thereby giving them an extra edge related to leadership. Four sources of extra edge consist of (i) development of success skill, (ii) development of education quality management, (iii) innovation grants and (iv) utilization of outstanding students. ELQD is aimed at intensifying the transmission of ethics, norms and mindset attained in the education process into managerial capabilities that are in line with community demand.

Implementation of Student-Centered Learning in UGM

One of the most important aspects of a successful education system is its ability to allow each student to develop and explore knowledge, creativity and skill on their own through student-centered learning (SCL) methodology. Proper implementation of SCL has many advantages that UGM can reap as an autonomous University. These include, among others are 1) enhancement of capability of lecturer capability to transfer intrinsic curriculum, 2) encouraging the development of dialogue and dynamic working groups, 3) motivating students by combining creative thinking and living skills, 4) enhancing the quality of academic activities for both students and lecturers, 5) reduction of duration of study, 6) developing an innovative curriculum, 7) produce graduates with perpetual learning attitude, and 8) produce graduates equipped with the capability and sensitivity to adapt to any changes in their working environments.

The methodology has been in operation in several faculties in UGM for some years. Such methodology has been ongoing in form of “problem based learning” at the Faculty of Medicine, Faculty of Veterinary, Faculty of Laws and Department of Electronics of Faculty of Engineering; and “case based learning” at the Faculty of Economics and Business. In addition, UGM had high commitment since 2004 to implement student-centered learning throughout the University in the future. Nonetheless, the shifting paradigm from a “teacher-centered learning” to student-centered learning” needs a great effort. One important step is that, UGM set up a Center for Innovation in Higher Education (CIHE) in 2005. Since its inception, the center has been in the forefront in efforts geared to developing an internally driven, and participatory student-centered learning approach. CIHE has also provided and implemented training, workshop, and seminar in SCL, Tutorial, Curriculum Development and Student Assessment. The lecturers participated the training program of SCL and then applied SCL were 1221 that came from all studies program. At present time the development of critical mass of UGM has established.

In the year of 2008 the SCL program has been improved to be a SCL-plus or STAR Program (“Student Teacher Aesthetic Role sharing”). The STAR program is not only aimed to activate student in learning process but also to keep a harmonious relationship between lecturer and student. CIHE had been evaluating the implementation of SCL throughout UGM in 2008-2009.
On-Line Learning Facilities

On the same note, UGM initiated the on-line learning facilities for courses taught in UGM via eLisa (“Electronic Learning System for the Academic Community”). The network continues to expand. By January 2009, 4,612 lecturers in UGM and 53,944 students were registered as eLisa. As courses were given on line via web site, students have some added flexibility to learn the material on their own and at their pace. In addition, eLisa enables the lecturer to provide some interactive tutorial to students, the outcome of which provides a measure of progress they register. Such advantages are vital in efforts to realize a student-centered learning system in UGM. Nonetheless, further improvement of the eLisa system must be made before such an advanced stage is reached.

Quality Assurance System in UGM

Since 2001 UGM have initiated quality assurance system. In 2004 UGM declared on implementing the quality assurance system which is tailored toward continuously improve the quality of the education process in the University. The Quality Assurance System is installed at the level of 1) study program, 2) department, and 3) faculty. The system implements cycles of seven integrated sequential processes, those are 1) implementation of standard guidelines in education, 2) application of the standard education processes, 3) monitoring the education process, 4) execution of self evaluation to the education process, 5) performing internal auditing, 6) obtaining/derivation of recommendations for corrections/improvements, and 7) improvement of quality standards in accordance with recommendations. The system evaluates various aspects of the education process, such as: 1) management and organization, 2) learning method, 3) curriculum and organization of the courses, 4) student assessment, 5) output of the learning process, 6) student support and supervision, 7) education sources/facilities, and 8) competence of graduates.

B. Research Activities

In line with the commitment of being a world class research university, UGM conducted various research activities in line with enhancement of services to community. UGM is highly committed to facilitate the conduction of applicable, collaborative, and multidisciplinary research. To achieve the objective, UGM has developed four research clusters i.e., agriculture, medicine and health sciences, social-humanity studies, as well as science and technology. Besides, to improve organization efficiency in research and community service activities, the existing laboratories and institutions related to the research activities had been integrated into two major laboratory and institute; those are Integrated Laboratory for Research and Service and Institute for Research and Community Service.

In order to achieve the strategic plan objectives, 4 (four) goals have been proposed. Firstly, research-based learning (RBL) as a model of student-centered learning (SCL) with research approaches. There was a statement of “implementing research-based teaching and learning”. In this regard, the learning course materials are enriched with research results. In addition, the students are encouraged to do research together with their lecturers. This activity has been initiated in 2006 and facilitated by providing awards of competitive grant to lecturers.

In the next few years, efforts toward enhancing research culture in UGM will be intensified, by providing appropriate research facilities such as laboratories, libraries, as well as advanced information and communication technology. This is quite a formidable challenge for UGM. This is because such efforts require a immense funding support. However, the upside is that UGM since 2004 UGM started the standardization of research quality.

C. Community Service

It is noteworthy that UGM came up with a new form of student’s community service, replacing the old program which so-called “Student’s Community Outreach” The new organization then called as “Student’s Community Outreach – Community Empowerment Learning Program”. This new institution is in line with the UGM commitment to be a World
Class research University. There is an interrelationship between community service activities and student research results. While community service activities are based on research results, outcomes of community service activities provide feedback inputs for improvements in future research conducted in UGM.

The performance of the “Student’s Community Outreach-Community Empowerment Program” indicated an upward trend. For example, in 2008 there were 165 programs that undertook the program compared to 2004 which only 24 programs. Such development indicates that the program is attractive to the students and lecturers. This is perhaps that such community services are an appropriate media for students to apply their knowledge learned to practical and real community situations. UGM is committed to accelerating the implementation of the program. Further, UGM developed thematic program, relevant to the students’ competencies.

However, carrying out the research based community services requires some improvements in a number of areas especially the substance, resources, and operations. The substance of the community services should be based on research and interdisciplinary approach, which will be advantageous to community service. Community services resources consists of human, financial, hardware, and software resources.

III. ACHIEVEMENTS

Academic Achievements

![Figure 1. Average GPA and duration of study of undergraduate program graduates from 2005 to 2008](image)

The application of the most recent methods in education activities has impacted positively on the education output. This is as much reflected in better performance of students on several parameters, which include the reduction in the duration of study and an increase in the grade point average (GPA). The recent average duration of study in undergraduate studies was 4.88 and 4.74 years for natural science and social science fields, respectively. As depicted in Figure 1, the duration of study from 2005 to 2008 tends to decrease steeply.

Graduate Profile

Grade Point Average (GPA) and duration of study is an indicator of the academic quality achieved by graduates. As demonstrated in Figure 1 during the last four years, the average GPA increased from 3.087 to 3.123 for Natural Sciences and from 3.205 to 3.298 for Social Sciences. Moreover, graduate profiles are discernible from the employment data, graduates ability to compete with those hailing from other universities, the number of graduates per annum, and the length of study.

Growing Number of Graduates

In 2005-2008, UGM graduated students in all levels of study as shown in Figure 2. The total number of graduate students at the undergraduate level has shown increases. The
number of graduate students in diploma and S1 extension programs in 2008 was relatively lower than the past three years. The number of graduate students in post graduate programs was increased significantly in 2008.

![Figure 2. Growth profile of graduates from 2005 to 2008](image)

**Competence of Graduates**

UGM graduates occupy positions in all manner of services. This include in the military, government institutions (regional and national), overseas organisations, private sector, and private businesses (*entrepreneur*). Unfortunately, the latest information concerning the status of UGM alumni jobs was not available. It is in order to remove the uncertainty that induced several faculties in UGM to conduct studies that aimed at tracing the status of alumni job situations. The findings of such studies and complemented by labour market signals point to the good quality of UGM alumni, especially as pertaining to their strong motivation, commitment, diligence, and honest lifestyle. Nevertheless, the studies came in with some weaknesses, which included, low confidence, low managerial and negotiating competence, and their deficiency in areas of recent science and technological development.

**Employment Rate**

Although in most cases, it took UGM alumni an average of less than 3 months, some alumni do not get their first job in less than a year. A number of factors are responsible for the duration an alumnus undergoes prior to getting the first job. Such factors, among others, include the demand for working experience for many jobs, insufficient salary offered, foreign language proficiency requirement, and disinterest to the available jobs. Therefore, UGM has the challenge to reduce such discrepancies in the future to ensure UGM alumni have the competence in terms of skill and expertise to compete with graduates from other Universities for jobs that suit their academic credentials.

**Outstanding Achievements**

During its transition era from a state University to a autonomous University, UGM has successfully registered some outstanding achievements, especially in the academic development area. In 2005, UGM together with Chulalongkorn University Thailand was awarded the highest rank in the application of Quality Assurance System, which is based on the European Union Quality Assurance System. UGM received a worldwide award as it was ranked 47th on The List of the World’s Top 100 Social Science Category, ranked 73rd on Biomedicine Sciences Category and ranked 70th on Arts and Humanities Category, in 2006.

Achievements made in institutional development during the last five years include the establishment competitive grants at various levels in more than 30 faculties, departments, or
other units. Many kinds of competitive grants provided the Directorate General of Higher Education supported UGM in becoming one of the most outstanding universities in Indonesia.

According to the THES rank, the position of UGM is in 341 on 2005, 270 on 2006, 360 on 2007, and 316 on 2008. Since 2008, several faculties holding the ISO 9001:2000 which focus on academic service, i.e.: Faculty of Biology, Faculty of Pharmacy, Faculty of Science, Faculty of Veterinary, Faculty of Agricultural Technology, Department of Chemical Engineering, and Department of Civil and Environmental Engineering.

References
Annual Report, 2007, Universitas Gadjah Mada, Yogyakarta Indonesia
Decree of National Education Minister Number 20, 2003, National Educational System, Indonesia
Government Regulation Number 19, 2005, National Standard of Education, Indonesia
I-MHERE Proposal, 2009, Universitas Gadjah Mada, Yogyakarta Indonesia
Report of Institutional Competitive Grant, 2008, Universitas Gadjah Mada, Yogyakarta, Indonesia
Strategic Plan of Universitas Gadjah Mada, 2008-2012, Universitas Gadjah Mada, Yogyakarta, Indonesia
Tracer Study and Labour Market Signal, 2004, Universitas Gadjah Mada, Yogyakarta Indonesia
Producing Resilient Graduates: UNITEN Experience

by

Ibrahim bin Hussein, BSc, MSc, PhD, FIEM, FIMechE, PEng, CEng.
and
Mohd Ariff bin Ahmad Tarmizi, BSc, MEd, MA.

Universiti Tenaga Nasional (UNITEN)
Km7, Jalan Kajang-Puchong, 43009 Kajang, Selangor, Malaysia
e-mail: ibrahim@uniten.edu.my
Tel: 603 89264030   Fax: 603 89263507

Abstract

Universiti Tenaga Nasional (UNITEN) is one of the first private universities in Malaysia which was established in 1997. Although relatively new in the education sector, UNITEN is able to perform at par or better in both academic and research. In 2007, UNITEN has developed a clear strategic direction in order to become a premier university in the areas of Engineering, Information Technology and Business by the year 2020. This strategy is divided into three phases. The first phase runs from 2007 till 2010 and the initiatives plan in the first phase is named UNITEN10 Strategic Plan. One of the key initiatives in the UNITEN10 Strategic Plan is to produce resilient graduates who are academically inclined as well as equipped with the necessary professional or soft skills. This will increase the quality of UNITEN graduates and thus enhance graduate employment. This paper describes the activities carried out in UNITEN in its efforts to produce resilient graduates. The activities include obtain international accreditation and certification, research on student profile, increase industry exposure activities, enhance student development program, develop system to encourage student participation in non academic activities, introduce employability skills, human relation and entrepreneurship in the academic curriculum and programs to enhance teaching and learning skills of lecturers. Description and examples of the activities carried out are presented in this paper.

Keywords: resilient graduates, graduate employment, strategic plan, soft skills

Introduction

Since 1997, Universiti Tenaga Nasional (UNITEN) has emerged as a dynamic and vibrant university in Malaysia, particularly among the Private Higher Education Institutions (HEIs). The university is one of the first private universities established in the country and has grown in leaps and bounds in the last 11 years. UNITEN is wholly owned by Tenaga Nasional Berhad (TNB), one of the largest utility companies in South East Asia. The university has five main colleges which cater to the educational and research activities of about 8000 students. UNITEN offers programs at foundation, bachelor, masters and Ph.D levels in the areas of Engineering, Information Technology, Business Management and Accounting. Although being relatively small, the university is able to perform at par or better in research and teaching compared to more established higher learning institutions. Our claim is supported by a number of achievements in the national and international arena. UNITEN has won more than 50 local and international awards and has acquired Ministry of Science Technology and Innovation (MOSTI), Malaysia research grants amounting to over RM15 million.

In 2007, UNITEN has developed a clear strategic direction in order to become a premier university in the areas of Engineering, Information Technology and Business by the year 2020. This strategy is divided into three phases. The first phase runs from 2007 till 2010.
and the initiatives plan in the first phase is named UNITEN10 Strategic Plan. One of the key initiatives in the UNITEN10 Strategic Plan is titled ‘to produce resilient graduates’ which look at the different approaches to produce wholesome and complete resilient graduates that are not only equipped with skills to withstand the challenges and demand of their respective professions, but more importantly, to generate a future competent civil community, that is capable of upholding integrity and ethical values in society.

This paper describes some of the activities carried out in UNITEN in this initiative i.e. to produce resilient graduates. The activities include obtain international accreditation and certification, research on student profile, increase industry exposure activities, enhance student development program, develop system to encourage student participation in non academic activities, introduce employability skills, human relation and entrepreneurship in the academic curriculum and programs to enhance teaching and learning skills of lecturers. Description and examples of the activities carried out are presented in this paper.

**Obtain International Accreditation**

The aim of accreditation is to ensure that the programs offered by an Institution of Higher Learning (IHL) meet the quality standards established by the profession for which it prepares the students for. The programs must at least attain the minimum standards comparable to global practice. For the employers, post graduate schools, and registration boards, graduation from an accredited program signifies that the graduates are well-prepared and have adequate knowledge and skill for entry into the profession. For the IHL, the accreditation provides a structured means to access, evaluate and continuously improve the quality of the programs it offers. It also helps students and parents to choose quality programs.

In Malaysia, accreditation of academic programs is being conducted by the Malaysian Qualification Agency (MQA). The main role of the MQA is to implement the Malaysian Qualifications Framework (MQF) as a basis for quality assurance of higher education and as the reference point for the criteria and standards for national qualifications. The MQA is responsible for monitoring and overseeing the quality assurance practices and accreditation of national higher education.

All programs in UNITEN are accredited by the MQA. In order to ensure that the graduates are all accepted in the international arenas, UNITEN also seek for international accreditation and certification for all its professional programs i.e. engineering and accounting.

B.Eng. Mechanical Engineering, B.Eng. Electrical and Electronics Engineering and B.Eng. Civil Engineering programs have recently been accredited and recognized by the Engineering Council, UK (ECUK) through the Institution of Mechanical Engineering (IMechE) (UK), Institution of Engineering and Technology (IET), UK and Institution of Civil Engineering, ICE (UK) respectively. Since ECUK is the signatory of Washington Accord, and an accreditation agency authorized to award the EUR-ACE (EURopean ACcredited Engineer) label by European Network for the Accreditation of Engineering Education (ENEAEE), these accreditations indicate that the engineering programs in UNITEN are of comparable standard to those offered by other countries.

Washington Accord is a multinational agreement first signed in 1989, which recognizes the substantial equivalency of engineering degree program accredited by the responsible bodies in each signatory countries. Admission to the Accord is an endorsement that the engineering education system of the member nation has demonstrated a strong,
long-term commitment to quality assurance in producing engineers ready for industry practice in the international scene.

The Bachelor of Accounting is also accredited by the Chartered Institute of Management Accountants (CIMA), Association of Chartered Certified Accountants (ACCA), Certified Public Accountants (CPA) Australia and the Institute of Chartered Accountants England and Wales (ICEAW), UK.

Research on Student Profile

Research on student achievement and failure is being carried out to monitor and determine student performance and to design follow up programs to help the weaker students. Student development committees at college level conduct programs to help these students. The programs include motivational talk to give motivation to these students, special help clinics e.g. Maths Clinic to provide avenue for them seek help in specific subjects, games between academic staff with students to make them closer to their lecturers etc.

Enhance student development program

UNITEN’s has developed a complete student development plan which aims at producing wholesome and complete resilient graduates. Below are examples of some of the activities carried out in order to enhance the student development program.

Personal Enrichment and Empowerment Program (PEEP)

PEEP is a structured program aims to provide students with the additional skills to help them in their studies. There are three modules i.e. Thinking Skills, Interpersonal Skills and Academic Skills. The content of the Thinking Skills module includes Mega Memory, Mind Mapping, Creative Thinking Blended and Test Taking Preparation. The content of the Interpersonal Skills module includes Speak up, Time Management, Stress Salad and Effective Groupwork. The content of the Academic Skills include Learning Style, Listening & Note Taking, Internet Research and Effective Writing. Students are nominated by their respective department to attend all or any one of the modules.

Students Activities Online Reporting System of UNITEN (SCORUN)

Co-curriculum activities have been introduced in UNITEN since its inception in 1997. In achieving UNITEN’s objective to develop a well balanced education system in the areas of academic and co-curriculum, in this initiative the university management has decided to introduce the new Student Activities Online Reporting System of UNITEN (SCORUN).

SCORUN is a student activity merit system which capture and award merit points to all the activities that the students participated in the course of their studies in UNITEN. This serves as a motivation factor for students to be active and allow them to further develop the students’ potential and leadership qualities in preparing them to be competent and resilient individuals to enable them to be ready to explore the world when they graduate from UNITEN.

SCORUN divided the student activities into five categories i.e. Spiritual, Leadership and Intellectual, Entrepreneurs and Innovation, Social and Community Service, and Sports, Culture and Recreational activities. For their participation in the activities, students will be granted merit points called ‘RUN’, in which the chronology of their participations and merit points accumulated throughout their life as students in UNITEN will be shown in their graduation certificate. Students therefore will have to score (SCO) and much as possible the RUN points, i.e. another meaning of the acronym name SCORUN.
Backpack to Briefcase Program

The ‘backpack to briefcase’ program is to equip students with the skills needed for the career after graduation. This program is normally incorporated in the yearly two-weeks UNITEN Career Carnival. Recently the program has been enhanced to increase the students’ readiness to enter the job market. The program consists of daily seminars whereby participants are coached and trained in various areas such as resume writing, interviewing skills, social and dining etiquette, grooming and many more. Prominent speakers from the relevant professional field are invited to conduct hands on training and guidance to graduating students preparing them to fine tune their skills before they meet their potential employers.

Resume Reviewing & Mock Interview (RR-MI) workshops are also held to bring the students one step closer to achieving their dream career where they put the skills attained above to test at the mock interviews and resume reviewing services offered in the RR-MI Workshop. These services will help participants learn what is expected in a real interview, and constructive feedback will be given immediately in order for them to improve and strategize for future interviews. Also included in this package is the Career Forum, a panel of professionals from various fields speak of the prospective job market, highlighting the expectations of the career world and the important skills required to meet it.

Finally, in the Career Carnival the students have the opportunity to be interviewed by potential employers. Companies from various backgrounds participated in the event to introduce their corporation to the undergraduates and also take the chance to explore the talent pool of UNITEN. In the last career carnival held in February 2009, 35 companies participated in the exhibitions and interviews.

Increase industry exposure activities

UNITEN is the only private university which is a subsidiary of Tenaga Nasional Berhad (TNB), a leading company in power utility industry. The image of TNB is portrayed by the uniqueness of UNITEN through its engineering programmes that are geared towards the core business of TNB. This is further illustrated in Figure 1, where ILSAS is a training arm of TNB, TNBR as a research arm of TNB and YTN provides financial assistant for TNB sponsored students. These four entities sit in the same campus. UNITEN provides more than just education based on theoretical grounds. It enriches its graduates with all the necessary skills and experiences.

Being wholly owned by one of the largest utility company in South East Asia, UNITEN is able to provide more industry exposure to the students. About one third of the engineering lecturers are practicing engineers from the parent company, TNB. Students are able to go for internship in TNB and TNB engineers are invited to give talks on various topics related to TNB operations and projects. Students have opportunities to use industrial size equipment at ILSAS and do their researches at TNBR. TNB professionals and experts are also appointed as Adjunct Professors and serve as Industrial Advisor to academic programmes.

UNITEN also recruits academic staff with strong academic background and industrial experience to enable its students to get useful insights of the actual demands and expectations of the industries. The establishment of the Power Engineering Centre (PEC) and Energy Business and Technology Centre (EBTC) reflect UNITEN’s effort to enhance UNITEN-Industry relationship.
Apart from our relationship with TNB and its subsidiaries, UNITEN also has links with other organisations and institutions including public universities and government agencies. These unique and enriching learning experiences distinguishes UNITEN from other institutions.

Most of the programs in UNITEN require the students to undergo at least 12 weeks of internship in industry. This is to expose them to the real industrial practices. The students will normally be allowed to go for the internship at the end of the third year. In this initiative, first year and second year students are allowed to do their internship in TNB, our parent company, during the three months semester break.

**Introduce employability skills, human relation and entrepreneurship in the academic curriculum**

With effect from Semester 1, academic year 2008/2009, UNITEN has introduces three new social science and humanities electives to the students. The courses are Creative Thinking, Leadership & Entrepreneurship and Counseling & Social Work. These courses aim at improving the leadership, human relation and entrepreneurship skills of the students.

**Programs to enhance teaching and learning skills of lecturers.**

Teaching is one of the most important functions of a university. Well trained and knowledgeable graduates are outputs of good teaching and learning practices and environment. To produce good graduate, good lecturers are needed, who will guide them throughout their stay in the university. The students will spent most of their time in classes, and the lecturers are the ones who will see them in their classes and therefore would be the...
best persons to guide them, coach them and consult them to success. Good curriculum and syllabuses are not good enough for any university especially now where the requirements of present employers not only focus on the technical knowledge of graduates but also their abilities to present their thought, to manage and interact with people, and must also possess other soft skills. Lecturers need to be innovative and creative and should be able to use variety of methods to enhance teaching and learning. Emphasis on memorizing of facts and formulas and reproducing them back in examination are not the way now. Emphasis must be on the student ability to grasp the fundamental concepts and principles and apply them in solving problems. The way questions are formed for the examinations, assignments and mini projects must make them think critically before providing the solutions.

In order to help the lecturers to acquire the skills needed for effective teaching, courses are held in UNITEN to cater to the varied needs of lecturers. Different modules were developed to suit the different level of skills and experience of the lecturers. The modules are…..

**Concluding Remarks**

Present employers are looking for employees who are not only technically good, but who possess good professional and soft skills. Not all of these skills can be acquired in the courses set in the curriculum of the academic programs. Some of these skills can be developed through structured out-of-class activities and in the co-curriculum activities. This paper has looked at and discussed some of the approaches used in UNITEN to increase the professional and soft skills of its graduates.

In order to assess and monitor the success of the above activities, two major Key Performance Indicators (KPIs) have been set in the initiative ‘to produce resilient graduates’. These two KPIs are percentage of graduates with Cumulative Grade Point Average (CGPA) of more than 3.0 out of 4.0 and employability rate above the national average. Figure 2 and Figure 3, show the percentage of graduates with CGPA >3.0 and the employability rate of our graduates respectively from year 2004 till 2008. The figures do show much variation throughout the five years. It is hoped that with the introduction of activities in the initiative ‘to produce resilient graduates’, as well as other initiative in UNITEN 10 Strategic Plan, the results of the two KPIs as well as other KPIs will improve significantly.
References:
“UNITEN10 2007-2010 Strategic Plan”, Strategic & Corporate Planning Center, Universiti Tenaga Nasional, 2007

“Quality Management Excellence Award (QMEA)” Report, Universiti Tenaga Nasional, 2007


Enrico c. Nera, “The Importance of Accreditation of Engineering Programs to the Global Practice of The Profession”, ASEAN Federation of Engineering Organizations.


Development of an Outcomes-based Curriculum Embedding Employability Skills, Institutional Goals and Values: A Sri Lankan Experience

E.R.K. Perera\textsuperscript{a}, G.L.L.P. Silva\textsuperscript{b} and B. Marambe\textsuperscript{c}
Faculty of Agriculture, University of Peradeniya, Sri Lanka
E-mail: kalyanip@pdn.ac.lk, Phone: +94 81 2395328, Fax: +94 81 2395322

Abstract

Enhancing employability of the graduates became a challenge for the agriculture higher education institutes in Sri Lanka during late 1990's. The Faculty of Agriculture, University of Peradeniya attempted to overcome this through curricular reform. A two stage process, viz., preparation of guidelines for curriculum development, and developing the curriculum based on those guidelines was adopted. Reducing the total number of credit units from 169 to a number close to 120, strengthening practical component, exposing students to world of work in a real setting, enhancing professionalism, and adopting student-centered teaching/learning approaches were the key aspects considered in this exercise. Accordingly, a curriculum in "Agricultural Technology and Management" was developed by the Curriculum Development Committee (CDC) of the Faculty using a holistic outcomes-based approach. Partial assistance from a World Bank grant on Improving Relevance and Quality of Undergraduate Education (IRQUE) secured by the Faculty was used for some activities. Questionnaire surveys and workshops were conducted to assess the needs of the stakeholders. Considering those needs along with the goals and values of the institute and level descriptors, the desired graduate profile was determined. Five broad thematic areas under which the curriculum should be developed were identified. The intended learning outcomes (ILOs) of the degree programme and of the thematic areas were detailed out. Teaching, learning and assessment policy were agreed upon. The appropriate teacher-guided, peer-guided and self-guided (independent) learning activities (LAs) and time requirements (T) were determined. Independent learning, in-plant training, field practical training, portfolio development were incorporated. Supplementary, complementary and theme-based courses were formulated taking the ILOs, related LAs and T into consideration. Credit unit was re-defined based on student workload (including independent learning activities) without contradicting the teacher contact hour-based definition of credit unit adopted by the university system. Courses were sequenced from principles to applications to independent studies. Curriculum mapping was done to ensure appropriateness of the course sequence and fulfilling of the programme ILOs. Appropriate assessment methods (AMs) were identified for each course and constructive alignment of the ILOs, LAs and AMs was made. Distribution-based grading system was adopted. After subjecting the developed curriculum for internal and external scrutiny, approval was obtained from the authorities. The first outcomes-based curriculum thus developed by a higher education institute in Sri Lanka, was implemented from 2006. Details on the process undertaken, the underlying reasons along with the model used and quality control measures adopted are described in the paper.

Key words: Graduate Employment, Curriculum Reform, Outcomes-based approach

Introduction

Education is venerated in Sri Lanka, which is renowned for achieving the highest literacy rate among South Asian countries within few decades of gaining independence from the British colonial rule. In spite of being a third world country, over 99% of the children within 5-15 year age category of this nation receives primary education (DCS, 2008) thanks to the government policy on ‘mandatory primary education’ and ‘free education’ practiced, and the structured school system in place. Notwithstanding such exceptional achievements, at present, the country is faced with more than its share of challenges in almost every sphere,
including the education arena. Unemployment and underemployment have begun to haunt the educated youth, including graduates. Even the graduates in agriculture were not spared, despite Sri Lanka being an agricultural country, where agriculture sector serves as the largest employer and a major contributor to the economy.

Both the agriculture sector and the university education in agriculture of the country have undergone revolutionary changes over the past six decades since independence. The agriculture sector initially expanded the cultivated land extent and subsequently embraced technological advances in its attempt to improve productivity overcoming local challenges, while transforming into a science based enterprise during the process. Although it managed to remain as a major contributor to the economy to date, its share of the gross domestic product (GDP) of the country suffered a progressive decline. An exception was made in the year 2008 which marked the highest growth rate in the agricultural sector of the country (7.5%) since 1990 (Central Bank, 2009).

The opening up of new lands for agriculture in the north and east of Sri Lanka during the recent past has created new avenues for agricultural development of the country. These opportunities have been well received and backed by the state sponsored national programs with a focus of building the country with a strong footing on agricultural sector. In such a scenario, well-trained human resources are a factor of critical importance to meet the challenges in an ever-changing technologically-driven agricultural environment of the country. Thus, the Faculties of Agriculture of the University system of Sri Lanka have a crucial role to play to ensure that their graduates are well-placed in the present dynamic environment and help the country to achieve its developmental goals. Employability of graduates of the Faculties of Agriculture is not limited to the agriculture sector alone. The country's development could always be achieved through integration of the activities of the different key sectors. Considering the small economy of the country, it is imperative that the higher educational system produces graduates who have the ability to handle challenges in diverse spheres of the country's developmental process. In this context, the training that the undergraduates receive during their university study period becomes crucial in acquiring technical and managerial skills in order to meet the aspirations of the nation. Clear understanding of this fact is decisive in the process of developing an effective curriculum that produces deliverable graduates for the nation. This paper presents a brief account on the employability of agriculture graduates and the latest and novel approach in terms of curriculum reform, adopted by the premier institute in agricultural higher education in the country, the Faculty of Agriculture, University of Peradeniya, to address this issue.

History of Agriculture Higher Education in Sri Lanka

The advent of the present system of university education in agriculture to the prevailed advanced education system of the country, took place in 1948, with the creation of a single department of study in the newly established Faculty of Agriculture and Veterinary Science at Peradeniya to operate under the auspices of the then five-year old University of Ceylon. The graduates in agriculture were to assist the country in improving food production during this immediate post independent era. The created Department of Study offered a three year degree programme in Agriculture, of which the students had to complete the General Science Qualifying Examination (GSQ) in the first year to proceed to follow agriculture related subjects during the remaining two years. With the improvements made in the course curricular, the degree was transformed into a 4-year programme in 1961. By increasing physical and human resources, an independent Faculty of Agriculture was established in 1972, which developed to become the premier institute for agriculture higher education of the country within the next decade.

Since 1978, 30 years after the inception of the B.Sc. Agriculture degree program at Peradeniya campus of the then University of Ceylon, six other Faculties of Agriculture were established at regional levels in the universities/university colleges of the country. At the time of establishment, these Faculties (except that of University of Jaffna) were affiliated to the Faculty of Agriculture at University of Peradeniya (FA-UP), which has achieved renown status for agriculture higher education by then. These affiliated Faculties at the regional Universities/University colleges subsequently became independent Faculties of the university system of Sri Lanka (Table 1). The annual student intake to the Agriculture degree
programmes increased from a little more than a dozen admitted to follow the only degree programme in Agriculture offered by the Department of Agriculture of the Faculty of Agriculture and Veterinary Science at Peradeniya, to little less than 900 to follow 8 degree programmes (Table 2) in agriculture offered by 8 Faculties at present. Several factors including the introduction of liberal economic policy in 1977, changes in the university admission policy, population growth and increase in the number of qualified candidates have contributed to the increase in admission of students to follow degree programmes in agriculture.

**Table 1. Landmarks in Expansion of University Education in Agriculture in Sri Lanka**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948</td>
<td>Faculty of Agriculture &amp; Veterinary Science at Peradeniya Campus</td>
</tr>
<tr>
<td>1972</td>
<td>Faculty of Agriculture - University of Peradeniya (FA-UP)</td>
</tr>
<tr>
<td>1978</td>
<td>Faculty of Agriculture - University of Ruhuna</td>
</tr>
<tr>
<td>1981</td>
<td>Faculty of Agriculture – Eastern University of Sri Lanka</td>
</tr>
<tr>
<td>1986</td>
<td>Faculty of Agriculture - Eastern University of Sri Lanka</td>
</tr>
<tr>
<td>1990</td>
<td>Faculty of Agriculture – University of Jaffna</td>
</tr>
<tr>
<td>1991</td>
<td>Faculty of Agricultural Science – Rajarata University of Sri Lanka</td>
</tr>
<tr>
<td>1996</td>
<td>Faculty of Agricultural Science (Sabaragamuwa University of Sri Lanka)</td>
</tr>
<tr>
<td>1999</td>
<td>Faculty of Agriculture and Plantation Management – Wayamba University of Sri Lanka</td>
</tr>
<tr>
<td>2006</td>
<td>Faculty of Export Agriculture and Animal Science – Uva Wellassa University of Sri Lanka</td>
</tr>
</tbody>
</table>

**Table 2. Internal Degree programmes in Agriculture offered and the number of Students assigned in 2008**

<table>
<thead>
<tr>
<th>University</th>
<th>Degree Programme</th>
<th>Number assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Peradeniya</td>
<td>B.Sc. Agricultural Technology and Management</td>
<td>200</td>
</tr>
<tr>
<td>University of Ruhuna</td>
<td>B.Sc. Agriculture</td>
<td>150</td>
</tr>
<tr>
<td>University of Jaffna</td>
<td>B.Sc. Agriculture</td>
<td>60</td>
</tr>
<tr>
<td>Eastern University</td>
<td>B.Sc. Agriculture</td>
<td>120</td>
</tr>
<tr>
<td>Rajarata University</td>
<td>B.Sc. Agriculture</td>
<td>130</td>
</tr>
<tr>
<td>Sabaragamuwa University</td>
<td>B.Sc. Agricultural Sciences and Management</td>
<td>85</td>
</tr>
<tr>
<td>Wayamba University</td>
<td>B.Sc. Agriculture</td>
<td>100</td>
</tr>
<tr>
<td>Uva Wellassa University</td>
<td>B.Sc. Export Agriculture</td>
<td>50</td>
</tr>
</tbody>
</table>

(Source: UGC, 2009)

**Employment of Agriculture Graduates**

During the first three decades of university education in agriculture in Sri Lanka, the government Department of Agriculture (DOA), plantation sector and the commodity research institutes (Tea Research Institute, Coconut Research Institute, Rubber Research Institute, and Sugarcane Research Institute) of the country served as the main employers of the graduates produced by the Faculty of Agriculture of the University of Peradeniya. In fact, the graduates in Agriculture were in such a demand that the Faculty was compelled not only to increase the student intake but also to formulate and offer custom-made courses such as Plantation Evaluation Course in response to requests made by the government from time to time.
Introduction of liberal economic policies in 1977 changed the economic structure of the country, compelling the agriculture sector of the country to improve productivity through diversified and commercialized production, liberalize trade, increase export and foster private sector participation. With stringent recruitment policies adopted by the successive governments, the employment opportunities available for the agriculture graduates in the state-owned organizations suffered. Notwithstanding the declining trend in graduate recruitment, the Government took an initiative to expand agriculture higher education through establishment of more Faculties of Agriculture. This led to accumulation of a surplus in the number of graduates produced and emergence of the problem of unemployment and underemployment among agriculture graduates. Declining trend in the employment of agriculture undergraduates is clearly shown in a series of surveys conducted by the National Science Foundation (NSF) targeting the status of employment among the graduates in science-based disciplines at 2 years after graduation. The findings revealed that the employment of agriculture graduates declined from 88% in 1997 to 75.5% in 2001 and then to 70% in 2004 (Dilrukshi & Wickramasinghe, 2005). Most (41.5%) were employed in the private sector followed by the semi-government sector (32.3%). Only 21.3% of the graduates were employed by the government sector in 2003. This value reduced further to 11.4% in 2004. The progressively increasing role played by the private sector during this period was clearly reflected in the findings. Furthermore, this study revealed that, about 25% of the employed graduates considered the degree as being not relevant to their employment. Only 46% indicated the degree to be directly relevant to their current employment while 28% reported the degree being somewhat relevant.

The Peradeniya Approach to Produce Employable Graduates

Being the prime institute for agriculture higher education in the country, the FA-UP has been vigilant to the transformations taking place in the agriculture sector. Since its inception in 1948, it has been the ardent policy and the practice of the FA-UP to periodically revise the curriculum of the degree programme it offers to meet the needs of the sector, to improve the quality of the graduates and to espouse the developments taking place in the education arena. The FA-UP was in the process of collecting information regarding the strengths and weaknesses of the semester based curriculum implemented since 1998. Realization of the need to improve the relevance of the agriculture degree programme prompted the FA-UP to organize a series of ‘needs assessment’ workshops and questionnaire surveys among stakeholders beginning from 2003. Information collection was further expanded to cover the whole range of stakeholders after the Faculty won a competitive grant from the World Bank funded project to “Improving Relevance and Quality of Undergraduate Education (IRQUE)” in 2004.

All the employers participated in the two workshops held in 2004 and 2005 rated practical skills, communication skills and interpersonal and team working skills as the most important attributes the graduates should posses. Professional (self) development, intellectual ability and IT skills were ranked next. Numeracy skills were ranked the lowest by the employers. However, those employers who responded to the questionnaire survey highlighted the importance of Knowledge & skills pertaining to the job, commitment, English and IT, ability to meet deadlines, punctuality, hardworking ability, maturity, responsibility, efficiency, independence and honesty as required attributes. 19 different groups of employers separately interviewed indicated self discipline, teamwork, communication skills, interpersonal skills, IT skills, willingness to learn, adaptability, creativity, leadership, presentation skills, honesty, punctuality and commitment as being important. These employability attributes were ear marked to be embedded in a revised curriculum.

In addition to highlighting the importance of above mentioned attributes to gain employment and achieve success, the employers indicated that in general agriculture graduates lacked ability to apply theoretical knowledge to real world situations and solve problems in an integrated manner, and were deficient in required practical skills to effectively perform in the field in spite of their strong theoretical knowledge. They further stated that the communication skills, especially English language proficiency, confidence, team working skills
and attitudes of graduates as being inadequate. The workshops further revealed that the agriculture sector of the country was transforming into a ‘technology-based venture’

Information were gathered from the alumni and the undergraduates regarding the strengths and aspects to be improved in the core curriculum. All unanimously indicated that the core module of the curriculum was over burdened with a large number of credit units (137) and certain subject contents were unnecessarily ‘repeated’ in different courses (subjects) offered. However, the alumni indicated that the broad spectrum of subjects addressed in the core module was beneficial to secure jobs in a wide range of allied fields. The FA-UP was mindful of the fact that the minimum total credit requirement of the degree program (171 credits) was much higher than the norm of 120 credit units for a credit based four-year degree programme and the need for reducing the number of credit units without sacrificing the quality of the degree. The summary of findings of the ‘Needs assessment’ is given in Table 3.

Table 3. Summary of Findings – Needs Assessment

- **Strengths**
  - Satisfactory theoretical knowledge
  - Broad subject Coverage
  - Core and Advanced modules
  - Final year research project
  - Farm Practice course
  - Field visits
  - Semester system
  - English as the medium of Instruction
  - Time management

- **Employers’ requirements**
  - Application to field situations
  - Integrated approach
  - Practical skills
  - Communication & IT skills
  - Interpersonal & team working skills
  - Punctuality, adaptability, commitment
  - Professionalism

- **Students & Faculty wanted**
  - Reduced workload during core module
  - More time for teamwork & skill development
  - Real-world work experience (link with industry)
  - Minimize repetitions, Logical sequence
  - Feedback on performance

Considering all those findings, the FA-UP decided to revise the curriculum completely. This task was assigned to the Curriculum Development Committee (CDC) appointed in 2004. The CDC accomplished this task in two main stages, viz., preparation of a working document on guidelines for the development of the curriculum in 2004, and formulation of the curriculum based on the developed guidelines during 2005/06.

This was the first time in the curriculum development history of the FA-UP a ‘Working Document on Guidelines for Curriculum Development’ was prepared. The ‘Guidelines Document’ prepared by the CDC in 2004, approved by the Faculty Board of Agriculture, recommended developing the curriculum using a student-oriented approach, deviating from the traditional teacher-oriented approach, to be in line with the prevailing trend in higher education. Using a part of the IRQUE funds received, the views of a foreign expert on the ‘Guidelines Document’ were obtained and workshops on ‘Curriculum Development’ were conducted for the members of the Faculty in 2005.

A ‘learning outcomes based model’ introduced by the foreign expert was adopted with minor modifications (Figure 1) by the CDC to formulate the new curriculum. At the outset, the desired profile of a ‘Graduate in Agricultural Technology and Management’ (Box 1) was established taking the vision of the University, the mission of the Faculty, and the needs of the agriculture sector into consideration.
Fig.1. Learning Outcomes-based Model used to develop the Curriculum of the B.Sc. degree in Agricultural Technology and Management

Box 1. Desired profile of a Graduate in Agricultural Technology and Management

A graduate in Agricultural Technology & Management shall possess the necessary knowledge, skills and appropriate attitudes that make him/her capable of making significant contribution to the overall development focusing mainly on the issues related to the agriculture and allied activities in the manner described below:

- Identifying and analyzing problems in agriculture and related sectors at the farm, community, provincial, national and global level,

- Proposing innovative, technologically appropriate, environmentally sound, economically feasible and socially acceptable solutions to challenges faced in the development of agriculture, and

- By becoming a professional in the areas of research/academia/management/entrepreneurship and a socially responsible ethical team player, with effective communication skills.

To produce a graduate with such attributes, the curriculum needed to be developed under five Broad Thematic Areas; namely

**Production and Management of Agricultural Commodities**

**Agro-product Processing Technologies**

**Natural Resources Management**

**Socio-economic Development and Business Management, and**

**Professional Development.**
To ensure acquisition of essential knowledge, skills and attitudes indicated in the ‘Graduate Profile’ by every graduate holding a B.Sc. degree in Agricultural Technology and Management, first a compulsory core module was developed under the five Broad Thematic Areas. All generic skills and related attributes except practical skills were marked as employability skills (Table 4) were included in the ‘Professional Development’ theme. Practical skills and subject specific skills were included in the other four subject related themes.

Table 4. Skills Identified as required to be Strengthened to Enhance Employability

- **Generic Skills**
  - Communication skills (English, Sinhala, Tamil)
  - IT skills
  - Interpersonal & team working skills
  - Punctuality
  - Adaptability
  - Professionalism

- **Subject Specific skills**
  - Application of theory to field situations
  - Integrated approach to problems
  - Practical skills
  - Real-world work experience

This was the first time in curriculum development history of the Faculty, a curriculum was developed based on ‘learning outcomes’ and under thematic areas, and Professional Development of undergraduates was considered as a theme. The prevailed trend in every sector to consider the generic skills of graduates, in addition to the subject knowledge and skill made the CDC to include this theme. The intended learning outcomes (ILOs) pertaining to the five Broad Thematic Areas were identified, and subdivided into more specific ILOs. Attributes of importance indicated by the employers were embedded into the subject related ILOs also wherever appropriate. Suitable learning activities (LAs) that would ensure the acquisition of the specified ILOs were listed and time requirements for conducting LAs were estimated. In identifying LAs, the available physical and professional resources at the Faculty were given primary consideration while the resources available at the other institutes were also given due consideration. The concept of ‘Independent learning’ (IL) was introduced to the curriculum for the first time. To promote independent learning skills, appropriate independent learning activities related to instructional activities (lectures and practical) and time requirements were incorporated into the curriculum for the first time. Related LAs were packaged into courses. In formulating courses, an attempt was made to minimize the number of courses worth of less than 2 credit units or more than 3 credit units.

The identified beneficial features of the previous curriculum such as the semester system, compulsory core module, and optional courses in advanced modules were retained. Special emphasis was paid to incorporate learning activities that strengthen the attributes that enhance employability such as practical skills, provide exposure to ‘real world working environment’, promote integrated approach to issues in agriculture, develop self-learning and investigative habits, promote communication skills, teamwork, leadership skills and attitudinal development.

Several new features were incorporated to embed employability skills and promote professional development of the students. A programme on “Leadership and Confidence Building” was included at the commencement of the degree programme to inculcate leadership and team work skills. As a part of the learning activity in the second year all the students participated in teams exercise to design and implement a business project to instigate entrepreneurial skills and team work. Considering the differences in the knowledge of English, Mathematics and Information Technology among new entrants coming from diverse educational backgrounds, a set of supplementary non-credit courses on English, Basic Mathematics, Basic Physics, Information and Communication Technology (ICT) and Laboratory Techniques were newly designed and included in the core module as described in Box 2, to assist the ‘needy’ students to acquire a satisfactory proficiency to successfully
complete the degree program. The course notation and numbering system was slightly modified to be more descriptive.

Since the curriculum was developed using ‘student-oriented approach’ based on the ‘intended learning outcomes’, the credit value of developed courses was estimated considering the ‘student workload’. A maximum of 40 hours of total academic work including participation in lectures, practical and independent learning pertaining to a given course, by a student within a period of 15 week semester was considered as the workload requirement of a credit unit.

Box 2. New Features incorporated to enhance Employability Skills

| English: Following series of English language courses was formulated with the assistance of the British Council to improve communication skills, presentation skills, and report writing skills of the students from a level of International English Language Testing System (IELTS) band 1 to a level in par with IELTS band 6. Satisfactory completion of English courses was made compulsory. |
| ATM 1  English 1 (300 hrs)** |
| ATM 6  English II (180 hrs)** |

| Information Technology: A Certificate course on Information and Communication Technology was developed and included as a compulsory course. |
| ATM 2 Information & Communication Technology (100 hr)* |

| Basic Mathematics and Laboratory Safety: Courses on Basic Mathematics and Laboratory safety were designed and included as compulsory courses. |
| ATM 3 Basic Mathematics (90 hr)* |
| ATM 5 Basic Laboratory Skill (15 hrs)* |

| Communication skill in National Languages: To improve verbal communication skills in other national languages, non-credit compulsory courses on Tamil and Sinhala were included. |
| ATM 7 National Language – Sinhala (90 hr) ** |
| ATM 8 National Language – Tamil (90 hr)** |

| Exposure to ‘World of Work’: To provide exposure to ‘real world working environment’, to learn ‘work ethics’, and develop ‘appropriate working attitude’ and ‘professionalism’, a course titled ‘In-plant Training’ was developed and included, ‘Satisfactory’ completion of ‘In-plant Training’ was made a requirement of the degree. |
| In-Plant Training (160 hr) |

| Portfolio Development: To inculcate reflective thinking and self assessment skills, ‘Portfolio Development’ was added to the ‘Career Development’ course. An official Portfolio document was prepared and distributed among students for completion. |
| ATM 9 Student Portfolio* |

| Leadership Training & confidence building: At the commencement |

Note: The respective numbers of credit units, lecture hours, practical hours & independent learning hours corresponding to each course are indicated within parenthesis after the course title.

* Supplementary non-credit courses offered prior to commencement of the academic programme.

** Complementary non-credit courses offered during 2nd, 3rd, 4th, 5th, 6th and 7th semesters.
This was the first time that any degree programme offered by the University system of Sri Lanka defined the credit unit based on student workload incorporating independent learning. Accordingly, one unit of semester credit was considered to be equivalent to 15 hours of lectures and a maximum of 25 hours of independent learning; or 30 hours of laboratory work / field work / tutorials / field visits and a maximum of 10 hours of independent learning; or 40 hours of assigned independent learning, library / web/ literature search, or preparation for research. The Prospectus 2006 – 2010 published by the Faculty provides details of the courses, credit units and associated numbers of lectures, practical and independent learning hours.

The formulated courses were then sequenced in a manner that promote integrated approach to learning (problem solving) and increased in comprehensiveness, by starting off with the courses that address the principles of interrelated disciplines, progressing to courses that pay more emphasis on applications and ending up with courses that encourage independent studies. During sequencing, attention was paid to promote inter-disciplinary approach and a near-equal distribution of credit units among the semesters.

A course package in Agricultural Technology and Management that incorporated both modern and traditional technologies in agriculture, consisting primarily of field practical, field visits and out-bound training supplemented with lectures, was formulated taking the facilities and expertise available into consideration, to provide an exposure and firsthand experience of ‘on-farm realities’ to the students from the commencement of the degree programme. This module was scheduled for the first semester of the first year.

The second and third semesters were devoted to courses addressing basic aspects of Agricultural Technology and Management. A set of courses addressing both principles and applied aspects were scheduled for the fourth semester. The fifth semester courses addressed more applied aspects of Agricultural Technology and Management, while the sixth semester core courses were completely applied in nature. Since the sixth semester consisted of courses from both core and advanced modules it was considered as the transitional semester. Advanced modules commenced in the sixth semester continued through the seventh semester. The 8th semester was devoted to Research Project to provide training in problem identification, investigation, data collection, analysis and interpretation and to promote research skills. Project was assigned 6 credit units and was considered as a compulsory component of the curriculum.

The completed ‘Core module’ consisted of 96 course credits contributed by 8 Departments of study, and 6 credits contributed by the Project. By adopting the outcomes based approach to formulate the curriculum, the FA-UP was thus able to embed the employability skills identified by the stakeholders into the curriculum through learning activities pertaining to the ILOs of ‘Professional development’ theme and LAs pertaining to improving practical skills associated with subject based ILOs in the other subject based four major themes.

After formulating the ‘Core module’ and obtaining approval from the Faculty Board, ‘Advanced modules’ were designed at departmental level using the same ‘Outcomes-based Model’, to provide ‘in-depth’ knowledge and skills ‘unique’ to different fields of study. For this purpose, every advanced module was formulated to consist of a set of compulsory courses that were ‘unique’ to that module, and contributed a minimum of 67% (i.e., 12 credit units) of the total 18 credit unit requirement of the advanced module. A total of 12 advanced modules (Table 4) providing unique ‘in-depth’ learning opportunities in 12 different important fields of Agricultural Technology and Management were formulated. The finalized ‘Outcomes-based’ curriculum of the B.Sc. Agricultural Technology and Management degree consisted of a compulsory ‘Core module’ jointly offered by eight Departments of study, and twelve advanced modules offered by Departments of study individually or jointly.

To be eligible for the B.Sc. degree in Agricultural Technology and Management, a minimum of 126 credit units of instructional program (102 credit units from the specified compulsory courses of the ‘Core module’; 18 credit units from specified compulsory courses and optional courses of an advanced module in a selected field of study; and 6 credit units from compulsory ‘Project’ in the selected field of study were required to be satisfactorily completed through full-time academic work during four academic years. However, students
had the option of taking more than 126 credit units if desired, depending on the recommendation of the academic advisors.

<table>
<thead>
<tr>
<th>Table 4. Advanced Modules of the Agricultural Technology &amp; Management Curriculum and the Coordinating Department of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of the Module</strong></td>
</tr>
<tr>
<td>I. Advanced Crop Production Technology</td>
</tr>
<tr>
<td>II. Agricultural and Biosystems Engineering</td>
</tr>
<tr>
<td>III. Animal Science and Technology</td>
</tr>
<tr>
<td>IV. Applied Economics &amp; Business Management</td>
</tr>
<tr>
<td>V. Development Communication and Organizational Management</td>
</tr>
<tr>
<td>VI Economic and Applied Entomology</td>
</tr>
<tr>
<td>VII. Food Science &amp; Technology</td>
</tr>
<tr>
<td>VIII. Genetic Improvement of Plants</td>
</tr>
<tr>
<td>IX. Molecular Biology and Biotechnology</td>
</tr>
<tr>
<td>X. Plantation Management and Forestry</td>
</tr>
<tr>
<td>XI. Plant Pathology and Microbiology</td>
</tr>
<tr>
<td>XII. Soils and Environment</td>
</tr>
</tbody>
</table>

**Improvement of Assessment Procedures**

Appropriate assessment methods (AMs) and criteria were designed to determine the extent of acquisition of the ILOs by the students from the learning opportunities made available through different learning activities. Constructive alignment method (alignment of the LAs and AMs with the ILOs) was used to ensure the acquisition of the ILOs through the courses of the core module. In-course (continuous) assessment was not only accepted as a policy but also adopted and practiced for every component (theory, practical, independent learning) of every course. Conducting more than one examination at important milestones / levels of learning and providing feedback to the students regarding their performance during the semester was made a requirement to ensure implementation of formative assessment.

Appropriate procedures to assess different components (theory, practical, independent learning) of each course, the stage at which each assessment is conducted, the percentage contribution of each component (including independent learning) to the final mark were determined by the course coordinator and approved by the Department of Study, the CDC and the Faculty Board. The minimum total duration of examinations (including the duration of in-course assessments) of a particular course was determined based on the number of credit units allocated to that course. To improve transparency of the teaching and learning process and to facilitate objective learning, informing the students regarding the ILOs, assessment procedures and scheme of marks allocation, at the commencement of a course was made a requirement.

The Cut-off mark-based grading system, which was adopted since 1948, was replaced by a Distribution-based grading system for all credited courses to remove the biases in cut-off based grading system. To ensure accuracy and transparency, the teachers were required to submit the marks and the grades to the Head of the Department to hold a pre-results board of examiners.

A 4-point scale of grading and the letter grades were used with slight modification. Threshold level of grading (Pass grade) was elevated to C- instead of D, to improve the quality of the graduates. A new grade, (A+) was added to the letter grades to be awarded to those who become distinct outliers of the ‘Marks’ distribution’ by securing the highest marks in a course examination. The 1st year, 2nd year, 3rd year and 4th year semester examinations were assigned to contribute 20%, 25%, 25% and 30%, respectively of the Final Grade point Average (FGPA).

Views of two foreign experts and one local expert were obtained on the new curriculum in Agricultural Technology and Management developed using the ‘Outcomes-based’ approach for the first time in the Faculties of Agriculture in Sri Lanka, and the
curriculum was launched in 2006. Although it is still premature to assess the employability outcomes, significant and continuous increase in the Z score of the students selected to follow the new degree programme indicates the effectiveness of the efforts made to develop this curriculum.

Curriculum Monitoring and Upgrading Quality of Delivery

In addition to improving the curriculum through periodic revisions, the FA-UP took initiatives to improve the quality of delivery and to ensure proper implementation of the outcomes based curriculum. For example, the CDC appointed in 2002, developed a Teacher/Course evaluation format incorporating the important attributes of a good teacher to obtain feedback from the students on the effectiveness of teaching. Upon obtaining approval from the Faculty Board of Agriculture, a pilot scale Teacher / Course evaluation programme was launched in 2002, introducing this practice formally to the University system of Sri Lanka, for the first time. Over the years, Teacher/Course evaluation received wide acceptance among the degree programmes conducted by the University system of Sri Lanka, contributing to improve the quality of undergraduate education in the country.

In 2006 the FA-UP selected and trained a group of eight members on curriculum development to serve as the core group for leading future curricular development activities, using financial assistance from the IRQUE project. Members of this group now serve as resource persons on curriculum development to the university system.

To ensure effective implementation of the new curriculum, the FA-UP commenced conducting pre-semester workshops on lesson planning for the teachers of courses in a particular semester from 2006. This activity is currently sponsored by the IRQUE project. A three-member Curriculum Monitoring Committee (CMC) was appointed in 2006 for the first time to monitor and report the progress of implementation of the new curriculum. Thus far, the CMC has conducted surveys among all stakeholders at every semester and submitted reports. The results reflect the effectiveness of the approach used in developing the new curriculum. In 2009, the FA-UP commenced peer evaluation of teaching as another good practice to further improve the quality of delivery

A Curriculum with a Vision

At the global scale, there has been considerable attention to the need of graduates to be life-long learners and effective problem-solvers. There is continuous pressure on higher education to contribute directly to national economic regeneration and growth. The emergence of an information rich “knowledge society” has made this requirement even more of an imperative. Many graduates including those with degrees in the field of agriculture and allied sciences are likely to be involved in knowledge intensive activities for which they need to be prepared. It is the responsibility of universities and other higher educational institutions to equip their graduates with the knowledge, skills and attitudes to help them in meet the challenges in a diverse society. In this context, the universities worldwide strive hard to be the choice for prospective employers, with graduates who are in demand for their knowledge, skills and competence. The challenge in front of an academic entity is not to look into ways of accommodating “employability”, but to shift the traditional balance of power from the education provider (teacher) to those participating in the learning process (student).

In this context, the FA-UP, Sri Lanka has designed and implemented a curriculum to meet the aspirations of the society. The FA -UP, among other science-based faculties in the universities of the country, has an outstanding history for producing highly employable graduates. The Faculty has been shifting its focus over the past six decades to produce graduates who are capable of successfully meeting the challenges of a dynamic society, while maintaining the highest academic quality and standards. The recently introduced outcomes based curriculum is such an attempt, which would no doubt be a rewarding experience for those who undergo the training (students), and in terms of employment and contribution to national development.
Acknowledgements

The authors gratefully acknowledge the unstinted support extended by all the stakeholders, the members of the Curriculum Development Committee and the other members of the Faculty Board of Agriculture in formulating this outcomes-based curriculum leading to the degree in Agricultural Technology and Management.

References

Adoption of Quality Assurance Frameworks towards Enhancing Employability: Issues and the Way Forward

Mad Nasir Shamsudin, Aini Ideris and Golnaz Reza

Universiti Putra Malaysia

1. Introduction

In the emerging global economy, advanced human capital has become a crucial factor in economic and social development and a central component of a nation’s competitive advantage. Consequently, many countries are shifting from elite to mass systems of higher education. The combined impacts of globalisation and massification have raised concern about the academic quality in higher education, and consequently motivated a search for new methods of assuring and improving academic standards, and hence the employability of graduates.

Besides globalisation and massification, there is also a general opinion that higher education is increasingly being viewed as sub-system of an economy. It is being repositioned as an industry, rather than as a social institution (Gumport, 2000). In certain instances, Higher Educations Institutions (HEIs) especially private institutions are engulfed in a process of commodification. Production metaphors, borrowed from industry, are now central to higher education discourse. Further, the rises of consumerism and political concerns with the use value of higher education have produced professional priorities. HEIs both mediate and manage government policy. Corporate interests are also now play a more powerful role in determining the purposes of higher education. There is a more explicit concern with universities producing new workers and the values of the consumer society are now embedded in educational relationships. With these development, all countries therefore are seeking an effective framework for academic quality assurance that will likely include an appropriate classification of academic degrees, the provision of valid and reliable information on academic quality, and some efficient means of external assessment designed to assure HEIs have in place effective internal quality assurance processes.

The above emerging and changing scenario has caused concerns about the reductive definition of the purpose of higher education. Has utilitarianism eclipsed intellectualism in HEIs? Do HEIs exist simply to meet the needs of modern capitalism and are students being constructed solely as future workers, rather than fully rounded citizens? Leonard (2000) observed that “Education has been redefined as primarily a means of skilling more and more young workers, and of providing professional and in-service courses in life-long (re)learning; rather than about expanding the minds and developing the capacities of citizens”.

A further question is whether quality assurance in general, and the emphasis on employability in particular, might promote equity and social inclusion by making procedures, practices and inequalities more transparent and calculable (Luke, 1997; Morley, 2000). Ideally, the employability imperative would help to ensure that students receive a tangible return on their investment.

Against the above background, this paper attempts to elucidate the issue of the adoption of Quality Assurance (QA) framework in enhancing graduate employability. The first section reviews the emergence of QA framework. This is followed by the discussion on the definition of employability and the nature of employability. This is then followed by the discussion on the QA and employability enhancement. The final part puts forwards QA

---

3 Professor and Dean, Faculty of Environmental Studies, Universiti Putra Malaysia
4 Professor and Deputy Vice Canselor (Academic and Internationalisation), Universiti Putra Malaysia
5 Former Graduate Student, Department of Agribusiness and Information System, Universiti Putra Malaysia
frameworks that are relevance to the Southeast Asian academic institutions in order to enhance the employability of graduates.

2. Emergence of Quality Assurance Framework

The term quality assurance in higher education is increasingly used to denote the practices whereby academic standards, i.e., the level of academic achievement attained by higher education graduates, are maintained and improved. This definition of academic quality as equivalent to academic standards is consistent with the emerging focus in higher education policies on student learning outcomes -- the specific levels of knowledge, skills, and abilities that students achieve as a consequence of their engagement in a particular education program (Brennan and Shah, 2000).

A useful distinction is drawn between internal and external academic quality assurance. Internal quality assurance refers to those policies and practices whereby academic institutions themselves monitor and improve the quality of their education provision, while external quality assurance refers to institutional policies and practices whereby the quality of higher education institutions and programs are assured. Individual HEIs have always possessed policies and practices designed to assure the quality of education, but academic institutions have also always operated within a national policy framework designed by the state to assure academic standards.

At the close of the twentieth century, the national policy frameworks for HEIs in both developed and developing countries underwent substantial reforms. Human capital has been recognised as a crucial factor in economic and social development. Consequently, many countries are shifting from elite to mass systems of higher education (Trow, 2005). This has motivated policymakers to seek new means for assuring academic quality in higher education (World Bank, 2002) due to the following reasons:

i. global demand for skilled human capital encouraged changes in the degree frameworks of many countries as policymakers sought international recognition of the credentials granted by their country’s higher education institutions. These new degree frameworks also encouraged a rapid proliferation of new academic programs in many countries, thereby testing established national practices for assuring academic standards;

ii. rapid growth of higher education systems has provided incentives for the development of private institutions, including cross-border franchise and virtual universities, which have posed novel challenges to national systems of external quality assurance, particularly those based upon central control of public institutions;

iii. competitive forces unleashed by globalization and massification have required HEIs to become more responsive to rapidly changing labour markets and to student program interests. Consequently institutions in many countries have sought increased flexibility and autonomy from traditional state quality assurance regulations so that they can react more swiftly to changing social demands by establishing new academic programs, reconfiguring existing programs, and eliminating outdated programs; and

iv. rapidly expanding social demand for higher education has been caused in large part by students' desire to achieve the increasing private benefits available to individuals with higher degrees. The empirical reality of the growing private benefits of academic degrees has altered the traditional debate about higher education finance, encouraging many countries to require students to pay a larger share of higher education costs.

The above reasons have altered the HEIs environment which reveals the inadequacy of both the traditional internal and external practices for assuring academic standards (Brennan and Shah, 2000). Therefore in their search for a national framework that will encourage innovation in academic programs while maintaining and improving academic
standards, policymakers are experimenting with many innovative forms of academic quality assurance.

The first government experiments with new quality assurance (QA) practices occurred in the US, an early exponent of mass higher education. Concerned with evidence of declining academic standards in public education, the majority of US states adopted, in the early 1980s, regulations requiring that public funded HEIs develop explicit plans for assessing student teaching (Dill et al, 1996). Subsequently new national QA policies were also introduced in France (1984), the United Kingdom (1985) and the Netherlands (1985) (Van Vught and Westerheijden, 1993). The French government was primarily interested in reducing its dysfunctional QA bureaucracy, the government in Great Britain sought to achieve a better linkage of higher education with the labour market, while the Netherlands adopted a new QA framework in association with an innovative approach to steering universities. The developments in these pioneering countries were then diffused to other countries in Europe, Asia, and eventually around the globe.

One of the most significant changes in national quality assurance frameworks at the end of the 20th century was the emergence of the evaluative state (Neave, 1988). Many national governments initiated and/or subsidized the creation of new agencies and practices designed to assess quality in existing higher education programs and institutions. The new assessment practices included academic audits, subject assessments, and new forms of academic accreditation.

The traditional national frameworks for external quality assurance varied from country to country, but had generally followed three modal forms: the European model of central control of quality assurance by state educational ministries, the US model of decentralized quality assurance combining limited state control with market competition, and the British model in which the state essentially ceded responsibility for quality assurance to self-accrediting universities (Dill, 1992). In the UK, the assurance of academic quality in the public funded HEIs is delegated to the academic profession itself, which monitored and assured the standard of university degrees through collective mechanisms such as the external examiner system. In the US, as higher education rapidly expanded following World War II, the federal Congress explicitly adopted a market–based approach to academic quality assurance as a supplement to the existing tradition of state licensing and voluntary institutional as well as program accreditation. During the 1972 re-authorization of the Higher Education Act members of Congress argued that providing federal financial assistance directly to students rather than to institutions was the most efficient and effective means to both equalize opportunities in higher education and harness market forces for enhancing academic quality.

**Quality Assurance Framework in Malaysia** - The concern of QA in Malaysia was initiated with establishment of Malaysia’s National Accreditation Board (LAN in its Malay acronym) in 1997 in the midst of the country’s dramatic policy shift towards massification of higher education. It was responsible for governing the standard and quality of private higher education. Quality in the public universities was the responsibility of the Quality Assurance Division (QAD) of the Ministry of Higher Education. In 2007, the Malaysian Qualification Agency (MQA) was established with the merging of LAN and the Quality Assurance Division, Ministry of Higher Education (QAD). This entity is responsible for quality assurance of higher education for both the public and the private sectors. MQA has developed a code of practice on criteria and standards for higher education in Malaysia. This code of practice is benchmarked against international good practices and nationally accepted by stakeholders through various consultations. The MQA is the guardian of the Malaysian Qualifications Framework (MQF). It is Malaysia’s declaration of its higher education qualifications and their quality. It classifies qualifications based on a set of nationally agreed and internationally benchmarked criteria that clarify academic levels, learning outcomes and learner academic load. It integrates all national qualifications and provides pathways that link them systematically. Thus the main role of the MQA is to implement the Malaysian Qualifications Framework (MQF) as a basis for quality assurance of higher education and as the reference point for the criteria and standards for national qualifications. The MQA is responsible for monitoring and overseeing the quality assurance practices and accreditation of national higher education.
In general, MQA quality assures programmes through two distinct processes:

i. **Provisional Accreditation** – this is initial process which will help higher education providers to achieve the accreditation by enhancing the standard and quality set in the provisional accreditation evaluation.

ii. **Accreditation** – this is a formal recognition that the certificates, diplomas and degrees awarded by higher education institutions are in accordance with the set standards.

Student achievements are measured by learning outcomes. These learning outcomes distinguish the varying competencies as to what a student will be able to do at the end of a period of study. Learning outcomes are based on eight domains, namely, knowledge; practical skill; social skills and responsibilities; values, attitudes and professionalism; communication, leadership and team skills; problem solving and scientific skill; information management and lifelong learning skill; and managerial and entrepreneurial skills.

### 3. Issues of Graduate Employability

Employability is a difficult concept to define succinctly and comprehensively. Hillage and Pollard (1998) defined employability as about having the capability to gain initial employment, maintain employment and obtain new employment if required. For the individual, employability depends upon assets in terms of knowledge, skills and attitudes; the way these assets are used and deployed; presentation of assets to potential employers; and the context within which the individual works, e.g. labour market and personal circumstances. Being in possession of employer-relevant knowledge, skills and attitudes is not enough for an individual to move within the labour market, and to realise their potential. People need to be capable of exploiting their assets, of marketing them and selling them.

Little (2001) defined employability as a multi-dimensional concept, and there is a need to distinguish between factors relevant to obtaining a job and factors relevant to the preparation for work. According Morley (2001), employability is not just about students making deposits in a bank of skills. Knight (2001) and Yorke (2001) consider the concept of employability to be a ‘synergic combination of personal qualities, skills of various kinds and subject understanding’ (Figure 1). It is a concept that is much more complex than the relatively restrictive key skills agenda, which has obscured a greater understanding of employability (Yorke, 2001; Knight & Yorke, 2001). Yorke (2001) also suggests that traditionally, little emphasis has been placed upon a student’s personal qualities, but that these could have considerable bearing on a particular student’s success. Based on above understanding, therefore, there are two main concepts of employability, namely: (i) the educational conception relating to the ability of graduates to tackle ‘graduate’ jobs; and (ii) the ability of the graduate to get a job – any job. The second concept is used normally sued by the government, but it is the first concept that most practitioners in HEIs are primarily concerned with. Good student learning and the curriculum, teaching and assessment that goes with it, describes ‘education for employability’ well (Knight & Yorke, 2000). This implies that curricula designed to enhance students’ employability are also desirable on purely educational grounds. It is possible to see both the traditional academic education and key skills as being subsets of ‘employability’. It is difficult to maintain that academic progress is not enhanced by high standard of literacy and numeracy, by a range of communication skills and the ability to work in groups or teams, and by learning how to learn effectively (Atkins, 1999).
From the employers’ point of view, employability is the propensity of the graduate to exhibit attributes that employers anticipate would be necessary for the future effective functioning of their organisation (Harvey, 1997). Increasingly, graduates need to be more flexible in response to the growing number of career changes experienced through life for many people (Harvey, 2000). Van der Heijden (2001) has called this new cohort of flexible experts ‘flexperts’.

From the above discussion, employment and employability is therefore not the same thing. Being employed means having a job, being employable means having the qualities needed to maintain employment and progress in the workplace. Employability from the perspective of HEIs is therefore about producing graduates who are capable and able, and these impacts upon all areas of university life, in terms of the delivery of academic programmes and extra curricula activities.

4. Nature of Employability

As mentioned, employability has many definitions but generally they can be categorised into two broad groups. The first relate to the ability of the student to get (and retain and develop in) a job after graduation. The other set are concerned with enhancing the students’ attributes (skills, knowledge, attitudes and abilities) and ultimately with empowering the student as a life-long learner (Hillage and Pollard, 1998; Harvey, 2001). One index of employability is whether students get jobs within a specific time after graduating, however this is flawed as it does not measure the attribute development of the student (but merely the graduation rates from a faculty or university). The simplistic model of employability (the magic bullet model) is that students are somehow given employability as a result of their having been a student, which leads them to being employed (Figure 2).

![Figure 1: A schematic model of employability](image-url)
A more realistic approach addresses a range of factors of which students are equipped to do a job. These factors include personal characteristics of the students, including, *inter alia*, age, gender, ethnicity and personality traits, all of which have been known to influence recruitment, and external economic factors, which may be sector- or region-specific (Harvey, 2000). There is thus a distinction between the employability potential of the individual (a matter of self-development) and the actual employment of the individual (a matter mediated by external factors).

The factors linking together the development of graduate attributes and the obtaining of an appropriate job are summarised in Figure 3. The graduate has to choose to engage with the employability development opportunities provided by the institution. The graduate will also have extracurricular activities, including work experience, to draw on, some as a result of the higher education experience and some external to it. The employability development includes the development of employability attributes; work experience; the development of self-promotional and career management skills; and a willingness to learn and reflect on learning.

Employability development opportunities, to some extent, are affected by the attributes of academic quality assurance. Some attributes tend to be more active in promoting employability, either because they more readily lend themselves to developing particular employability attributes or because of a need to ensure engagement with the world of work.
5. Quality Assurance and Employability

Three major policy initiatives have contributed to the development of QA framework over the last decade, which include widening participation and improving retention; enhancing employability; and lifelong learning. Using the QA framework to enhance the employability will enable us to review students' work practice, the standards of achievement of employments, efficiency and effectiveness with which local resources are managed and also to identify the strengths and weaknesses which lead us to propose key issues for change/actions. There is also a potential for the implementation of QA that empowers students as successful learners and an employability agenda that sees employability outcomes as rooted in an empowering learning process that runs throughout the higher educational experience. This intervention of the QA is shown in Figure 4. The impact of QA in employability can be considered in three dimensions:

i. institutions have developed a more sophisticated understanding of the complexity of the modern workplace, the needs of employers and of graduates in a variety of different work settings (large and small; private, public and voluntary; employment and self-employment) and an appreciation of the diversity of attributes that contribute to ‘employability’ (as well as enterprise and entrepreneurship);

ii. there has been a wider debate on the nature of employability, informed by long-term studies of graduate employment and career paths (Elias et al., 1999), that goes beyond the first destinations of graduates; and

iii. there is growing awareness of the diversity of activities of universities and a sharing of good practice in the sector.

Besides, the world of work is changing with more graduates entering small and medium enterprises (SMEs), going into freelance work (especially in art and design but increasingly in other areas) and self-employment/entrepreneurship. Furthermore, with the expansion of higher education, the long-time concerns of employers about academic QA attributes have become more pronounced. Employers are looking for something in addition to a degree and have become more explicit about the skills they seek and more sophisticated in identifying them in their recruitment procedures (at least at the end of the recruitment process).
Figure 4: Model of Employability adopted from “Magic bullet” with QA intervention

Many research studies have also revealed a consistent core set of desirable skills, often independent of the degree subject. These consist of interactive attributes; communication skills, interpersonal skills and team working and personal attributes, including, intellect and problem solving, analytic, critical and reflective ability, willingness to learn and continue learning, flexibility and adaptability, risk-taking and self-skills. In short, QA attributes help organisations deal with change. As analyses of employer needs and QA attributes have become more sophisticated, there has been a shift away from ‘skills’. There has been a shift in higher education from seeking to develop specific skills through quality assurance modules or extracurricular activity to a more holistic approach. Institutions are seeking to develop employability attributes as an explicit and embedded part of academic learning (Jagadeesh, 2000).

6. Academic Quality Assurance and Employability Enhancement

The role of academic QA in enhancing employability is shown in Figure 5. The QA ensures that the students obtained necessary learning outcomes that make them more employable.
Generic Skills

The growing emphasis on generic skills in higher education has several causes. Traditional jobs have disappeared and people entering the job market need to have different attributes. One is the increasing evidence of demand from business and employer organizations for graduates to possess generic skills. There are also various economic, technological and educational arguments that have brought generic skills to wider attention. The contemporary focus on generic skills is really part of a bigger, as yet unresolved, debate about the purpose of university education and how to develop well educated persons who are both employable and capable of contributing to civil society. Generic skills can play a significant role in quality assurance that is suitable for use in higher education. For example, having a consistent terminology for describing course outcomes can improve course development across an institution. It can also improve communication to those outside of the institution. Likewise, higher education institution could use well-grounded sets of generic skills to facilitate recognition and accreditation of prior learning, e.g. of non-graduates students into post-graduate programs. Such a procedure could generate greater public confidence in the assessment decisions that are made by educators.

Work experience

Increasingly, work experience is being seen as a major vehicle to enable students to make connections between their academic study and the world of work and to familiarise themselves with the skills necessary to be effective in the work setting. Work experience can take a variety of forms ranging from traditional placements through ‘live’ project work to part-time employment. Three main categories of work experience are (Little et al., 2001):

i. organised work experience as part of a programme of study;
ii. organised work experience external to a programme of study; and
iii. work experience external to a programme of study.

Employers tend to be favourably disposed to work experience and a recent study of final-year students (in progress) has shown very strong endorsement of the value of work experience (even short periods of work experience). There is a growing trend among employers to recruit from students who have undertaken work placement with companies. Leslie (1999) revealed that students who had undertaken a work experience placement had higher rates of full-time permanent employment after graduation. They also had a more favourable view of the quality assurance program and a belief that their employability skills had been more strongly developed in the undergraduate years.

Career Development Learning

In the study of Careers Developing Learning by Morey et al., (2003), opinions were divided about the appropriateness and utility of targeting particular groups of students, as well as conflicting thoughts on how, or in fact whether, it could be done in practice. The academic QA prepares students not only ‘for a successful transition to employment’ but also ‘for effective management of their career thereafter’. Career development learning offers an additional dimension to institutional strategies designed to foster the employability of students. It makes the value of such strategies transparent to students; it also strengthens the sustainability of their benefits.

Knowledge and Emotional Intelligence

QA framework is concerned with qualifications and the associated degrees, knowledge and skills students should have. It provides students with a broad understanding
of quality management and a wide range of practical skills that they can apply to management quality in their workplace.

An emotionally intelligent quality teaches the students to listen to the viewpoints of others and consider them dispassionately when making decisions. This aspect of QA will enable them to communicate the rationale behind the decision to personnel at all levels in the organization without precipitating unnecessary conflicts and without breeding antagonism. In addition, such an employee is able to achieve a good balance between work life and personal life, even in the face of increasing workload and pressures (Lubit, 2003).

Embedding Employability in the Curriculum

There is a growing tendency towards an integrated approach to employability development that includes embedding the development of student attributes within the subject curriculum. In some institutions, the integration of skills in the curriculum has been aided by the restructuring of programmes to identify outcomes or take account of quality assurance benchmarks. The introduction of computerised managed learning environments offers another opportunity to embed employability in the curriculum. A widely-used pedagogic device to develop employability skills is group working. However, this is frequently unsupported and students are often grouped together and told to work as a team. The full extent of the embedding of employability within curricula is difficult to assess as development activity is often informal and may include lecturers’ business and industry contacts, personal support and encouragement to students and provision of information.

7. The Way Forward

There has seen considerable proactive development of employability initiatives in HEIs augmented by collaborative activities with employers. Employability initiatives are varied and are, increasingly, being integrated into programmes of study rather than marginalized. Furthermore, some institutions are taking a strategic approach to employability development.

However, the very diversity and dynamic nature of provision means that development is not even. Some institutions are better at embedding employability in the curriculum than others. Some institutions prioritise the role of central services; others have excellent relations with employers and have made enormous progress in developing and acknowledging work experience opportunities. Some institutions have taken a strategic Quality Assurance (QA) approach to enhance graduate employability.

As regards to the Southeast Asian (SEA) region, which is characterised by a diversity of economic, social and political systems, cultural traditions and values, languages and aspirations, the structure and organisation of higher education across the region and national approaches to QA framework are also diverse. In this context it is important to acknowledge the considerable diversity in QA arrangements in the region and provide a basis for establishing agreed frameworks that harmonise local approaches.

It is important to emphasise that a generic approach should be formulated that has relevance for all higher education institutions, QA agencies and quality assessment practices in the region regardless of the level of development, size and national context. It is however recognised that the QA framework should be supplemented by context-specific approaches linked to particular national needs. The formulated generic approach should be able to provide guidance to both higher education institutions and QA agencies interested in enhancing policies and practices. They are intended to complement national quality assurance approaches and frameworks relating to recognition of qualifications (both domestic and international), institutions, courses and programmes and national registers of institutions, courses and QA agencies.

References


Student Teacher Aesthetic Role-sharing (STAR): A Local-wisdom Based Approach to Build Graduate’s Character

Ika Dewi Ana, Harsono, and Edia Rahayuningsih

Center for Innovation in Higher Education (CIHE)
Universitas Gadjah Mada, Yogyakarta 55281, Indonesia

ikadewiana@ugm.ac.id

Abstract

A Student-Centered Learning (SCL) began to be realized and implemented in Universitas Gadjah Mada (UGM) since 2004. One of the important aspects in SCL concerns the shifting role of the teacher, from the only main source of information, to a facilitator and a learning partner. UGM realizes that this role need to be improved, to bring SCL to be in harmony with the principles of Patrap Triloka, a local-wisdom based three main teacher behaviors: “at the front providing a model, in the middle creating an intention, and at the back giving constructive support.” The principles of SCL and Patrap Triloka have inspired UGM to build a program called Student Teacher Aesthetic Role-sharing (STAR).

Basically, STAR is an activity to lead student to a closer and harmonious academic relationship. By implementing STAR, it is expected that: 1) students will feel comfortable communicating with their teachers, and at the same time, teachers will guide their students more intensively; 2) a conducive academic atmosphere is created and produces more independent, creative and innovative students; and 3) teachers will be more concerned on the academic development of the students individually. The STAR could be seen as an effort to build a harmonized relationship between student-teacher of UGM towards a Master Dignity.

The effort to implement STAR in UGM is similar to building a culture, therefore it should be done gradually and patiently. The implementation consists of the following stages: 1) Establishment of a team to produce an academic paper regarding the main ideas of SCL-Plus (STAR); 2) Socialization of academic paper of STAR to the relevant parties; 3) Providing competitive grants for the implementation of STAR. The grant winners have to implement STAR in their learning process and evaluate it; 4) Dissemination to other teachers within UGM. This activity is designed to create a multiplier effect. Furthermore, dissemination of STAR to other universities in Indonesia will be carried out, to achieve one of UGM’s mission to increase the academic quality of higher education in Indonesia. By STAR, it is expected that high quality of graduates will be achieved both in UGM as well as in other universities in Indonesia.

Keywords: STAR – student-centered learning – patrap triloka – master dignity – multiplier effect

A. Introduction

Changes in the political and societal forces, such as diversity in student population, technological transformation, science comodification, as well as university entrepreneurship, influence higher education community to rethink its priorities. Students who come to higher education institutions reflect greater diversity of experience, ethnicity, expectations, and preparedness than ever before, and institutions need to be ready to face the challenges these students bring with them. Meanwhile, technology brings along with them the introduction of liberalization in higher education institutions. In view of this, developing learning communities has been an important aspect in higher education institutions. As defined by Gabelnick et al. (1990), constructing learning communities will allow students to have opportunity for deeper
understanding and integration of the material they are learning, more interaction with one another with their teachers as fellow participants in the learning process.

In the case of Indonesia, as a developing country, the wind of change shaped, transformed, and reformed higher education institutions. Data shows that higher education institutions are not immune from market forces, technological innovation, and emerging globalization of access and resources. To respond to the situation, one of the efforts to transform the priorities of higher education institutions in Indonesia is by introducing and implementing competence-based curriculum since 2000. Based on the competence-based curriculum, science vision and market signs are combined to improve the quality of higher education graduates to fulfill the integrated needs of the society.

In terms of the scope of the university, as mentioned in its strategic plan, Universitas Gadjah Mada (UGM) has played significant roles since the early period of Indonesia's Independence to maintain and enhance the nation's intellect, to develop sciences, and to solve the problems in the society, without leaving the basic principles of the culture of the nation. It has been half a century that the reputation and characteristics of superiority of either civitas academica's dedication or commitment, together with the alumni in contributing to society, state, nation and humanity, have always been widely acknowledged at the international level.

As time goes by, along with the more dynamic and complex changes of human civilization and being endorsed by the world of open communication, challenges faced by the university to maintain its position and roles, in the national and international community, demand pioneering in intellectual and innovative changes. To simultaneously answer these challenges, a visionary view is necessary and it ended up with the conclusion that it is very important for UGM to build a learning community by shifting its learning process based on the local wisdom and philosophy in learning. The local wisdom and philosophy in learning is believed to create sustainable improved capacity to respond to both contemporary and future challenges of higher education institutions. The local wisdom found in Javanese philosophy on learning process is also believed to be important in building the character of graduates, which in the next process, will guarantee the sustainability of the existence of learning community.

B. Chronological History of STAR in UGM

In 1992, the Faculty of Medicine at UGM began to implement problem-based learning (PBL) methods. For about 10 years, PBL at the Faculty of Medicine has been implemented partially in terms of using clinical symptoms and signs without applying block model. In 2002, the faculty started to apply the PBL block system before reforming its curriculum to be a competence-based, with block system, with a seven semesters learning process in 2007. The implementation of PBL at the faculty resulted in a multiplier effect. In 2003, Department of Electronics and Electrical Engineering, Faculty of Engineering started to implement PBL while the Faculty of Economics and Business has been applying case-based learning (CBL) method in its learning process. Both PBL and CBL methods are considered to use SCL approaches.

In between 2005 to 2007, the dissemination of SCL concepts in UGM was followed by SCL trainings, tutorial trainings, student assessment trainings, and curriculum development workshops. The series of trainings resulted in the implementation of PBL by block system at the Faculty of Veterinary Medicine (2006), partial PBL method at the Faculty of Law (2006). Some lecturers, individually and in teams, respectively started to implement SCL model based on the collaborative learning method.
Table 1. Number of UGM lecturers has been involved in series of trainings (2005-2007)

<table>
<thead>
<tr>
<th>Training</th>
<th>Number of UGM Lecturers Involved As Trainee</th>
<th>Number of UGM Lecturers Involved As Trainer</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCL</td>
<td>1163 (55%)</td>
<td>35</td>
</tr>
<tr>
<td>Student Assessment</td>
<td>117 (5.5%)</td>
<td>35</td>
</tr>
</tbody>
</table>

By implementing SCL, the role of lecturers has been shifted from the only main source of information to be a facilitator in the learning process. In the next step, UGM realizes that this role need to be improved, to bring SCL to be in harmony with the principles of Patrap Triloka, a local-wisdom based three main teacher behaviors: “at the front providing a model, in the middle creating an intention, and at the back giving constructive support.” The principles of SCL and Patrap Triloka has inspired UGM to build a program called the “Student Teacher Aesthetic Role-sharing” (STAR) in which the lecturer shifts the roles from a facilitator to be a learning partner.

Patrap Triloka was first introduced by the Indonesian Founding Father of Education, R.M. Suwardi Surjaningrat, in 1931. He was born on May 2nd, 1889, in Yogyakarta. R.M. Suwardi Surjaningrat or Ki Hajar Dewantara (his more popular name) was a great educator as well as a great politician. Along with Douwes Dekker and Cipto Mangunkusumo, he founded “Indische Partij”, the first party that explicitly stated the Indonesian Independence from the Dutch colonialism as its goal. His article was “Als Ik eens Nederlander Was” (If I Were a Dutchman), which satirically criticized the Dutch colonialism in Indonesia, costing him his freedom. He was exiled to the Netherlands in 1914. Ki Hajar Dewantara was deeply concerned with the education of the indigenous Indonesian people. As part of his political struggle for Indonesian independence, he founded Taman Siswa (Students’ Garden), a school that educated Indonesians by equipping them with nationalistic and humanistic views. His famous motto was “Ing Ngarso Sung Tuladha; Ing Madya Mangun Karsa; Tutwuri Andayani” (At the front providing a model, in the middle creating an intention, and at the back giving constructive support). His philosophy on education reflected by the motto is still relevant now. Even new approaches and theories on education are in line with the motto that suggests the main roles of a teacher: a model, a motivator, and a supporter.

The basic principle of STAR (SCL-Plus) is constructed by the local-wisdom based three main teacher behaviors introduced by Ki Hajar Dewantara. It is believed that by bringing along inherently the Patrap Triloka concept into the learning processes, aesthetical relations between students and teachers will be achieved, and resulting in a self-confident and perpetual learner as well as a problem solver. Building an aesthetical relation between students and teachers is a basis to build graduates’ character to finally develop learning community rather than only to produce smart and competent graduates.

Besides the adoption of the Patrap Triloka principles, STAR has been inspired by the spirit of 3+3N proposed by Ki Hajar Dewantara (1931). The 3+3N is Niteni (to observe intentionally in detail), Nirokake (to imitate constructively), and Nambahi (to add, modify, and develop). In terms of paradigm shifting, the first 3N has also been implemented by UGM: To observe intentionally on the shifting of teacher-centered learning (TCL) to SCL from the Faculty of Medicine and other higher education institutions in developed countries; to implement SCL by shifting TCL into SCL in its learning process, and to modify and actualize
the SCL concept in the cultural based dynamic process by the adoption process of *Patrap Triloka*. Moreover, based on data of SCL implementation in UGM, from socialization (2004) to evaluation (2008), UGM has also been inspired by the values of *Nulari/Nularake* (to disseminate), *Nutugake* (to continuously improve), and to finally *Ngrembakake* (to grow and multiply benefit) from science and technology resulted by learning process. In this context, students are enhanced to be a perpetual learner by constructivism approaches.

Moreover, the spirit of 3+3N local-wisdom based learning process is an actually universally accepted concept in learning. Table 2 shows how the spirit of 3+3N is in line with constructivism approaches in science teaching.

**Table 2. Comparison of Traditional, Constructive, and Local-wisdom based Learning Approaches**

<table>
<thead>
<tr>
<th>Traditional Learning (Duschl and Gitoma, 1991)</th>
<th>Constructive Learning (Duschl and Gitoma, 1991)</th>
<th>Local-wisdom based 3+3N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific knowledge</td>
<td>Knowledge about science</td>
<td><em>Niteni</em> (to observe in detail intentionally)</td>
</tr>
<tr>
<td>What we know</td>
<td>How and why we know</td>
<td><em>Nirokake</em> (to imitate constructively), which is only allowed by understanding complete “know how” aspects</td>
</tr>
<tr>
<td>Emphasizes fully developed final form explanations</td>
<td>Emphasizes growth, and development knowledge, explanation</td>
<td><em>Nambahi</em> (to add, modify, and develop)</td>
</tr>
<tr>
<td>Breadth of knowledge</td>
<td>Depth of knowledge</td>
<td><em>Nulari/Nularake</em> (to disseminate) and <em>Nutugake</em> (to continuously improve), which is only allowed by mastering depth of knowledge</td>
</tr>
<tr>
<td>Basic scientific knowledge</td>
<td>Conceptualized science</td>
<td><em>Ngrembakakake</em> (to grow and multiply benefit), which is only allowed by conceptualization of science knowledge</td>
</tr>
</tbody>
</table>

The concept of STAR, which is based on the SCL approaches, *Patrap Triloka*, and Javanese learning steps 3+3N, requires aesthetic relations between students and teachers. To guarantee the success of the learning process in STAR, teachers as motivators should be able to: develop effective class interaction; build scientific and social skills inside and outside the classroom; become role models for students, enhance cognitive, affective, and psychomotor skills of the students by motivating them; and build leadership characters of the students.
C. Model of Implementation and Best Practices

To implement STAR internally, UGM cultivated the idea by conducting a series of focus group discussions among lecturers to develop and actualize the proposed concepts. Along with that, the draft the concept paper of STAR was distributed to all faculties to be discussed and reviewed. The results of faculty reviews were then formulated into the academic document which was used as the basis to hold activities related to the dissemination of STAR at UGM. One of the activities conducted in 2008 was offering STAR Innovation Grants for lecturers, whereby lecturers were invited to plan learning programs based on STAR concept. Grantees have shared, documented, self-evaluated, and published the process of the implementation of STAR among lecturers with the Center for Innovation in Higher Education (CIHE) which acts as the facilitator. Like building a culture in terms of learning process, continuous discussions and disseminations done by grantees and CIHE resulted into multiplier effects on the motivation of lecturers to develop their course syllabi based on STAR concept.

It was known that specific course subjects required different circumstances to implement STAR. Figure-1 shows how the implementation of STAR requires different learning circumstances, based on the objective of the courses. In the figure, the triangle shows how T (Tuladha, or providing a model), K (Karsa, or creating intention), and A (Andayani, or giving constructive support) influences delivery methods dynamically, based on the objective of the course in terms of expected cognitive, affective, and psychomotor competences. Meanwhile, the course contents are constructed dynamically by I (ilmu pengetahuan, or science), N (nilai, or values), K (ketrampilan, or skills), and S (sikap dan etika, or attitude and ethics) in which science, values, skills, attitude and ethics are correlated with each other as an integral part of learning materials.

![Figure-1. Dynamic interaction between delivery method based on T-A-K and learning materials constructed by I-N-K-S applied in STAR.](image)

Based on the experiences related to the implementation of STAR at UGM, the following is considered as STAR-based practices. In the Faculty of Mathematics and Natural Sciences, the Chemical Analysis Instrumentation Course has been conducted inside the classroom. Before changing the learning approaches, students did not have the opportunity to internalize the knowledge and to describe well the importance of the use of instrumentations. By having STAR Innovation Grant, nowadays, students have been allowed to have more interactions with teachers, student assistants, and industries, to build their ability to conceptualize the need of the chemical analysis and how it will be applied in daily lives. Teachers have more interactions with students inside and outside the class and follow the process on how students transform knowledge into science and its application. In the Faculty of Agricultural Technology, the Quality Management Course has been conducted classically.
By having the STAR Innovation Grant, students are allowed and encouraged to have interactions with industries to conduct research related to quality management, and they are even allowed to construct innovation model on food quality management by having intensive discussion with industries and teachers. Teachers also follow the processes done by the students and evaluate the cognitive, affective, and psychomotor aspects of the students by having final presentations and discussions with industries and students.

In the context of specific programs, since 1971 UGM has been implementing Student Community Services or SCS which is done as an obligatory subject for undergraduate students. The program is made compulsory to undergraduate students with a three-credit semester unit. There are some paradigms and principles that must be carried out within the Student Community Services – Community Empowerment Learning (SCS-CEL) Program. These are: empowerment paradigm and principles of win-win solution, co-creation, co-financing, research-based activity, flexibility, and sustainability. All the students involved in the program are mostly final year undergraduate students who come from different disciplines and study programs. Every theme or topic of the SCS-CEL Programs may consist of 20 to 800 students who come from different backgrounds and disciplines. The groups will stay and work in the fields and villages all over Indonesia for about two months. Each group works in a certain village, under one supervisor. The following is a success story (among 100 themes done per year) wherein the STAR concept has been applied.

Gunungkidul is a district in Yogyakarta Special Region in a very dry area with no consistent clean water supply. During the dry seasons, the only water sources are the rain and muddy water ponds that are used for washing, cooking, and drinking, either for human or animal consumption. In 2004, a group of 30 UGM students, who were doing the SCS-CEL obligatory subjects, identified the water supply problem in Giricahyo sector, Gunungkidul. They were supposed to live within the local community for 60 days. They also found that there is a river located 107 meter under the ground, based on information from some engineering students as well as the local community. They formed a focus group made up of multidisciplinary students and the community. By having collaborations with the local community and local government, they decided to run a project to explore underground river. They extended the collaboration with the Center for Energy Studies of UGM, DGHE (Directorate General of Higher Education) of the Ministry of National Education, Ministry of General Work and Water Supply Company, BPP-Teknologi (Agency for the Assessment and Application of Technology), and States Bank Association.

The idea of providing a water supply for the community by exploiting the presence of an underground river has become a three-year continuous program done by 185 students and supervised by 5 UGM experts. Nowadays, the project has succeeded to provide water to each villager and to manage a water supply system so that water supply for the community will not be a problem anymore, especially during dry seasons. The program also considered succeeded to establish a community-based water supply system and management, because the local community is managing the water supply on their own. The program demonstrates how students successfully build a learning community among themselves and at the same time develop a knowledge-based community in the areas where they worked to collectively solve community problems.

The above best practices and success story have made UGM confident that STAR will allow UGM to successfully develop learning communities by building graduates with attributes to become a self-confident learner, perpetual learner, and problem solver, and not only resulting in clever and competent graduates. It is also a fact that there are certain constraints in developing the STAR ideas to become an internally driving force among lecturers. However, UGM has been continuously improving the internalization of STAR by conducting periodical reviews and evaluations through intensive communications. The local-wisdom based learning approaches proposed by UGM will provide significant contributions to the improvement of learning processes at the international level.

D. Conclusion

Universitas Gadjah Mada has played significant roles since the early period of Indonesia's Independence to struggle in maintaining and enhancing the nation's intellect, to
develop sciences, and to solve the problems in the society without leaving behind the basic cultural principles of the nation. It has been half a century that the reputations and characteristics of the superiority of either civitas academica’s dedication or commitment, together with the alumni in contributing to the society, state, nation and humanity, and have always been widely acknowledged at the international level. To continuously improve the role of the university in the fast changing society, UGM has been implementing STAR (a local-wisdom based SCL) as an approach to build graduates’ character that will allow students to become a self-confident learner, a perpetual learner, and a problem solver. It is believed that the implementation of STAR will also allow UGM to build a learning community.

Acknowledgement

This paper is a result of collective discussions and comprehensive data analysis provided by Center for Higher Education Innovation (CIHE), Universitas Gadjah Mada. Special thanks go to Dr. F. X. Nadar of the Faculty of Cultural Sciences and Gandes R. Rahayu, M.D., Ph.D. of the Faculty of Medicine who gave significant contribution during the conceptualization of STAR academic document.

References


A study of entrepreneurial traits and skills among university students.

H.A.K.N.S. Surangi,
Lecturer.
Dept of Commerce & Financial Mgt, Faculty of Commerce & Mgt Studies,
University of Kelaniya.
shereshasurangi@yahoo.com, 0722488850.

Abstract.
Entrepreneurship is identified by many economists as a vital force in the process of industrialization in general and economic development in particular. Accordingly, it suggests that economic development is not only a function of land, labour, capital and technology. There must be some elements to co-ordinate these factors in the right proportions, which can be identified as entrepreneurial traits, skills, desires and abilities (Prabhakara, 2000). Thus entrepreneur with these traits is the central figure of any activity. Accordingly, the entrepreneurs are those who initiate, organize, manage and control the affairs of businesses. In order to perform these tasks successfully they need specific skills, abilities and motives. Research studies on personal entrepreneurial characteristics have generated a long list of characteristics often attributed to entrepreneurs.

Thus, entrepreneurship has been now identified as a crucial activity to ensure economic growth and employment generation in almost all the countries. However, this area has been not still recognized sufficiently by the Sri Lankan authorities. In this context, it is important to examine how far entrepreneurship abilities have been recognized to be developed by the university education system. Accordingly, this study aims at assessing entrepreneurial traits, skills and the desires of undergraduate students in the university system based on the sample of one hundred fifty students of the Bachelor of Commerce Special Degree Programme in the University of Kelaniya.

Data were collected for this study administering questionnaire, holding general enterprising test, thematic appreciation test and self reports. To analyze the collected data simple statistical methods such as percentage, charts and graphs were used.

The study concludes that university students have lack of ability, traits and skills and interest to engage in entrepreneurial activities. Out of total sample 96% were interested in engaging in jobs under the existing organizations. Only the balance few expressed their desire to start new ventures. Therefore, it can be concluded that university study programmes, even Commerce Degree Programmes are not sufficiently geared towards improving entrepreneurial abilities among undergraduates.

Key words: Entrepreneurship, traits, skills, economic development, effectiveness.

1. Introduction.
Entrepreneurship is identified by many economists as a vital force in the process of industrialization in general and economic development in particular. Accordingly, it suggests that economic development is not only a function of land, labour, capital and technology. There must be some elements to co-ordinate these factors in the right proportions, which can be identified as entrepreneurial traits, skills, desires and abilities (Prabhakara, 2000). Thus entrepreneur with these traits is the central figure of any activity. Accordingly, the entrepreneurs are those who initiate, organize, manage and control the affairs of businesses. In order to perform these tasks successfully they need specific skills, abilities and motives.
Research studies on personal entrepreneurial characteristics have generated a long list of characteristics often attributed to entrepreneurs.

Developing entrepreneurial competency has been given a lot of attention in recent scientific literature and the development programmes of education, in connection with changes in entrepreneurial environment, which have been brought along by globalization and liberalization and movement towards a more entrepreneurial society. Economics theoreticians think that on this road the important role is played by the development of so-called entrepreneurial capital, which includes achieving public approval of entrepreneurial behaviour, existence of institutional support (including banks, venture capital) and individuals who wish to take the risk of establishing a new company [Audretsch,D B., The Entrepreneurial Society]. Concentrating on entrepreneurial competency has been justified with the necessity of developing human capital, where the skill to be entrepreneurial creates the opportunities and motivation to be a successful entrepreneur, employee or family, in order to better exploit the increasing prosperity and wealth in the interest of common as well as personal development and satisfaction in a globalizing society.

Fostering entrepreneurship among students has become an important topic in universities and governments' as well as in research. Behavior of students are confirmed by a number of studies which help to explain the emergence of entrepreneurial intention among target groups as well as suggest the stimulation of entrepreneurship education. In a recent (2004) empirical study of Estonian Institute of Economic Research residents were asked to evaluate which knowledge and characteristics are beneficial while starting and acting in entrepreneurship [Hannon, P. D. The Journey from Student to Entrepreneur. ]. The inquiry showed that the preparation of entrepreneurs for starting in entrepreneurship is quite modest. Potential entrepreneurs (i.e. who were thinking to start in entrepreneurship or were establishing a company at the time of the inquiry) did mostly not have any experience in establishing and managing a company or business education. Half of the questioned potential entrepreneurs did not have knowledge on accounting and marketing. By age, the 25-34 year-olds were more aware of writing a business plan, experience of establishing a company, finding finances and business education. Younger persons (16-24 year-olds) were sure on knowing who to turn to in order to find entrepreneurial help. The theoretical treatment of entrepreneurship is complicated because of its tight connection with different disciplines, e.g. psychology, sociology and anthropology. Theories of psychology (e.g. McLelland) pay attention to personal traits, motives and incentives and conclude that entrepreneurs have a strong achievement-need. In literature there are quantities of definitions of entrepreneurship and the personal traits necessary for entrepreneurs and the developments of the definitions have been analyzed as a result of entrepreneurial researches [Landstrom, H., Pioneers in Entrepreneurship and Small Business Research].

The objective of this research is to analyze the personal traits and entrepreneurial skills of students of university, at the example of Kelaniya University. The results could help to develop entrepreneurial education and raise the entrepreneurial competency of higher educational establishment graduates. On the assumption of the main objective, the study is based on theoretical premises developed by Robert D. Hisrich and Michael P. Peters and their tests (General Enterpriseing Tendency Test) for evaluating the personal traits of entrepreneurs and entrepreneurial skills. In addition to Thematic apprehension test, self report and structured questionnaire were used to evaluate students’ entrepreneurial traits and skills.

2. Research problem.

There is general agreement that attitudes, their traits and skills towards the entrepreneur, entrepreneurial activity, and its social function are determinant factors for university students to decide an entrepreneurial career. Considering the empirical studies, results reveal a negative entrepreneur’s image of younger generation. Many studies have an unfavorable perception of desirability of new venture creation and their entrepreneurial traits and skills although the perception of feasibility is by far not so positive and only a small percentage has the firm intention to create a new company. In this context it is very
important to study whether Sri Lankan university students are also facing similar situation or not.

3. Research objectives.

The prime objective of this research is to study the entrepreneurial traits and skills among university students.

Secondary objectives.

- To review entrepreneurship programmes in Sri Lankan Universities.
- To examine entrepreneurial education and environment in Sri Lanka.

4. Significance of the study.

It is well known that a career in entrepreneurship offers significant opportunities for individuals to achieve financial independence and benefit the economy by contributing to job creation, innovation, and economic growth. Today’s students are tomorrow’s potential entrepreneurs, which may explain why a growing number of US universities offer courses and programs in entrepreneurship. However, there is little understanding of the factors that affect students’ intentions of becoming entrepreneurs and the relationship between entrepreneurship education and students’ entrepreneurial attitudes and intentions (Souitaris et al 2007). Similarly, little is known about differences in entrepreneurial intentions and attitudes among students belonging to different cultures and ethnicities (Wilson et al 2004).

In recent years fostering entrepreneurship has become a topic of highest priority in public policy. This trend is due to the widespread recognition that business start-ups are a driving force of economic growth and significant job creation.

Entrepreneurship education has been intensified in universities during the past four decades. In the sixties, less than ten universities in the USA were teaching in this field, 1990 there were already 400 universities in America active in entrepreneurship education and estimates today exceed 700 universities (Vesper and McMullan 1988; Hills and Morris 1998; Fiet 2001). Many of these academic institutions have established majors on the graduate level or other kinds of concentrations. Entrepreneurship centers have been founded to coordinate the broad array of activities, programs and resources within universities. Very seldom, schools pushed back out of entrepreneurship once they had entered.

This growth in interest and funding is accompanied by an increasing demand for legitimization of entrepreneurship education at the university level. Consequently, the impact of education on the creation of future entrepreneurs and the link between university training and the success of the new ventures has been subject of much discussion in the academic community. A review of the entrepreneurship literature reveals contradictory findings (Gorman, Hanlon and King 1997). The results suggest differentiating between general business and specific entrepreneurship education when exploring the role of university programs.

The existing literature on entrepreneurship in Sri Lanka has not focused on entrepreneurial traits or skills with reference to university students. So it helps to bridge research gap in the area of entrepreneurship.

Thus, entrepreneurship has been now identified as a crucial activity to ensure economic growth and employment generation in almost all the countries. However, this area has been not still recognized sufficiently by the Sri Lankan authorities. In this context, it is important to examine how far entrepreneurship abilities have been recognized to be developed by the university education system.

Considerable attention has therefore been paid to formal entrepreneurship education at the university level. Public authorities and economic experts stress the importance of promoting aspirations for entrepreneurship among young and highly-educated people. If the business birth rate in any nation can be enhanced by supporting students and graduates in their entrepreneurial activities, it is worthwhile to examine the current status of
entrepreneurship education.

5. Literature Review.
5.1 Entrepreneur traits and skills.

Entrepreneurs have many of the character traits as leaders. Similarity to the early great man theories of leadership: however trait based theories of entrepreneurship are increasingly being called into question. Entrepreneurs are often contrasted with managers and administrators who are said to be more methodological and less prone to risk taking. Although such person –centric models of entrepreneurship have shown to be of questionable validity a vast but clearly dated literature studying the entrepreneurial personality found that certain traits seem personality found that certain traits seem to be associated with entrepreneurs.

David McClelland (1961) described the entrepreneur as primarily motivated by an overwhelming need for achievement and strong urge to build.

Collins and Moore (1970) studied 150 entrepreneurs and concluded that they are tough, pragmatic people driven by needs of independence and achievement. They seldom are willing to submit to authority.

Cooper, Woo and Dunkelberg (1988) argue that entrepreneurs exhibit extreme optimism in their decision making process. In a study of 2994 entrepreneurs they report that 81% indicate their personal odds of success as greater than 70% and a remarkable 33 % seeing odds of success of ten out of ten.

Busenitz and Barney (1997) claim entrepreneurs are prone to over confidence and over generalizations.

Cole (1959) found there are four types of entrepreneur: the innovator, the calculating, and the over optimistic promoter and the organization builder. These types are not related to personality but to the type of opportunity the entrepreneur faces.

However, there is common understanding that although entrepreneurs can be very different, they can be described by certain common features or personal traits. Already in the 18th century Cantillon defined an entrepreneur as someone who makes grounded decisions, takes on risk and manages a company. Entrepreneur has been defined as an innovator entrepreneurial person, organizer and risk-taker. The ability to see the imbalance of demand and supply and to direct the entrepreneurial activity towards changing that difference through business activity has also been seen as one of the traits of an entrepreneur [J. Timmons,1994].

Also in more recent literature an entrepreneur has been characterized as a person who has a great ability of imagination, flexibility, creativity and innovation; as a person who is ready for conceptual thinking and who sees change as a business opportunity [Wilsonet al 2004].] Some authors agree on entrepreneur having a high readiness to take risks, optimistic attitude towards success, also having sufficiently self-confidence to start implementing their idea and aspiration towards independence [Audretsch,D B., The Entrepreneurial Society]. The entrepreneurial mind (e.g. dedication, persistence) has been described by J. Timmons (1994). However, in case of the existence of potential to act as an entrepreneur, appropriate environment and conditions are needed to actualize the potential.
Table 1. Entrepreneurial skill Estimating variables

<table>
<thead>
<tr>
<th>variables</th>
<th>References</th>
<th>A few situations evoked in the questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>Craig (1990), Cronie (1987)</td>
<td>Working on one’s own or with a group, preferring to be framed when working on a project.</td>
</tr>
<tr>
<td>Need for fulfilment</td>
<td>McClelland 1961, Koh (1996)</td>
<td>Setting up personal challenges, working more than required to.</td>
</tr>
<tr>
<td>Dynamism</td>
<td>Craig (1990)</td>
<td>Extra curricular activities, with associations …</td>
</tr>
<tr>
<td>Initiative taking</td>
<td>Cronie (2000)</td>
<td>Initiatives within a class, a group, the family …</td>
</tr>
<tr>
<td>Responsibility</td>
<td>McClelland (1961)</td>
<td>Responsibilities within an association, class representative functions.</td>
</tr>
</tbody>
</table>

5.2 Exposure to Entrepreneurship Education

Specifically, the role of education in affecting attitudes, norms, perceptions of controllability, and behavior merits further investigation. Previous research indicates that entrepreneurship education can enhance an individual's level of self-efficacy (Bandura 1986; Hollenbeck and Hall 2004; Wilson et al 2007). Wilson et al's (2007) study concluded that this relationship is more pronounced in the case of female students. Noel (1998) found that entrepreneurship education is strongly related to entrepreneurial intention, with entrepreneurship majors expressing higher intentions to start their own businesses. Dyer (1994) and Wilson et al (2007) argued that entrepreneurship education can also increase students' interest in entrepreneurship as a career. Souitaris et al (2007) found that entrepreneurship programs significantly raised students' subjective norms and intentions toward entrepreneurship by inspiring them to choose entrepreneurial careers.

In Malaysia, the entrepreneurship programmes have been attracting school drop outs, small traders and women (Rao, Entrepreneurship and Economic Development).

In Australia, schools offer programs for managing the enterprises; whereas in Jamaica, Zambia, Switzerland, Uganda, New Guinea, Zimbabwe the entrepreneurship programmes are encouraged the respective governments.

In India, Entrepreneurship Development programmes are sponsored by the state governments.

In Sri Lanka Chamber of Commerce conducts entrepreneurship programmes regularly. The Ministry of Youth Affairs in Sri Lanka conducts short term programmes for creating awareness about self employment among school college dropouts and gives preliminary information on accounts, management, marketing etc.

The entrepreneurship education in Germany has been intensified in recent years. While only 21 chairs for entrepreneurship had been founded in 1998, this number raised to 42 chairs in 2001 (Klandt and Heil 2001). In addition, several universities designed entrepreneurship education and training programs without establishing dedicated chairs. In 1996, 106 courses in entrepreneurship were offered at 92 German universities (Kofner, Menges and Schmidt 1999). However, experts still see the entrepreneurial activities in outstanding US universities as a benchmark for the educational system in Germany. A recent evaluation of German universities indicates that, although the situation has clearly improved, the
teaching and training of students in entrepreneurship are far away from excellent. Only 6 out of the 78 investigated universities offer a good or very good program for entrepreneurial education (Schmude and Uebelacker 2001). Among others, Minsk can show that German universities play a secondary role for the qualification and motivation of future entrepreneurs. The parental background, for instance, is a much stronger impact factor on entrepreneurial propensity than the knowledge and skills that the graduates acquire during their studies (Minks 1998).

An autonomous institute was set up within the University of Phillipines for small scale industries, which is recognized as a focal point of expertise and resource for entrepreneurship programmes.

The Asian institute of Management has a clear objective that the students must become entrepreneurial managers rather than management executives. Students are encouraged to take up projects which they conceptualize, set up and successfully run and then report their experiences, instead of writing thesis.

Considering the Sri Lankan universities, University of Ruhuna and University of Uwa Wellassa offered several (twelve courses) course modules related to entrepreneurship. Most recently university of Kelaniya has introduced Entrepreneurship subject stream in their new curriculum revision. All other universities didn’t much care about this.

5.3 The impact of education on entrepreneurial propensity

Many of these academic institutions have established majors on the graduate level or other kinds of concentrations. Entrepreneurship centers have been founded to coordinate the broad array of activities, programs and resources within universities. Very seldom, schools pushed back out of entrepreneurship once they had entered.

This growth in interest and funding is accompanied by an increasing demand for legitimization of entrepreneurship education at the university level. Consequently, the impact of education on the creation of future entrepreneurs and the link between university training and the success of the new ventures has been subject of much discussion in the academic community. A review of the entrepreneurship literature reveals contradictory findings (Gorman, Hanlon and King 1997). The results suggest differentiating between general business and specific entrepreneurship education when exploring the role of university programs.

Most of the surveys show that entrepreneurship education encourages graduates to start their own business. In an early study, Clark surveyed a sample of students of a medium-sized American university who were enrolled in an introductory entrepreneurship course. He found that almost 80% of these students were considering setup their own business. These plans were often turned into reality. Three out of four students who reported concrete plans for founding a company in fact started a new venture. Furthermore, 76% of the respondents stated that the entrepreneurship course had a large or very large effect upon their founding decision (Clark, Davis and Hamish 1984). McMullan, Long and Wilson report a high rate of new venture creation among MBA students who attended more than three entrepreneurship-related courses at a Canadian university (McMullan, Long and Wilson 1985). A review of a graduate enterprise program in the UK suggests that the program provided an incentive to more than half of the participants to start their business sooner than intended. Thus, this initiative had an enabling and accelerating impact on the graduates' founding activities. (Brown 1990). Irish students who participated in a student enterprise award indicated that the initiative had a “very important” impact on their subsequent career choice (Fleming 1994). Finally, Vesper and McMullan can show that entrepreneurship courses help alumni to make better decisions in the startup process (Vesper and McMullan 1997).

6. Methodology.

This study aims at assessing entrepreneurial traits, skills and the desires of undergraduate students in the university system based on the sample of one hundred fifty students (Fourth year) of the Bachelor of Commerce Special Degree Programme in the University of Kelaniya.

Data were collected for this study administering questionnaire, holding general
enterprising tendency test, thematic appreciation test and self reports.

To evaluate students' personal traits, general enterprising tendency test was used (authors Hisrich and Peters), in which the questions were directed to making certain behavioral choices and where it was possible to give “agree” and “not agree” answers. To analyze the entrepreneur’s psychological portrait test I have worked out a system, based on which the prerequisites of becoming an entrepreneur can be evaluated. As a criterion of those prerequisites, questions characterizing the five important personal traits – Need for achievement, need for independent, readiness to take risks, creativity and drive and determination - have been put into the test.

Another tool Thematic Apperception Test also used to measure students entrepreneurial traits and skills. Before starting this test, facilitator instructs the participants as follows, "For twenty seconds, you will see a picture on the screen. Then you will be five minutes to interesting and dramatic story about what you have seen”. After fulfill the story, these stories can be categorized into three groups such as AI (Achievement Imaginary), TI (Task Imaginary) and UI (Unrelated Imagery).

If the writer involves an achievement goal, either in explicit terms or in an implied fashion, then a story has achievement imaginary. If some person has desire for success in competition with others, competition with self, unique accomplishment, long term involvement, that story can be categorized into AI story. If there is a story which is unrelated, either explicitly or implicitly to any competitive standard, but bears some reference to achievement, then it is classify as TI. The “T” Stand for common “task” in a routine problem. If a story fails to bear any reference, whatsoever, to any achievement criteria mentioned above, then it is generally classified as unrelated imagery.

If a story has AI, then it can be scored for achievement related sub categories as follows,

<table>
<thead>
<tr>
<th>Sub categories</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Need</td>
<td>+1</td>
</tr>
<tr>
<td>2. Activity</td>
<td>+1</td>
</tr>
<tr>
<td>3. Goal anticipation</td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>+1</td>
</tr>
<tr>
<td>Negative</td>
<td>+1</td>
</tr>
<tr>
<td>Obstacles or blocks</td>
<td></td>
</tr>
<tr>
<td>Personal blocks</td>
<td>+1</td>
</tr>
<tr>
<td>Worldly blocks</td>
<td>+1</td>
</tr>
<tr>
<td>Help +1</td>
<td></td>
</tr>
<tr>
<td>Feeling</td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>+1</td>
</tr>
<tr>
<td>Negative</td>
<td>+1</td>
</tr>
<tr>
<td>Achievement theme</td>
<td>+1</td>
</tr>
<tr>
<td>Stories with AI</td>
<td>+1</td>
</tr>
</tbody>
</table>

Maximum obtainable score in one story will be +11.

Thirdly, the students’ answers to the individual questions of the entrepreneur's psychological portrait were analyzed and their attitudes towards entrepreneurship were evaluated. The analysis of the answers to the individual questions helps to better understand the influence of those answers to the final results of the analysis.

To analyze the collected data simple statistical methods such as percentage, charts and graphs were used.
7. Research Results.

Out of total sample 96% were interested in engaging in jobs under the existing organizations. Only the balance (4%) few expressed their desire to start new ventures.

Most students want to occupy managerial positions in various fields and others students want to go into further studies, which can be interpreted in two ways: either as a way of delaying a choice of profession a bit longer or to acquire more knowledge in specific fields (often in management).

Some students still have no idea, which means they rely very much on opportunities in their job search. But what is more striking for our subject is the case of potential entrepreneurs.

Thematic Apperception Test results.

Table 2.

<table>
<thead>
<tr>
<th>Type of story</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI</td>
<td>28.2</td>
</tr>
<tr>
<td>TI</td>
<td>48.6</td>
</tr>
<tr>
<td>UI</td>
<td>24.2</td>
</tr>
</tbody>
</table>

After analyzing the personal traits of the students based to the Thematic Apperception Test according to the answers they didn’t have good prerequisites necessary for an entrepreneur, it appeared that 71.8 % of the respondents have no good prerequisites of becoming an entrepreneur and only 28.2 % have those prerequisites.

Considering that, a conclusion can be made that most questioned students didn’t have prerequisites of becoming an entrepreneur.

Table 3.

General Enterprising Tendency Test results.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Marks</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>Need for achievement</td>
<td>458</td>
<td>483</td>
</tr>
<tr>
<td>Need for independence</td>
<td>158</td>
<td>240</td>
</tr>
<tr>
<td>Creativity</td>
<td>404</td>
<td>439</td>
</tr>
<tr>
<td>Risk taking</td>
<td>456</td>
<td>364</td>
</tr>
<tr>
<td>Drive &amp; determination</td>
<td>418</td>
<td>411</td>
</tr>
<tr>
<td>Total</td>
<td>1,894</td>
<td>1,937</td>
</tr>
</tbody>
</table>
Table 4.
According to the GETT students marks should be as follows,

<table>
<thead>
<tr>
<th>Variables</th>
<th>Maximum score</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for achievement</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Need for independence</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Creativity</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Risk taking</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Drive &amp; determination</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Mean value</td>
<td></td>
<td>&gt;37</td>
</tr>
</tbody>
</table>

Considering the students results any variables were not come up to at least average level. So we can't satisfy with students above entrepreneurial skills. Considering that, a conclusion can be made that most students didn't have entrepreneurial skills.

The analysis of the impact of answers to self-evaluation questions of entrepreneurial competency shows also that respondents with partial skills have yet the most impact. In order to organize the study programmes better it is important to find a possibility to determine the target groups more specifically by analyzing the relationships between the answers to the questions of the questionnaire.

Table 5. Entrepreneurial skills, share of respondents, %

<table>
<thead>
<tr>
<th>No</th>
<th>Main skills</th>
<th>Do you have them?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>1.</td>
<td>Skill to manage a small enterprise</td>
<td>15.5</td>
</tr>
<tr>
<td>2.</td>
<td>Skill to develop new business ideas</td>
<td>18.4</td>
</tr>
<tr>
<td>3.</td>
<td>Skill to make deals</td>
<td>24.9</td>
</tr>
<tr>
<td>4.</td>
<td>Clear understanding of entrepreneurship</td>
<td>13.9</td>
</tr>
<tr>
<td>5.</td>
<td>Skill to behave and pass decisions under the conditions of uncertainty</td>
<td>29.4</td>
</tr>
<tr>
<td>6.</td>
<td>Skill to find unconventional solutions</td>
<td>38.4</td>
</tr>
<tr>
<td>7.</td>
<td>Skill to make contacts, negotiate</td>
<td>39.6</td>
</tr>
</tbody>
</table>
The analysis of the relationships between the answers to the questions enables to make some rather logical conclusions. For example students, who said that they are unable to manage a small enterprise have also answered that they cannot make contacts (47% of sample), find innovative solutions (49 %), have no clear understanding of entrepreneurship (64 %) and cannot make deals (26 %). So more than two-third of the students are in need of entrepreneurship training and of acquiring practical skills in the aforementioned areas that are necessary for obtaining knowledge about managing an enterprise. In the same group of respondents there is also a big part of those who do not have a clear understanding of entrepreneurship together with the lack of some other skills in the area of implementing business ideas. On the other hand, those who wrote that they are able to evaluate deals from the standpoint of ethics and morale, have several other skills as well (answers “yes” or “partly”) in the area of managing an enterprise, in evaluating the results of their actions and in finding solutions. In terms of relationships of answers of the last group of respondents, there were no answers saying that they cannot do something. It can be therefore assumed that they have basic entrepreneurial skills at a certain level and are in need of specialized education the content of which needs to be further specified before starting with the course.

8. Conclusion.

Currently the idea that entrepreneurial skills can be studied is supported more and more. In this context it would be interesting to know, which is the potential of Sri Lankan university students in connection with entrepreneurship and what aspects entrepreneurship policy and educational programmes should consider in order developing entrepreneurship competency.

The analysis of the test of Thematic Apperception of an entrepreneur showed that most of the students who participated in the study don’t have prerequisites for becoming an entrepreneur. Moreover, according to GETT results student have a lack of skills related to entrepreneurship.

The study concludes that university students have lack of ability, traits and skills and interest to engage in entrepreneurial activities. Out of total sample 96% were interested in engaging in jobs under the existing organizations. Only the balance few expressed their desire to start new ventures. Therefore, it can be concluded that university study programmes, even Commerce Degree Programmes are not sufficiently geared towards improving entrepreneurial abilities among undergraduates.

Due to the need of developing personal traits and skills necessary for an entrepreneur it is the task of educational institutions and also of institutions implementing entrepreneurship policy to direct study programmes towards developing the skills of students according to the needs of specific target groups.

We point out the importance of group dynamics during the curriculum. This is an issue we will explore in the future. Setting up these project activities is probably a major factor for developing Entrepreneurial Spirit.

Networks and links to industry

Successful universities outline the necessity to establish strong links between the university and the entrepreneurship community (Leclerc 1985). The many student moves from entrepreneurial awareness and opportunity identification to concrete activities within the stage of pre-creation the more critical these networks are.

Knowledge about innovative opportunities

Entrepreneurship is characterized by new combinations causing discontinuity. It is therefore fundamental to the subsequent formation of growth companies that the students have access to the forefront of technological development.

Theory-based knowledge

In order to generate theory-based knowledge, it is essential to ground entrepreneurship education on theoretical frameworks and empirical research findings. Students have to be encouraged to apply their theoretical and conceptual knowledge when interpreting text cases, when developing business plans and when implementing new venture projects. Good teaching will help students to use theories as a tool to answer practical questions (Fiet 2001).

Experiential learning and real-world experiences.

Involvement in "hands-on" projects of opportunity identification and new venture creation would be a central part of education programs. In this respect, business plans are a useful approach. They teach the application of theoretical concepts and academic knowledge to business reality (Kelmar 1992).

10. References.


Hadimani, R.N., Dynamics of industrial entrepreneurship, 1985, Sunil printers, New Delhi.


Shapero, A. The Displaced Uncomfortable Entrepreneur, 1975, Psychology Today.


Graduates' Employability Skills: Evidence from Literature Review

Susima Samudrika Weligamage
Lecturer, Department of Accountancy, University of Kelaniya, Sri Lanka.
susima@kln.ac.lk

Abstract
Enhancing Graduate Employability skills is considered as an important task within the Sri Lankan university community. This study was conducted with the objectives of identifying the employer skills needs in different countries, various definitions related to employability skills, previous research done in different countries related to the employability skills requirement and their recommendation. The study is based on a literature survey of educational reports, empirical and theoretical research papers. Studies done in Sri Lanka and in other countries as well as those comparing the inter-country situation are also summarized in this paper. Review findings revealed that skills definitions, employer expectation and requirement differ according to different countries. Employers’ needs and also the learners’ skill enhancement capabilities should be taken into account in formulating future skills assessments. This study concludes that universities should identify skill sets that will best serve the future labor market and align programmes to meet those needs.

Keywords: Employability, Indicators, Learner Aspirations, Competitive Advantages

Introduction
Enhancing Graduate Employability skills is considered as an important task within the Sri Lankan university community. The labor market needs and the employers’ requirements for skills from graduates vary by employer and also from one country to another country. The current changing business environment emphasizes the importance of education for employability, focusing on the development of not only skills but also practical experience. Then, in order to enhance competitive advantage for graduate employment, students need to develop employability skills in addition to the acquisition of subject-specific knowledge. Higher Education Institutes (HEIs) need to identify ways of incorporate this requirement.

This paper will review the existing research findings, studies and practices of employability skills and present the review on eight aspects: Definitions of employability, employability skills and employer needs, expectations of employers and university students, matching employer needs, the nature of employability, and, international perspective on employability and employability as key performance Indicator.

Definitions of Employability
Yorke and Knight (2003) define employability as a “A set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy”.

University of Exeter defined employability as;” The establishment of clear mechanisms by which students can develop their abilities to use and deploy a wide range of skills and opportunities to enhance their own academic learning and enable them to become more employable”.(Lee,2000). Employment and employability is not the same thing and should be differentiated. (Lee, 2002). “Being employed means having a job, being employable means having the qualities needed to maintain employment and progress in the workplace. Employability from the perspective of HEIs is therefore about producing graduates who are
capable and able, and this impact upon all areas of university life, in terms of the delivery of academic programmes and extra curricula activities. Fundamentally then, employability is about learning – learning how to learn – and employability is not a product, but a process” (LTSN - cited Lee, 2002).

Harvey (2001) mentioned in his report titled Employability and Diversity: “Employability has many definitions but they break down into two broad groups. The first relate to the ability of the student to get (and retain and develop in) a job after graduation. The other set are concerned with enhancing the students’ attributes (skills, knowledge, attitudes and abilities) and ultimately with empowering the student as a critical life-long learner (Hillage and Pollard, 1998; Harvey, 2001)”.

Employability Skills

Enhancing employability skills of the graduates’ is not a new topic and policy makers are still making plans to increase graduates’ skills to meet the need of the current workforce. Higher education Institutions are one of key player in enhancing employability and their responsibility to identify how they can enhance skills of their “future employees”’. Generic skills are the key term used as employability skills in most of the countries, but what is meant by this term varies in different countries (Table 01).

Table 01: Terms used in various countries to describe generic skills

<table>
<thead>
<tr>
<th>Country</th>
<th>Terms used</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>Core skills, key skills, common skills</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Essential skills</td>
</tr>
<tr>
<td>Australia</td>
<td>Key competencies, employability skills, generic skills</td>
</tr>
<tr>
<td>Canada</td>
<td>Employability skills</td>
</tr>
<tr>
<td>United States</td>
<td>Basic skills, necessary skills, workplace know-how</td>
</tr>
<tr>
<td>Singapore</td>
<td>Critical enabling skills</td>
</tr>
<tr>
<td>France</td>
<td>Transferable skills</td>
</tr>
<tr>
<td>Germany</td>
<td>Key qualifications</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Trans-disciplinary goals</td>
</tr>
<tr>
<td>Denmark</td>
<td>Process independent qualifications</td>
</tr>
</tbody>
</table>

Source: National Centre for Vocational Education Research (2003), defining generic skills report

University of Sydney believes that graduates should be more employable, more able to cope with change and more developed as people. In specific terms, graduates of any faculty, board of study or college of the university should have knowledge skills, thinking skills, personal skills, personal attributes and practical skills. They have mentioned a specific list of requirements needed to fulfill above skills as stated in Table 02.
Table 02: Description of Skills required by the University of Sydney

<table>
<thead>
<tr>
<th>1. Knowledge skills:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Have a body of knowledge in the field(s) studied;</td>
</tr>
<tr>
<td>(b) Be able to apply theory to practice in familiar and unfamiliar situations;</td>
</tr>
<tr>
<td>(c) Be able to identify, access, organize and communicate knowledge in both written and oral English;</td>
</tr>
<tr>
<td>(d) Have an appreciation of the requirements and characteristics of scholarship and research;</td>
</tr>
<tr>
<td>(e) Have the ability to use appropriate technologies in furthering all of the above</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Thinking skills:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Be able to exercise critical judgment;</td>
</tr>
<tr>
<td>(b) Be capable of rigorous and independent thinking;</td>
</tr>
<tr>
<td>(c) Be able to account for their decisions;</td>
</tr>
<tr>
<td>(d) Be realistic self evaluators;</td>
</tr>
<tr>
<td>(e) Adopt a problem solving approach;</td>
</tr>
<tr>
<td>(f) Be creative and imaginative thinkers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Personal skills:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) The capacity for and a commitment to life-long learning;</td>
</tr>
<tr>
<td>(b) The ability to plan and achieve goals in both personal and the professional spheres;</td>
</tr>
<tr>
<td>(c) The ability to work with others.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Personal attributes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Strive for tolerance and integrity;</td>
</tr>
<tr>
<td>(b) Acknowledge their personal responsibility for: their own value judgments;</td>
</tr>
<tr>
<td>(c) Their ethical behavior towards others.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Practical skills:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Be able to use information technology for professional and personal development.</td>
</tr>
</tbody>
</table>

Other than higher education institutions, student and employers can also be considered as important parties to get involved in this process. Students and Employers can be taken as real customers in higher education. Expectation of both customers should be considered by the HEIs as service providers in this industry. Jerzy (2000) discussed student and employer expectations from higher education. The author pointed out that young people would like to position themselves in the society and most of them think of their university studies as a good way to offer them good job opportunities. Sometimes they look for “modern” fields of studies without analyzing job (employment) market prospect. On the other hand, universities are responsible in finding out answers for some key questions regarding the mission and the future strategy as well as the present status of their alumni. Following Questions are considered as important by the author.

1. What is the university mission?
2. Do they have the strategy for next 10, 20, 50 years?
3. What is the position of the university graduates?
4. Does the university possess the promotional strategies of their own graduates?
5. In which way the university graduates are perceived in the employment market?
6. Are graduates attractive employees for the potential employers?
7. What kind of activities do both students and employers expect?

Employer Needs

An employer’s perspective defines employability skills as “skills required not only to gain employment, but also to progress within an enterprise so as to achieve one’s potential and contribute successfully to enterprise strategic directions”. (Australian Chamber of Commerce and Industry & Business Council of Australia, 2002)

Enhancing graduate employability skills is considered as an important task within the university community in any country. In order to identify employer requirement most of the universities in the world regularly conduct employers’ needs surveys. Employers normally give their comments on the skills they are looking for in new employees. Table 03 presents some of the most common skills and their definitions expected from their new employees according to Employers’ Needs Survey conducted by University of Guelph, Canada.
Table 03: Employers’ expectations from employees

1. Time Management: The ability to manage several tasks at once, to set priorities and allocate time effectively in order to meet multiple deadlines

2. Self-Understanding: The ability to know about strengths and personal characteristics

3. Learning Skills: The ability to learn effectively from a wide range of sources including competencies such as learning what matters, organizing information and critical thinking

4. Teamwork Skills: The ability to work effectively as a member of a team and to understand the dynamics that make teams successful

5. Leadership Skills: The ability to lead, influence and motivate others

6. Problem Solving: The ability to identify, prioritize and solve problems. The ability to ask the right questions, sort out the many facets of the problem and determine possible solutions

7. Working with Diversity: The ability to respect and tolerate different points of view, values and philosophies of life and deal constructively with people who differ from yourself

8. Career Planning: The ability to manage your career in a constantly changing world of work

9. Understanding Workplace: The ability to grasp the underlying values of the workplace, its dynamics and expectations

10. Risk Assessment Management: The ability to assess alternative courses of action in terms of their consequences and associated risks and to identify alternative ways to reduce inherent risk.

Source: Generic Attributes of Graduates of the University of Sydney (1997)

Universities should conduct employers’ skills requirement surveys to identify real needs, in order to strengthening their graduates’ skills. In most of the countries government organizations give attention on identifying this skills requirement. The Australian Chamber of Commerce and Industry and the Business Council of Australia (2002) had taken pioneer attempt to discover what employers really looking from their workers. According to the Employability Skills Framework presented by the organization, employers have mainly given attention on personal attributes which will mainly contribute to overall employability. Personal attributes maintained in this framework are loyalty, commitment, honesty and integrity, enthusiasm, reliability, personal presentation, common sense, positive self esteem, a sense of humour, a balanced attitude to work and home life, an ability to deal with pressure, and, motivation and adaptability. Main skills requirement mentioned in this framework are communication, teamwork, problem solving, planning and organizing, technology, learning, self management, initiative and enterprise skills. Many of the businesses had suggested that educators should review and redevelop their curriculum and change delivery methodology to support the development of these skills and attributes.

Employability and Expectations of University Students

Vidanapathirana (2000) studied employability and job expectations of university students using a sample of 68 undergraduates to ascertain the extent employability and expectations affect job opportunities of educated youth. The findings confirmed the view that there is a mismatch. The author claims “the more person has been educated, the greater the likelihood that her or she may be unemployed” This situation arises out of high rate of entry to the labor-force on one hand and the relatively sluggish expansion of the economy..

Public services is experiencing resource constrains to generate employment due to lack of funding and lack of organizational planning. Today, private sector is becoming the dominant player in the economy and expected to generate more employment opportunities. But, most of the students expected to select future employment in a government sector.
Weligamage, 2005) after their graduation and employment expectations of students varies by study programme.

Burden & Mc-Avinia (1998) reports of projects at the University of Surrey Known as the skills project with the main objective to identify and articulate the skills/attributes sought by employers and professional bodies, and to raise the skills of students to a threshold level which is acceptable to the employers of new graduates. The project aims to raise the key skills of new students to an acceptable generic threshold in the first semester of university education and thereafter to enhance the skills of students in a discipline specific environment to meet the requirements of employers and professional bodies. Then it was necessary to gather data from employers and professional bodies as to exactly what they expect of their graduate recruits.

Matching Employer Needs

Current business environment is dynamic. Graduates from universities should compete with professional qualification holders in a job market where employers prefer to recruit professional qualification holders which can be taken evidence from job advertisement. Therefore there is a need to match the skills of university graduates with the needs of the industry if they are to be successful in the job market. Hence, there is an urgent need of identifying the employers’ perspective on the skills and attributes of potentially employable graduates and their opinion regarding comparability of graduates with professional qualification holders.

Employers reported work related experience as an important consideration in recruitment. Non-technical skills sought include, presenting technical findings to a diverse audience and teamwork, while personality, self-confidence and attitudes towards work are considered as preferred attributes (Weligamage, 2006). Employers consider graduates’ problem solving and creative thinking skills are not always adequate to perform the tasks required on the job. According to the perceptions held by employers’, graduates are more academically oriented while lacking awareness on latest developments and applicability skills when compared with the professional qualification holders. However, employers mentioned of the preference to employ persons with both degree and professional qualifications clearly indicating better career prospects for university students if supplemented with professional qualifications. It is recommended that undergraduate curricular in management should include more opportunities to integrate class-room instructions with actual working environment. While this will reduce the gap between theory and experience, potential employers should be made aware of the nature of opportunities available to the students as a part of their curriculum to enhance team work and presentation skills and other personal development activities.

Frye (2000) and his colleagues investigated the methods through which employers and learners’ needs can be taken into account in formulating future skills assessments. This model helps existing systems to promote a framework for all learners to gain the skills they need important and to maintain purposeful employment. The group used a supply and demand model comprising three main components as employers demand for skills, providers’ supply of education and training opportunities and learners demand for skills. This model identified following matches and mistakes; 1. Employer demand-provider supply: the mismatch between employers demand for particular skills and the flow of skilled people arising from provider supply, 2. Learner aspirations-employer demand: The mismatches between what learners aim to achieve through education and training and the skills need of employer and 3. Provider supply-Learner aspirations: the mismatch between courses offered by providers and the expectations and needs of learners.

The Nature of Employability

Vidanapathirana (2001) building on his past research further suggested that “people are unemployed because of unemployment mismatch”. Author identified four main parties in his model who are involving in this process as employers, candidates (graduates), state (government) and Institutions (university) Author presented this four parties situation as
graduates do not have the required competencies, knowledge, skills and experience. Employers are the second party in this model and on there view, graduates failed to fill requirement and core potencies. The third party is the educational institute and this system is criticized for not accommodating the volume and variety of students demand, high unit cost arising from unproductive overheads, inflexible curricula and teaching methods, and, lack of research output. The fourth party is the government that also should involve finding solution to the problem. The author found that the employability concept currently considers factors such as achievements, competencies, attitudes and social-economic backgrounds, which most of the private sector use in making selection decisions. An achievement includes results, graduate rank, winning university colors, and the age of candidate. Competencies include communication, decision making, leadership and team work. Attitudes cover values, orientations and out look of candidates. Socio economic statues deal with affiliations, family status

There are several alternative models created by researchers for understanding the parties and their role in implementing employability skills into higher educational institutes. All stakeholders: the government, the university system administrators, employers and graduates themselves must be involved into this process to find out skills requirement, the way of improving these skills and solutions to skill gap. Harvey (2002) presented the simplistic model of employability called “the magic bullet model”. According to his model shown in Figure 01, magic bullet “ is that students are somehow given employability as a result of their having been a student, which leads them to being employed”.

![Figure 01: Magic Bullet Model of Employability](image)

*Source: Harvey (2002), employability and diversity*

Harvey (2002) presented another model after considering all the parties involving in this process and all important employability factors. Author pointed out the important of linking all factors together with all parties involving this process to develop graduate attributes. Three main parties involved in this process are graduates (students), HEIs and employers. Graduates having responsibility to choose and engage with the employability development opportunities provided by HEIs and they also can use their extracurricular experiences to enhance these skills. Author identified employability development activities as the development of employability attributes, work experience, the development of self-promotional and career management skills and a willingness to learn and reflect on learning. This model is presented as Figure 02. The model presented three core processes having an impact on employability as, a) pedagogic process that encourages development, b) self-reflection by the student and c) the articulation of experiences and abilities. Author also pointed out that employability development opportunities, to some extent, are affected by the...
subject discipline of the graduate and some programme areas tend to be more active in promoting employability.

**International Perspective on Employability**

Little (2003), with advice from (?) ESECT and (?) LTSN Generic Center colleagues, presented employability in an international perspective. The purpose aimed to learn lessons in the context of current ‘employability’ developments in the UK. It is based on information and data from a number of different countries.

The concept of employability can also be understood in terms of previous discussions that have become separated from contemporary thinking. For example, Barnett (1994, 2003) implied the employability and the promotion of ‘key’ or ‘core’ skills are similar a set of achievements, understanding and personal attributes that make individuals more likely to gain employment and be successful in their chosen occupations.

Commenting on current issues of graduate employment and work in France, Paul and Murdoch (2000) noted that recent studies have tended to concentrate on the latter focus. In the Netherlands, these same shifts in emphasis have become apparent in research findings in the last decade (Allen, Boezerooy, de Weert, van der Velden, 2000). It is revealed in the Euro-Japan Study that in mainland Europe the close linkages between field of study and subsequent specific occupation existed traditionally. However, there are now some signs that the emphasis may be shifting towards the role of more general knowledge, attitudes and

---

**Figure 02: A model of graduate employability development**

*Source: Harvey (2002), employability and diversity*
social skills. Table 04 lists the ten most highly rated possessed competencies by the UK, European and Japanese graduates at the time of graduation.

Table 04: Top Ten Competences as Listed by UK, European and Japanese Graduates

<table>
<thead>
<tr>
<th>Order</th>
<th>UK</th>
<th>Europe</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Learning abilities</td>
<td>Learning abilities</td>
<td>Loyalty, integrity</td>
</tr>
<tr>
<td>2</td>
<td>Working independently</td>
<td>Power of concentration</td>
<td>Power of concentration</td>
</tr>
<tr>
<td>3</td>
<td>Written communication</td>
<td>Working independently</td>
<td>Adaptability</td>
</tr>
<tr>
<td></td>
<td>skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Working in a team</td>
<td>Written communication</td>
<td>Getting personally</td>
</tr>
<tr>
<td></td>
<td></td>
<td>skills</td>
<td>involved</td>
</tr>
<tr>
<td>5</td>
<td>Working under pressure</td>
<td>Loyalty, integrity</td>
<td>Learning abilities</td>
</tr>
<tr>
<td>6</td>
<td>Accuracy, attention to</td>
<td>Field-specific</td>
<td>Field-specific theoretical</td>
</tr>
<tr>
<td></td>
<td>detail</td>
<td>theoretical knowledge</td>
<td>knowledge</td>
</tr>
<tr>
<td>7</td>
<td>Power of concentration</td>
<td>Getting personally</td>
<td>Fitness for work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>involved</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Oral communication</td>
<td>Critical thinking</td>
<td>Initiative</td>
</tr>
<tr>
<td></td>
<td>skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Problem-solving ability</td>
<td>Adaptability</td>
<td>Tolerance</td>
</tr>
<tr>
<td>10</td>
<td>Initiative, Adaptability</td>
<td>Tolerance</td>
<td>Working in a team</td>
</tr>
<tr>
<td></td>
<td>Tolerance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


A study by Blasko (2002) looked at the pattern of possession of five key skills among graduates from seven countries. Skills considered in the study are, oral and written communication skills, computer skills, ability to work in a team, problem solving, learning abilities/reflective thinking, and assessing one’s own work. The average ratings by each country for these skills are shown in Table 05 (These ratings are graduates’ own average ratings, where ‘5’ indicates ‘to a great extent’ and ‘1’ indicates ‘not at all’) Computing skills are generally perceived as the least important skill to be acquired in the UK and in six other European countries. Communication skills and improving own performances were considered as the most important by respondents in all the countries.

Table 05: Average Ratings for Key Skills Considered as Important by Graduates by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Average Rating based on a scale (1-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Communication</td>
</tr>
<tr>
<td>UK</td>
<td>4.0</td>
</tr>
<tr>
<td>Austria</td>
<td>3.9</td>
</tr>
<tr>
<td>France</td>
<td>3.5</td>
</tr>
<tr>
<td>Germany</td>
<td>3.7</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3.7</td>
</tr>
<tr>
<td>Norway</td>
<td>3.8</td>
</tr>
<tr>
<td>Sweden</td>
<td>4.0</td>
</tr>
<tr>
<td>Mean overall</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Employability as Key Performance Indicators

The current changing business environment emphasize the importance of education for employability, focusing on the development of key skills and work experience. Development of undergraduates from theoretical background to the practice is a contemporary need, because the practice will enhance the employability of graduates. Participation of undergraduates in the training process and obtaining the feedback from the stakeholders are more important for understanding the trainee undergraduates’ future skills development areas (Weligamage and Munasingha, 2006). This study was conducted with the objectives of identifying stakeholders’ satisfaction on competencies and identified skills of their trainee undergraduates. Findings reveal that the trainers were highly satisfied with the punctuality, responsibility, commitment and attitudes towards work of their trainees. Also they were fairly satisfied with oral and written communication skills and decision making abilities. However, they have emphasized on several areas that need improvement, such as advanced writing skills, ability to use of e-mail and internet facilities, decision making and analytical skills.

In recent years, there has been a strong emphasis on providing on work related training for undergraduates as a part of their degree program. Completion of industrial training of a specific duration by undergraduates is an important expectation of employers. During the training, undergraduates get their first experience of real working environment and, an understanding on working patterns within an organization. Training satisfaction is a measure of the attitude that individuals develop about the training undergone and is based on individuals’ perceptions. This is an indicator of the outcome of training on individual trainees. Understanding of the factors affecting on trainees’ satisfaction helps trainers to improve the quality of training.

Employability or employment of graduates are taken as key performance indicators in many countries to measure the university or programme performance. These indicators are called employment indicators. Performance measures of graduate labor market outcomes are likely to feature as an important element in the prospective Student’s information set (Smith, McKnight and Naylor, 2000). In United Kingdom first destination survey to measure the employment performance was conducted (HEFCE, 2003). They calculated two type of indicators using the survey information as percentage of graduates who are employed or in further study, among all those who are employed, unemployed, or studying; and the second showing the percentage employed among those who are employed or unemployed. The Graduate Careers Council of Australia in association with Australian higher education institutions administers the Graduate Destination Survey and the Course Experience Questionnaire (CEQ) to gather information from graduates. Performance indicators used as Graduate full-time employment, Graduate full-time study, graduate salary, overall satisfaction, Good Teaching and Generic skills (Report of AEPL, 2003).

Conclusion

This Paper discussed existing research findings on studies and practices of employability skills on eight aspects as, definitions of employability, employability skills and employer needs, expectations of employers and university students, matching employer needs, the nature of employability, international perspective on employability and employability as key performance Indicator. The current changing business environment emphasize the importance of education for employability, focusing on the development of not only skills but also practical experience. Then, in order to enhance competitive advantage for graduate employment, students need to develop employability skills in addition to the acquisition of subject-specific knowledge and study programmes need to identifying the way of improving that requirement. Personal attributes mostly required by the employers are loyalty, commitment, honesty and integrity, enthusiasm, reliability, personal presentation, common sense, positive self esteem, A sense of humour, a balanced attitude to work and home life, an ability to deal with pressure, motivation and adaptability. How can these attributes teach within the teaching process? Can they? Specially can we teach loyalty, commitment, honesty and enthusiasm?
Main skills requirement mentioned in studies are communication, teamwork, problem solving, planning and organizing, technology, self management and initiative and enterprise skills. Many of the businesses suggested that educators should review and redevelop their curriculum and change delivery methodology to support the development of these skills and attributes.

Employers reported that work related experience is an important consideration in recruitment. Sri Lankan Universities already taken action in this issue and most of the study programmes included internship component into their curricular. This programme is running very successfully and getting benefit by all stakeholders involving in this process. But still possessions of university graduates of key skills sought by employers are lacking in Sri Lanka. Most of the countries Universities, government organization and employers have given attention on identifying this skills requirement and Sri Lankan universities should conduct employers’ skills requirement surveys to identify real needs, in order to strengthening their graduates’ skills. All stakeholders: the government, the university system administrators, employers and graduates themselves must be actively involved in this process should find the way to enhancing this skill.

This study concludes that many research studies have revealed a consistent core set of desirable attributes, such as communication skills, interpersonal skills and team working, problem solving, analytic, critical and reflective ability, willingness to learn and continue learning, flexibility and adaptability, risk-taking and self-skills and these attributes are often independent of the degree subject. Universities are incorporating extracurricular activities into their study programme and changing their subject to develop specific skills through specialist modules. We also need to identify the skill set that will best serve the future labor market.

References
Employers’ needs, Career services(2002), :http://www.careerservices.uoguelph.ca/students
Generic Attributes of Graduates of the University of Sydney (1997), http://www.policy.rms.usyd.edu.au


www.enhancingemployability.org.uk/
www.heacademy.ac.uk
www.universitiesuk.ac.uk/Publications/Documents/employers.pdf
Directions and Challenges of Private Institutions of Higher Learning in Malaysia: A Holistic Approach from the Perspective of Universiti Tenaga Nasional (UNITEN)

Prof. Dato'Dr. Ir. Mashkuri Yaakob
Mohd Ariff Ahmad Tarmizi
Dr. Bahisham Yunus
Zainora Abdul Ghani
Mohd Zain Mokhtar

ABSTRACT

The competition and progress of higher education in Malaysia is mainly centred on the public education system. As such, private universities established through the process of the liberalising of higher education encounter stiff competition amongst universities and colleges in Malaysia. Within this competition, several challenges have to be viewed from a larger perspective particularly with Malaysia aspiring to be the hub of higher education within the region. In the international context, other countries which have started similar directions are Singapore, Thailand, Indonesia as well as efforts put in by other developed nations in increasing the number of international student intake. From an internal perspective, private universities face the dilemma of securing excellent students in the field of science and technology. Students of such a calibre will continue to remain within public institutions of higher learning unless new initiatives in the form of attractive packages are offered by private institutions of higher learning. The lack of academic staff within the country is crucial in advancing academic excellence. The current number of PhD holders stand at 8,000 is still at a critical stage. Therefore, foreign experts with experience from abroad have to be intensively employed. UNITEN has forged synergies with foreign universities and industries through several programmes. Among them are split Phds, joint research, idea and technology transfers as well as student and academic exchanges through projects conducted in partnerships with universities in this region. However, several obstacles that hinder the competition among the public and private institutions have been identified particularly in the financial capital development which generates the university operations, programme competitions and infrastructural amenities, difference in work culture and interest, product competitions, as well as the gap in the focus of specialisations. In order to overcome the challenges faced as a university of excellence, UNITEN has created a new force by researching on the effectiveness of a more dynamic and open curriculum and by being internationally competitive. To ensure excellence, UNITEN strives to strengthen its policies so as to make them flexible, prepares a transformation planning for a period between 10 –20 years, builds a new market at the international level, prepares a direction as a premier university as well as a university of choice, internationalises the context of collaboration with international professional bodies. In summary, UNITEN strives to transform itself into a platform as a benchmark for private education to lead the private universities competition at the international level.

INTRODUCTION

The Malaysian Education System

As a country that was once ruled by foreign powers, Malaysia’s growth and development during the early period of its post-independence were much influenced by policies and administration instruments introduced by the colonial rulers. Slowly, the local administrators started to practice the principle of accept-adapt-and-adopt in order to ensure implemented policies suited the local needs and benefited the people. Such experiences were not alien to countries which just gained its liberty from foreign occupation – and in this case – the Federation of Malaya from the British in 1957.
2. In relation to this, the growth and development of the education system in Malaysia precludes its independence day. However, it experienced phases of transformation during post-independence back in 1960s. The transformation of Malaysia’s education was aimed at creating a system that has local identity/influence and could act as the main pillar of human resource development of the nation. Hence, to achieve the aim, the Government had introduced the National Education Philosophy as a tool to localise the education system as well as to deviate from influences of the colonial education system.

3. The blueprint of the national education policy spells out the National Education Philosophy i.e. “Education in Malaysia is an on-going effort towards further developing the potential of individuals in a holistic and integrated manner, so as to produce individuals who are intellectually, spiritually, emotionally and physically balanced and harmonious, based on a firm belief in and devotion to God. Such an effort is designed to produce Malaysian citizens who are knowledgeable and competent, who possess high moral standards and who are responsible and capable of achieving high level of personal well-being as well as being able to contribute to the harmony and betterment of the family, the society and the nation at large”.

4. The philosophy has become the thrust of Malaysia’s education system till now. The philosophy was integrated in the implementation process of Malaysia’s education system at every level i.e. (i) pre-school; (ii) elementary (primary); (iii) high school (secondary); and (iv) tertiary. In implementing the system to face educational challenges, Malaysia also built up its education strengths through adapting the soft-approach of the education system of other developed countries such as Japan and the US. As such, we could see the transformation from the use of the ‘Term System’ to the ‘Semester System’ in Malaysian institutes of higher learning. In adapting to this soft approach, it was, however, not adopted totally, but rather more selectively. Malaysia’s semester system (derived from the American education system), for example, has never been entirely the same with the one practised in the United States (US).

History and Development of Malaysia’s Private Education

5. Malaysia’s education sector in the post-independence era has been heavily depended on initiatives introduced by the Government. The role of private entities as the education providers has been very minimal. This scenario, however, has transformed phase by phase.

6. The history of Malaysia’s private education started in the 1960s. At this stage, Malaysia’s private education operators focussed more on providing higher education services vis-à-vis preparing students for the Higher School Certificate or better known as STPM, associates programmes, diploma courses and external examinations in the United Kingdom (UK) especially in LLB, CIT, ACCA, ICMA, Institutes of Insurance and Marketing. Among the pioneer private colleges in Malaysia in the 1960s were Yayasan Anda, Goon Institute, Maktab Adabi, and etc. During that time, the establishment of these institutes helped assist more Malaysian students to obtain extra education services as well as to prepare for higher education examinations i.e. HSC/STPM. This is due to the fact that there was limited space at public schools for students who sought studies at post-Senior Certificate (SC) or Malaysian Certificate of Education (MCE) level.

7. Although there were private institutions which provided services for education at HSC/STPM level, the number was very small. Consequently, the opportunity for Malaysian students to pursue their studies at tertiary level was limited. In addition, those private colleges/institutes were located in urban areas. On the other hand, private missionary schools also played an important role in private education in the 19th century of which the functions were relatively similar to those mentioned colleges/institutes. In rural areas, however, such set-ups were more in the context of private tuition services. Some of the states in Malaysia such as Kelantan and Terengganu in the eastern peninsula, Perak and Kedah in the northern peninsula as well as Johor in the southern peninsula, had their own state private institutions set up through religious schools (or better known as Sekolah Agama Rakyat). These religious schools did not only provide religious education, but also primary and secondary education.
8. The growth and development of private education in Malaysia in the late 1980s revealed that big companies started to show their interest to venture in the education industry as well as to be education providers. The involvement of Paramount Gardens, Land and General, and other Government-owned companies in education during that time, bears testimony to the strong interests by these private entities to be important players in the industry. In the 1980s, private colleges such as Stamford College, Taylor’s College, Damansara Utama College (KDU) etc started to develop higher education programmes such as American Associate Degree (AAD) and programmes for external examination with partners from the UK. With focus on subjects in the field of law, marketing, business administration, these colleges provided more opportunities for Malaysian students, particularly the Malays, to pursue studies in local private institutes of higher learning (IPTS) as well as to continue studies abroad vis-à-vis the US, the UK, Australia and New Zealand, through twinning programmes introduced by those colleges.

9. Government agencies also participated in private education through collaborations in setting up higher education programmes with overseas’ higher learning institutes/universities through local private colleges – which act as programme operator. This lead to the establishment of, inter alia, the Klang Valley Community College, Ganella College, Southern Illinois University Campus, Malaysian-American Consortiums (MUNCIA) and Northern Consortium of UK (NCUK).

10. During that time, without proper guidance, monitoring and controlling mechanism by the Government, Malaysia was faced with the rapid escalation of private institution/colleges. Most of these institutions embarked on providing programmes, at preparatory level, for Malaysian students who plan to study abroad such as Australia, Canada, Ireland, New Zealand, the UK, the US etc through programmes such as A-levels, Australian Matriculation (AUSMAT), Canadian Tertiary Education etc.

11. This scenario has prompted the Government to take a more proactive role in controlling and monitoring the establishment of private institutions, as well as programmes that these institutions offer. As a result, in the mid and late 1990s, there were major structural changes in governing private education which brought a more systematic and integrated approach to Malaysia’s education system i.e. public education system and private education system co-exist hand-in-hand in driving the human capital development of the nation. The structural changes included the introduction of the National Accreditation Board (LAN) and the Malaysian Qualification Agency (MQA) to implement the Malaysian Qualification Framework (MQF) and to regulate, monitor, oversee and ensure the quality assurance practises and accreditation of private education operators vis-à-vis its curriculum, teaching and learning methodology, and assessment process. This endeavour was to safeguard and ensure the rights of Malaysian students in obtaining high quality education.

12. The introduction of LAN and MQA has changed the orientation of services provided by private education operators. More and more collaboration with renowned overseas education private institutions were established by local private education operators which led to the introduction of twinning programmes (2+1 or 3+0) by private colleges as well as setting up campus of foreign universities in Malaysia. This development has indeed played an important role in efforts for Malaysia to become a regional hub for education, particularly in the Southeast Asian region. Furthermore, through proper regulation, monitoring, streamlining and synchronisation of private education system in Malaysia has resulted in the growing interest of Malaysia’s Government-Link Companies (GLC) to embark their business in the education sector too. Major companies such as Tenaga Nasional Berhad (TNB), Telekom Berhad and Petroliam Nasional (PETRONAS) form its own private universities, through its subsidiary companies, i.e. University Tenaga Nasional (UNITEN), Multimedia University (MMU), and Universiti Teknologi Petronas (UTP), respectively. Till now, these universities have catered to the needs of the national education service provider to inject international flavour in the curriculum of their programmes in order to attract international and local students.
13. At this point of time, the development of Malaysia’s private education system vis-à-vis private institutions of higher learning (IPTS) could still be considered as slow, but gradual, compared to its neighbouring countries such as Singapore, Thailand and Indonesia. Although the establishment of an integrated Malaysian education system was back in the early years of its independence, the overall guiding principles on higher education by the Government and programmes offered by Malaysian institutes of higher learning, be it from public domain (IPTA) or IPTS need improvement in order to shape the higher education industry in Malaysia to be more attractive for global education. Areas such as education policies, procedures, legal structures and guideline frameworks should be more flexible to enable IPTA and IPTS to move forward within their own capacity.

14. In Indonesia for instance, reformation of higher education has taken place when a new law was introduced to provide ‘autonomy’ – the empowerment concept – for individual institutes of higher learning. The reform has enabled more than 87 public institutes of higher learning and 2750 private institutions under the private business (yayasan) in Indonesia to compete more effectively at a global level through the creation of more international collaborations with internationally-recognised universities. As a result, Indonesia could place some of its higher learning institutes in Asia’s top 50 universities. Similarly, for Singapore and Thailand, their universities such as the National University of Singapore (NUS) and Chulalongkorn University in Thailand have placed themselves among reputable universities globally.

15. Another close example is through efforts by the Government of New Zealand (NZ) to promote its higher education industry. In the past, most of the countries including NZ sent their students to Europe and the US to pursue their studies. Recently, however, a backward trend can be seen whereby NZ put up a national plan targeting to attract more than 100,000 students from the US and Europe to pursue studies at its higher learning institutes by the year 2030. In West Asia, Saudi Arabia also put up a similar plan. With the inspiration to become a regional hub for education, Saudi Arabia aimed to attract more students from the Middle Eastern, Northern African, Central Asian, and Eastern European countries as well as Muslim students from Latin America to study in Saudi Arabia. Another example worth mentioning is in Hong Kong whereby most of its universities have already established themselves and are among the tops in universities’ world ranking. Furthermore, universities in Hong Kong have always benchmarked themselves against world-ranking as well as have striven and looked forward for better ranking in future.

UNITEN STRATEGIC PLAN AND COMPETITIVE EDGE

16. Notwithstanding the growth and development of higher education in other countries, which turn out to be the competitive challenge for Malaysia, UNITEN has, gradually, put in place proper mechanisms to face this challenge. Although more in terms of policy support from the Government is needed, UNITEN has taken a proactive role by benchmarking itself with other reputable international universities. These include putting up an objective to be among top-ranking universities in its vision and mission statement as well as developing and putting in place necessary policies, soft and hard infrastructures, academic frameworks as well as strategic business plan to accomplish the objective. Since 2007, UNITEN has introduced its Road Map, outlining its 3 to 5 years strategic plan i.e. 2007 – 2010, 2010 to 2015 and 2015 to 2020. The UNITEN Road Map does not only encompass UNITEN’s goal to be among the top universities at Asia and World levels, but also enumerating initiatives and means to upgrade the quality of its academic programmes, learning and teaching methodologies and researches to be at par with other top leading universities.

17. Firstly, to envision itself as among the top 3 universities locally, particularly in the field of engineering, information technology (IT) and business administration (BA), UNITEN has now developed new strategies to improve its image as a global player of education provider.

18. From another local challenge, UNITEN, as well as other IPTS, are faced with the challenge to attract high quality students. This is largely due to the fact that most of Malaysia’s top 10,000 students prefer to enrol in overseas universities via government scholarships or in IPTAs, due to the cost factor, upon completing their high school/secondary
studies. To face this challenge, UNITEN has developed an internationalisation programme with the aim, amongst others to:

(i) be integral with the international standards and quality recognition and accreditation; and

(ii) be relevant in the academic endeavour and research mission.

The internationalisation programme also encompasses efforts in:

(i) recruitment of more international students of not only from the Middle Eastern countries, but also from new market in Africa, Latin America, Europe and the Pacific Islands through international grant and external government scholarship collaborations with UNITEN Foundation or also known as Yayasan Tun Chancellor;

(ii) recruitment of more high quality students locally and internationally via such scholarship collaborations;

(iii) delivery of programmes from different modes i.e. full-time, part-time, life-long learning, e-learning and long-distance learning in future. The full scale e-learning mode will be on board by year 2020;

(iv) implementation of students and staff exchange programme;

(v) cooperation and collaboration in research at national and international levels; and

(vi) advancement of initiatives on capacity building;

19. Furthermore, in coping with the above-mentioned challenges and in achieving those aims, UNITEN is focussing on developing specialised expertise in energy technology as well as new energy-related technology. With the assistance from its parent company Tenaga Nasional – the largest utility company in Southeast Asia – UNITEN has managed to attract top researchers and experts in energy-related technology from both the local and international pools in achieving this endeavour. In relation to this, efforts and programmes to attract renowned scholars to conduct researches in UNITEN through the setting up new centres have become the main priority programme of the university. This would lead to the improvement of UNITEN's academic hands on experiences.

20. In facing challenges from other local IPTA and IPTS vis-à-vis the re-branding of programmes, new-collaboration programmes with universities abroad and the re-branding of public universities through the upgrading of university-colleges, UNITEN has outlined new strategies to internationalise its curriculum and programme. The strategies, amongst others include the following:

(i) allowing UNITEN’s human capital i.e. students and staff at all levels to experience reach-out programmes for them to have a better understanding on the development of local and global environment as well as to improve their inter-cultural knowledge and skills;

(ii) improving students (inter alia credit transfer) and academic staff mobility in attracting high quality human capital;

(iii) enhancing international academic cooperation via mutual agreement (MOU, MOA or LOI), joint programmes, joint researches, joint publications and sabbatical opportunities.

(iv) increasing international networking through curriculum design arrangement, external examiners programme and international industrial advisors programme; and

(v) developing more collaborations with international bodies such as UNESCO, ISESCO – International Convention on Recognition of Academic Credentials and Network of National Information Centre on Foreign Credentials - as well as establishing networking with other international organisations/bodies e.g. IDB, OIC, EU, ABET etc.
21. In addition to positioning itself to be among major global players in future, UNITEN has also adopted a new plan, which, among others, outlines the following needs:

(i) the development of a new international network and consortium. In this regard, UNITEN has to overcome the challenge of a lack of funding in bringing more new experts and renowned professors and scholars; and

(ii) the increase of extra-curricular activities with international and multilateral components. However, UNITEN has to overcome the obstacle in finding strong strategic partners with strong interests in joint collaborative efforts, be it in academic sector or research mission.

CONCLUSION

22. UNITEN envisages itself to be a premier university globally in future. In that relation, UNITEN has delineated premier as being a world class university i.e. reputable university that could be associated with top world-ranking universities in the US, the UK and all around the globe. To UNITEN, world class also denotes the ability to produce the best products and services that would be recognised internationally and be accepted by the rest of the world through maximised utilization of its human capital, resources and technological advantages for the benefit of the nation. In this regard, UNITEN pledges to produce world class graduates i.e. excellent individuals that could:

(i) provide a world class pool of thinkers, decision-makers, technology experts and traders.

(ii) contribute to planning, creating, maintaining or upgrading the best infrastructure and facilities that are needed by the world-class communities;

(iii) manage the workforce in organisations and companies that would be able to provide the most excellent efforts; and

(iv) be the best thinkers and visionaries in order to develop a nation that would be ahead of others.

23. In a nutshell, UNITEN is progressing on the right track to be a world class university based on the following achievements;

(i) UNITEN graduates have been accepted to top class universities such as Oxford University, Cambridge University, MIT and Yale University to pursue their postgraduates studies;

(ii) UNITEN is the first university in Malaysia that has received acclaimed recognition from international professional bodies from the UK, Wales, Australia and NZ for its academic programmes although UNITEN could be considered as an infant in terms of the years of its establishment;

(iii) UNITEN students have won prizes in various international competitions, be it technical, academic and extra-curricular in nature, by beating students from other top class universities;

(iv) UNITEN researches have won and received awards worldwide i.e. from the UK, US and Germany; and

(iii) UNITEN graduates have been among the top choices by employers ahead of other universities in Malaysia.
Enhancing Employability Through Quality Assurance:
The Centro Escolar University Experience

Erna Volante - Yabut, PhD
Assistant Vice-President for Research and Evaluation
Quality Management Representative
Centro Escolar University
Manila, Philippines

Abstract:
Both higher education and the graduate labour market are changing rapidly. The transition from education into employment is not a straightforward matter. The student intake is becoming more diverse, in age, background, previous educational experience, interests and ambitions.

The knowledge base in Higher Education is constantly expanding, specifically in scientific and technological disciplines. Colleges and universities under increasing pressure have to produce quality outcomes, both in research and learning.

The nature of graduates’ work is being transformed and diversifying, and many students already work part-time throughout their courses. Institutional responses to developing employability are also diverse. This paper explores the ways that a private higher education institution like the Centro Escolar University is addressing employability through Quality Assurance System.

Quality Assurance is a collective process by which the University as an academic institution ensures that the quality of educational process is maintained to the standards it has set itself. Through the quality assurance arrangements the University is able to satisfy itself, its students and interested external persona.

Enhancing Academic Quality and the Employability of graduates are the two most driving forces behind the quality assurance system implemented in Centro Escolar University.

Keywords: Quality Assurance, Employability, Academic Quality

Introduction
Education is central to development; it empowers people and strengthens nations. It is one of the most powerful instruments for reducing poverty and inequality and helps lay a foundation for sustained economic growth.

Quality in higher education is not only a national concern but has become an international issue through academic, political, and commercial developments associated with globalization, such as the rise of market forces in tertiary education and the emergence of a global market for skilled professionals and graduates.

All institutions are expected to have quality assurance mechanisms in place as a way of assuring stakeholders about the high standards of their programmes and their achievement through outcomes. The key aim of quality assurance is to monitor performance as well as ensure the achievement of quality outputs.

Arguments that quality could not be measured but could be recognized by academics when and where it existed were prevalent. However, over the last two decades, a number of factors have combined to challenge traditional views about quality in higher education and how it is assured. These factors have been elaborated by many commentators - individuals
and organizations such as UNESCO and the World Bank – and have led to the making of quality assurance in higher education “a central objective of governmental policies and an important steering mechanism in higher education systems worldwide” (Van Damme, 2002).

Quality itself can be defined as "fitness of purpose" where it denotes itself in the manner that it translates to the functions of an institution or "fitness for purpose" where the notion of quality of an institution is measurable through its mission statement with clearly defined aims. Quality assurance mechanisms can be implemented and monitored internally by the institution or by an external body.

From an institutional perspective, consideration has been given to:

- Institutional quality framework and resources for managing and implementing quality systems,
- Internal norms and standards as well as performance indicators,
- Staff development on the conceptualization of the quality framework
- Capacity development.

In developing products and services, quality assurance is any systematic process of checking to see whether a product or service being developed is meeting specified requirements. A quality assurance system is said to increase customer confidence and a company's credibility, to improve work processes and efficiency, and to enable a company to better compete with others.

Quality assurance systems have the potential to promote improvements in tertiary education institutions and programs in ways that are linked not only to acquired competencies or employment of graduates, but also to more efficient and transparent operations of institutions and programs. QA assessments can also be effective when they help to supply data and information for strategic planning purposes.

There are many different understandings of the term, quality, often reflecting the interests of different constituencies or stakeholders in higher education. Thus, quality is a multidimensional and often a subjective concept (PHARE Multicountry Handbook, 1998).

Conceptions of quality were categorized by Harvey and Green(1993), and were elaborated in the PHARE Manual of Quality Assurance: Procedures and Practices (1998). They include the following:

1. **Quality as excellence.** This definition is considered to be the traditional academic view that holds as its goal to be the best.

2. **Quality as “fitness for purpose”**. This view requires that the product or service meet a customer’s needs, requirements, or desires. Learners (students) and prospective learners, those who fund higher education, the academic community, government, and society at large are to a greater or lesser extent all clients or users of higher education but may have very different views of both “purpose” and “fitness”.

3. **Quality as transformation.** This concept focuses firmly on the learners: the better the higher education institution, the more it achieves the goal of empowering students with specific skills, knowledge, and attitudes which enable them to live and work in the knowledge society. This notion of quality may be particularly appropriate when there have been significant changes in the profile of learners, for example, when changes in society or politics have enhanced access to higher education for large numbers of disadvantaged learners. It is argued that the delivery of a transformational quality approach involves five key elements (Harvey and Knight, 1996, p. 117): envisioning quality as a transformational process designed to enhance the experience of students; a bottom-up approach to continuous improvement; responsiveness and openness as the means of gaining greater trust; an emphasis on effective action; external monitoring which is sensitive to internal procedures (and values). While this notion is popular, it may be difficult to measure quality as transformation in terms of intellectual capital (Lomas, 2002).
4. **Quality as threshold.** Defining a threshold for quality means setting certain norms and criteria. Any programme, department, or institution, which reaches these norms and criteria, is deemed to be of quality. The advantage of setting a threshold is that it is objective and certifiable. However, there are arguments that setting a threshold creates uniformity across the higher education system. This argument might well apply if institutions adopt a “compliance” mentality and only do what is sufficient to satisfy the minimum. There are significant disadvantages to this concept, especially when the criteria and standards are based on quantitative “input” factors enshrined in law. It cannot readily be adapted to changing circumstances or to stimulate change and innovation. In this respect, the “threshold” can mitigate against improvement. Neither does it take account of “output” standards, the actual level of achievement by graduates, the criteria used to assess these achievements, and how that assessment is verified.

5. **Quality as enhancement or improvement.** This concept emphasizes the pursuit of continuous improvement and is predicated on the notion that achieving quality is central to the academic ethos and that it is academics themselves who know best what quality is at any point in time. Some of these concepts of quality still hold true especially when explicit quality assurance and accreditation procedures are being developed and introduced for the first time either at system or at institutional level. But, notions of quality are evolving or merging, either as the result of the changing context in which higher education institutions are operating in some countries, or as a result of growing expertise within higher education systems and institutions in devising their own concepts of quality and models of evaluation and quality management.

The quality of education includes the learning environment and students' outcomes (Longe 1999). There are two broad approaches to measuring quality. One involves measuring the 'outputs' from the education system. The other involves examining the 'educational processes' which produce these outputs. These approaches can be used separately or together. From the input side, quality of education can be gauged through students' capacity and motivation to learn and the curriculum or the subjects to be learned.

This paper aims to highlight the importance of Quality Assurance System of the university and how it enhanced employability. Also, it will present the experience of Centro Escolar University (CEU) in linking Quality Assurance and employability in its institutional strategy.

**ISO Certification Project of CEU**

In the rapidly changing environment of higher education, the maintenance of high quality and standards in education has become a major concern for higher education institutions and governments; thus, the demand for explicit quality evaluation and assurance processes has increased. The result has been the introduction of national quality assurance systems into many countries and the planned introduction of such systems into other countries. One of the challenges facing higher education worldwide is the meeting of new expectations in terms of the "employability" of graduates in the knowledge society;

The Quality Assurance focused almost exclusively on assessment of education inputs; these eventually evolved to include learning outcomes and in some instances labor market returns of graduates. More recently, however, formalized QA systems for tertiary education have emerged and now typically encompass a much broader mandate. Today QA systems are generally concerned as much with institutional development, as with inputs, learning outcomes, and employment.

In response to the challenges in tertiary education, CEU voluntarily subjected to certification of Internationalization Organization for Standardization or better known as ISO. In 1999, CEU got the certification of ISO 9001:1994 version to the migration from 1994 to the 2000 version and the recent re-certification for academic and support services functions in Manila and Malolos campuses.

For almost a decade now, there are so many innovative programs and projects were implemented in response to the quest for quality. CEU would like to sustain its quest to become total quality organization. Continuous improvement is the permanent objective of
CEU. We continuously exercise the unwavering commitment and relentless efforts to sustain Total Quality Culture.

The figure below shows the flow of the CEU business process. All programs and the continuous improvement tools were anchored to the said business process.
Curriculum Validation and Evaluation

Enhancing employability is a University priority. For everyone involved in Quality Management System Committee, enhancing employability is about adding value to the curriculum by making explicit what we do already and helping students recognize the employability skills and attributes they are developing as part of their study.

The close relationship between employability skills and those attributes needed to be an effective learner means that curriculum will support employability through a range of learning activities and assessments. Enhancing employability within the curriculum is about adding value by making explicit what we do already and drawing students’ attention to the skills they are developing as part of their study.

Employability is not simply about finding a job. It is about making connections between study, personal development and other activities that influence individuals’ ability to find, gain and be successful in their chosen employment. Enhancing employability is about recognizing and making explicit what we do already in our courses by drawing students’ attention to the employability skills and outcomes they are developing as part of their study. This means: raising awareness about how the curriculum develops employability skills; explicitly linking learning outcomes with employability; enhancing students’ understanding of the value of HE study beyond their immediate subject area giving students a language to communicate more effectively with employers about their skills, knowledge and career potential.

Employability is part of the wider group of benefits that emerge from learning. Whilst enhancing employability in our curriculum is clearly of benefit to students in the employment market, it is also relevant to many students studying for their own personal development. By being aware of their capabilities, they can make the most of their opportunities at work and their career plans. All students are entitled to know how their studies contribute to a wider range of outcomes, such as increased confidence and recognition of personal achievement, that enhance not just their claims in a competitive job market but their ongoing development as individuals and lifelong learners.

Policies, guidelines and procedures on preparation, validation and evaluation of the curriculum were formulated and approved by the administration to ensure that the knowledge and skills by the students for them to be ready to face the workforce.

The curriculum design shall be based on the Policies and Standards for a particular course and/or Memorandum Order issued by the Commission on Higher Education (CHED) pertaining to instruction, faculty, library, laboratories, physical plant and facilities, student/personnel services, community outreach/social orientation and administration. The curriculum shall be guided by the minimum requirements prescribed by CHED, PRC and pertinent legislations. Under the full autonomy status of the University, the CHED shall be informed through the submission of a copy of each curriculum.

Included in the QA system of the university is the validation of the curriculum annually of the new program and shall be evaluated before the end of its completion by indicating degree of agreement on the extent of adequacy of the curriculum as to preparedness of the graduates for the practice of the profession.

The curriculum is being validated annually by the faculty and students and at the end of the program where the students are on their practicum, the industry is included in the evaluation where they are asked to rate the graduating students on the level of proficiency in the identified skills such as oral and written communication skills, computer skills, human relation skills, research skills, analytical thinking skills, self-management skills, continuous improvement and learning skills, work attitude and knowledge related to the course taken in college.

Practicum or On-the-Job Training
The practicum experience is an opportunity for the graduating students to apply some of the theory learned in class to the actual workplace while working under the supervision of professionals. The field mentor, faculty supervisor, faculty advisor, and practicum coordinator are all cheering for the success of the graduating students. The practicum experience can be one of the most important career enhancing choices the students should make. The students have the opportunity to creatively build their resumes and develop a professional portfolio by carefully choosing the practicum site, field mentor, and special project. Students choose practicum for a number of reasons such as:

- Experiencing the general aspects of work in an information setting
- Completing a special project with a unique learning experience
- Understanding different types of information-providing agencies
- Developing an area of expertise with a large project

The practicum experience can launch the career or help develop an expertise in a particular area. It can open doors to a special experience in a particular institution. It can provide an opportunity to work closely with an expert in the field.

Included in the Academic Affairs Manual are the documented policies, guidelines and procedures on practicum training of the graduating students at an off-campus agency/establishment.

**Mock Employment Test (Pre-Employment)**

The Mock Employment Test was created in response to the continuous improvement tools of the university as part of the quality assurance system. The objective was to familiarize the graduating students with the kinds of test given for job search and employment. Thus, the Counseling and Testing Department administered the Mock Employment Test consisting of Primary Mental Ability Test and 16 Personality Factor Questionnaire. However, in 2001, the Counseling and Testing Department (CTD) developed a CEU Made Tests covering the following areas: English Ability, General Information and Natural Science, Mathematics Ability, Logical Reasoning, Abstract Reasoning, Filing, Coding and Speed and Accuracy. After the CEU Made Tests was formulated and has gone through content validation, the tests was administered in 2002 up to the present.

The pre-employment testing program can lead to higher productivity because test results can be accurate predictors of future job performance. Tests are among the most accurate means of predicting performance because they are the objective means of determining the extent to which a candidate has the capacity to perform well at a given job. Research has shown that cognitive aptitude test, for example, are much more accurate predictors of job performance than are other widely used employee selection techniques.

The results of the mock employment test were used as inputs to know which areas need to be strengthened so that the graduates are equipped with knowledge and skills needed by the industries for their employment.

**Jobs and Career Fair**

All CEU graduating students and even the alumni get the edge in job search of the university placement services. University student council in partnership with the Marketing and Placement department conduct annual jobs and careers fair. The aim is to orient the graduating students on job-search processes. Graduating students are given the opportunity to gain first-hand experience on job application, interview, and online job search.

Together with government agencies and other private companies from the fields of telecommunications, health, education, business process outsourcing (BPO), information technology, banking, hospitality, business and trade are invited in the annual jobs fair.
A career expo is simultaneously conducted in which the resource speakers are invited to talk about the job market issues and trends. Figure below shows the placement services cycle as a mechanism to enhance the potentials of our graduate to employ in a soonest possible time right after graduation.

Alumni Tracer Study

The alumni tracer study was implemented by different schools and colleges of the university to get feedback on the courses that are considered most in demand in the job market, the academic experiences and learning in college that the graduates find very useful in the workplace.

Using the instrument developed by CHED, a tracer study is part of the operations plan of the university to track down the graduates. The result of the study can help the institution to be more strategic in developing their curricula as well as on deciding on program offerings, staffing patterns and faculty development. It can also gauge the effectiveness and/or responsiveness of the degree programs which the graduates completed in the particular school, specifically on identifying the cluster of courses/subjects that the graduates found most useful in their workplaces. The result of the tracer study can be utilized by the University to put up an Annual Higher Education Advisory for parents, students and guidance counselors for career placement. The advisory will contain information such as most demanded jobs, highest hiring (starting) rate and the types of schools most desired by employees.

Other findings that may be generated from the tracer study are: type of graduates who are most employable, academic experiences (competencies learned in college) that the
graduates find very useful in the workplace, and personal academic background of graduates that can determine employability.

Conclusions

Higher education and the labour market are changing rapidly in the age of globalization. The economy is increasingly knowledge based and competitive, and the nature of graduates’ work is being transformed and diversified. In the light of the globalization context, there is a need to emphasize to increase the international competitiveness of the higher education system in the world market. This is why the role for quality assurance and employability in the Higher Education Institutions has become essential.

Quality in higher education has to be seen as a co-production of a plurality of legitimate actors (universities, students, academic staff, employers, QA agencies, government agencies, etc.). In order to enhance the employability of their graduates, universities have the responsibility of creating, implementing and developing their internal QA systems.

In a knowledge-based society, universities should be fully attuned in their own way to societal needs and expectations over a broad front and able to provide it high calibre graduates. As a result, employability has grown in importance as a driver of change in universities. On the other hand, quality represents a value generator for universities, ensuring a higher employability for their graduates.

References

4. Observatory on Borderless Higher Education: <http://www.obhe.ac.uk>. [An international strategic information
5. Carolyn Campbell, Quality Assurance Agency for Higher Education, UK; Judith Eaton, Council for Higher Education Accreditation, US; Eric Froment, European University Association; Matthew James, Australian
8. European University Association (2005), *Developing an internal quality culture in European universities*, Brussels: EUA asbl
Sub-Theme B

The Role of Professional Associations
Teacher Associations’ Roles in Sustainable Professional Development

Assoc. Prof. Dr. Padmani Mildred Thiyagarajah

School of Educational Studies
Universiti Sains Malaysia

Abstract

A key function of teacher associations is to advocate the importance of focused and sustained periods of personal-professional development which is sustainable. New as well as experienced teachers need to see themselves as the source of professional development. This is because personal-professional development begins with self-awareness and self-motivation and progresses with self-direction as teachers make choices and claim ownership for the decisions they make in their professional development. Unlike highly centralized and bureaucratic training programmes which are in the main prescriptive in orientation in that the emphasis is on what is important to know and do, what is current in theory and research and therefore what a participating teacher should do, teacher associations on the other hand could play a more significant role in fostering a personal point of view that can enable teachers to make sense of what is propagated and develop professionally on a sustainable basis. As a practitioner, this ownership of a point of view is best fostered by teacher associations which provide a sounding board for teachers’ ideas and a metric for their own thinking. When teachers band together for mutual support, they can collectively suggest courses of action and explain why these make sense to the authors. The individual teacher can in turn take from them what she/he will do and do with them what she/he can to help her/him make sense of what she/he does. This paper will therefore review the role and functions of some teacher associations in Malaysia from this perspective in their common cause of helping teachers make sense of how they can make a difference not only in how they impact the lives of individual children but also their own profession as they strive for sustainable professional development.

Keywords: sustainable professional development teachers associations

1.0 Introduction

Teacher associations’ roles in sustainable professional development will enhance graduate employment in the long term. This is especially so, if teacher associations like all other professional organizations align their internal structures to reinforce overarching values and goals which make full use of human resources and potential. A large body of literature provides evidence that when organizations broaden and elevate the interests of followers, generating awareness and acceptance among the followers of the purposes and missions of the organizations (Den Hartog, House, Hanges, & Ruiz-Quintanilla, 1999), and lead out in new directions for achieving them, human potential is released for performance and productivity. Teacher associations can support and sustain the local context to create sustainable professional development amidst the changing nature of teachers’ work and environment which has become more and more complex. This is apparent when theories of learning keep changing, new instructional materials are being produced each year and online learning has been imposed on many teachers, who are often expected to juggle instruction with counseling, curriculum development and many more activities. Teacher associations can provide the proper setting for innovative learning by designing organizations in which participation and anticipation work together to extend horizons of decision making, broaden
perspectives, allow the sharing of assumptions and values, and facilitate the development and use of new approaches. (Bennis and Nanus:1997). However professional development ought not to just focus on learning new skills but on changing habits and attitudes. Hence teacher associations need to instill courage among teachers for articulating a realistic vision of the future and inspiring them to share that vision by stimulating teachers intellectually and caring for individual differences. The role of teacher associations is not to coerce but to inspire so that teachers are propelled by noble values and principles to do the right things with honesty and responsibility for the common good. It is the role of teachers’ associations to inspire in teachers these values.

2.0 Teacher associations and sustainable professional development

Sustainable professional development involves both individual and collective/collaborative participation. While professional development is on the one hand a personal choice made by the individual, yet individuals are essentially embedded in social groups who work collectively to uphold shared professional values and practices. This dual dimension frames teachers’ professional development which is defined by Dale Lange, “as a process of continual intellectual, experiential and attitudinal growth” (1990, 250).

2.1 Sustainable Individual Development

New as well as experienced teachers need to see themselves as the source of professional development. Individual professional development can be sustained as long as this source of personal potential is available to be exploited by the self. This is because personal-professional development begins with self-awareness and self-motivation and progresses with self-direction as teachers make choices and claim ownership for the decisions they make in their professional development. Because teaching and learning are human experiences with profound social consequences (Freire, 1970), teachers’ associations play a key role in facilitating teachers to be responsible beings towards themselves and society as they actively engage in critical reflection, decision making and independent action in trying to teach in a sustainable way within the context of daily reality. Teacher associations can promote and facilitate the development of self-awareness, self-motivation, self-determinism and self-agency which are crucial to sustaining personal professional development. To this end teacher associations ought to provide a platform where teachers have the opportunity to raise their self-awareness of their own beliefs, values and preferred practices in teaching through critical reflection and articulation and in so doing reconstruct their own personal practical knowledge in order to pave the way for professional development.

Empowerment and teacher autonomy

When teacher associations serve as a forum for individual teachers to tell their stories, teachers begin to become accountable for the choices they make in their classrooms. Teacher associations ought to recognize the power of stories in the development of teachers. When teachers tell their stories in recounting their experience, they become aware of the consequences of their instructional strategies especially when they make the connection between their personal practical knowledge and the consequences of their action. It is in the process of articulating their personal stories that teachers are enabled to view possibilities of developing alternative conceptions of how classroom practice should and can be. Teachers’ professional development is also captured in their articulation which reflects the transition of their discourse from local to professional language as they develop new understandings of teaching through renaming their experiences and reconstructing their practice. This is important as Donald Freeman has said “The process of articulation – making the tacit explicit – brings into play new discourse and with it, different ways of conceptualizing teaching” (1992, 7). Teachers are empowered when they can articulate and communicate meaningfully and effectively to put forward their points of view, especially when the positions they take are inspired by autonomous decision-making based on critical reflection. This autonomy empowers them to be critical thinkers and liberates them to overcome contextual
impediments through the realization of their full human and intellectual potential. They are also enabled to talk confidently with administrators, parents, students and other teachers. This in itself is an important part of being competent teachers and gaining respect as professionals.

Teachers can become autonomous only to the extent they are willing and able to embark on a continual process of self-development. (Kumaravadivelu, 2001). Hence teachers associations need to instill courage among teachers for articulating a realistic vision of the future and inspire them to share that vision by stimulating teachers intellectually and caring for individual differences.

### 2.2 Sustaining collective/collaborative professional development

Though sustainable professional development is inherently personal in nature and starts out as private or solitary endeavours, yet self-development cannot be done in isolation. Julian Edge (1992, 3-4) posits that it is through cooperation and collaboration that teachers have a chance to escape from simple, egocentric subjectivity, without chasing after a non-existent objectivity. He calls this *Cooperative Development* and says that, I need someone to work with, but I don’t need someone who wants to change me more like the way they think I ought to be. I need someone who will help me see myself more clearly. To make this possible, we need a distinct style of working together so that each person’s development remains in that person’s own hands. This type of interaction will involve new some rules for speaking, for listening, and for responding in order to cooperate in a disciplined way. This mixture of awareness-raising and disciplined cooperation is what I call *Cooperative Development* (1992, 4).

Teacher associations can support sustainable cooperative development based on the principles of trust, respect, empathy and honesty by providing a venue where teachers are free of the bureaucracy of the work place to be self aware and in control of their powers to think, feel, speak and act as they share their personal practical knowledge and learn from one another in a supportive environment. A teacher cannot function adequately “for long without an informed shoulder to lean on, without an on-the-spot human wailing wall at which to gripe, to rage, to express fears and to confess mistakes, to ask questions and wonder aloud. Where the human wailing wall is carefully conceived and consistently offered, where the people provided are informed, sensitive, sympathetic and understanding (Long and Newman, 1961, 5-26, as cited in Maslach, 1982, 111).

Teacher associations can help drive the highest possibilities of human nature, by providing organized feedback in order that teachers can have the ability to step back and adapt and change themselves if necessary so that they are at their most effective for realizing their vision and accomplishing their goals. As they constantly seek feedback through cooperative professional development teachers can stay relevant to the needs and demands of the world around us. Teacher associations can organize collective professional activities such as conducting action research, facilitating conferences and workshops for teachers to try out new teaching ideas and co-develop instructional materials. Collaborative professional development can also be sustained through on-line activities such as teacher chat groups, electronic bulletins, newsletters, journals and blogging. By participating in such professional development activities teachers stay abreast and cope with changes. They not only develop their own professional discourse, ideas and skills but also gain confirmation or re-affirmation that what they do is worthwhile. This is essential for sustaining motivation, empowerment and inspiration to stay on track for sustainable professional development.

### 3.0 Teacher associations and professional development in Malaysia

A survey of stated objectives and activities of teacher associations in Malaysia show that they share the common aspirations of providing a forum for teachers and educators to confer and debate issues central to teaching and learning, and at the same time promote opportunities for creating a network of relationships which can sustain professional development on a continual basis.
One example of such a teacher association is the Association of Science and Mathematics Educators of Penang (ASMEP) which was established in 1978 by a group of enthusiastic science and mathematics educators from schools, colleges and universities in Penang. ASMEP provides a platform for all members who are science and mathematics teachers to come together to share ideas about professional development and issues and activities that can enhance the teaching and learning of the subjects. The activities organized by ASMEP include new interactive technologies for e-learning, workshops on problem-based learning for teachers, projects in bringing scientists, teachers and students together, and science and technology competitions and exhibitions. Its website also includes the E-bulletin ASMEP which provides the latest update on the association’s activities.

Another such teacher association is the Malaysian English Language Teaching Association. More popularly known as MELTA, it is a voluntary, non-profit organization which was officially formed in 1982. Its stated constitutional aim is to promote English language teaching in Malaysia by pooling together all expertise and resources for English Language Teaching (ELT) in Malaysia and make them available for teachers all over the country and to liaise with major ELT organizations in the ESL/ EFL world.

The Teachers’ Club run by the British Council also subscribes to the mission of providing professional development opportunities for English language teachers all over Malaysia. The British Council through the Teachers’ Club works with teachers from all sectors of the education system and its projects range from instructional materials design, teacher training workshops and organizing competitions for teachers.

4.0 Conclusion

Sustainable professional development paradoxically hinges as much on self-determinism as collegial support. As such, teacher associations play the crucial role of creating space for individual context-sensitive exploration of pedagogic knowledge as well as providing meaningful collaboration and co-operation among teachers and educators. Teacher associations and can provide the structure for the follow-up training that is essential for acquiring new teaching knowledge, skills and strategies to members of the teaching community as they continuously engage in the study of their craft. Professional development can only be sustained if teachers and teacher educators are committed to be totally engaged in their work and explore the possibilities of reaching their full potential through the process of self-awareness in the reconstruction of personal meanings of teaching and learning. Though the journey of professional development begins with the self awakening to the need for self-actualization and reaching for our full potential, yet teachers and educators can achieve far more by collaborating and enriching colleagues professionally along the way. And it is teacher associations which can bring this about by leading the way for partnership collaboration, innovation and creativity among the teaching community.

References


The Role of Professional Associations to Improve Graduate’s Employability: UGM Experiences

Wisnug Martani and Harsono

Center for Innovation in Higher Education (CIHE)
Universitas Gadjah Mada, Yogyakarta,
Indonesia
martani_w@yahoo.com

Abstract

Universitas Gadjah Mada (UGM) has been improving the quality of its graduates based on the issues introduced in HELTS (Higher Education Long Term Strategy) and the relevance of its graduates with the market signal. The improvement process has been done comprehensively. Both internal and external stakeholders are have been a part in the improvement process. One among many external stakeholders is professional associations.

There are many professional associations registered in Indonesia such as IDI (Ikatan Dokter Indonesia or Indonesian Medical Association) for medical doctors, PDGI (Persatuan Dokter Gigi Indonesia or Indonesian Dental Association) for dentists, HIMPSI (Himpunan Psikologi Indonesia or Indonesian Psychological Association) for psychologists, and ISFI (Ikatan Sarjana Farmasi Indonesia or Indonesian Pharmacist Association) for pharmacists. The roles of professional associations are significant in improving graduate quality. The professional associations provide labor market signal, formulate graduates competence standard, involve in the learning process evaluations, assess graduates quality to be used for curriculum implementation feedback, as well as assist help DGHE (Directorate General of Higher Education) to review study programs establishment. In the near future, professional associations will become a part of accreditation process for professional education.

Based on the role of professional associations, UGM has been developing strong networking with professional associations. The networking between UGM and professional associations resulted in the establishment of policies related to graduates quality improvement. Based on the networking, UGM and professional associations have been conducting joint workshops on curriculum developments, professional certifications, and having external examiners for professional educations. In indirect context, the existence of professional associations and their networking with UGM provide assistance to UGM improving the quality of its human resources, since the lecturers have continuous discussions on the market and professional aspects related to their own professions. The data show that users’ satisfactions are increasing significantly.

Keywords: graduate quality, networking, professional associations, UGM.

Background

Higher education has changed markedly in many countries over the last 19 years. Widening access, increased demand, new technologies, borderless education, reduced government funding, new forms of governance have all played a major role in the recent changes. As an impact of this change competition in work place become harder. Number of higher education graduates increase very fast and imbalance between job seeker and work place is happened .This condition occurred not only in Europe in 90’s (Schomburg and Teichler, 2006) but also happened in developing countries.

In this time Higher Education Institution has to do some effort for enhancing relevance and employability of their graduates, to indicate the quality of HE institution. Because of increasing the number of Higher Education Institution, government uncovered to check it. Due to this situation, government has to manage the quality and restrict the expansion of HE Institution and invite professional organization as one of external stakeholders to assist the
government for controlling the tendency of such expansion. Harvey and Newton (2004) mentioned that professional organization can do this function to see the compliance of HE institution in implementing government policy

The issue also arises in Indonesia, where in nowadays there are three thousands HE institution and around 350,000,000 HE students, the more open facilities to access marketplace, increasing competition among national graduates and between Indonesia and non-Indonesia graduates become harder. As an impact, it is too difficult to find a job for fresh graduates. Higher Education Institution will recognize its quality since their graduates will be absorbed by market, and users feel satisfied with their graduate's quality.

Responding the condition, Indonesian Ministry of National Education cq Directorate General of Higher Education has launched national strategy for facing this challenge. The strategy called HELTS (Higher Education Long Term Strategic) 2003-2010, is used as guideline for sharing good practices and as a lesson learnt process for previous experiences and also as National Commitment for facing and coping the situation. HELTS has three main pillars namely (1) nation competitiveness (2) health organizations (3) autonomy and quality. Since the HE Institution wants to improve nation competitiveness, its HE institutions need to become a healthy organization. To attain the required condition as a healthy organization, HE institution has to set up networking with external stakeholders, one of them is professional organization.

**UGM experiences**

Some efforts to improve graduate’s employability have been executed, such as tracer study for its graduates in 2003. Result of the survey given to UGM alumni shows us that graduates employability is good enough that can be seen from the graduate’s length of waiting time to get their first job, user satisfaction, and evaluation on their job performance. Users say that UGM graduates are good in hard skill but less in their communication skill and less confident. Result of tracer study has been followed-up by revising and developing curriculum and some program which increase competencies of students especially on their soft skills.

In order to improve the graduate’s employability, UGM has been trying to get more information and many kinds of sources, not only based on one effort such as tracer study. Besides UGM also has been trying to attain information from Indonesian professional organizations in order to get accurate information that will be used as a source of a curriculum development.

There are many professional associations registered in Indonesia such as IDI (Ikatan Dokter Indonesia or Indonesian Medical Association) for medical doctors, PDGI (Persatuan Dokter Gigi Indonesia or Indonesian Dental Association) for dentists, HIMPSI (Himpunan Psikologi Indonesia or Indonesian Psychological Association) for psychologists, and ISFI (Ikatan Sarjana Farmasi Indonesia or Indonesian Pharmacist Association) for pharmacists. PDHI (Persatuan Dokter Hewan Indonesia or Indonesian Veterinary Association) for veterinarians, PII (Persatuan Insinyur Indonesia or Indonesian Engineering Association) for engineers.

UGM has eighteen faculties, therefore there are many professional organizations involved in some university or faculty program which will improve the employability of graduates. Beside this UGM also wants to use the DGHE strategy to attain healthy organization. UGM believe by achieving healthy organization, UGM can enhance nation competitiveness of its graduates.

UGM notions that professional organizations have special roles in improving the quality and employability of students and graduates of the university through institutional development, curriculum development in term of teaching learning process, and continuing professional development.

1. Institutional development

a. Professional organization gives some feedback about employability of UGM graduates

b. As a partner for setting up standard of procedure in conducting professional
practicing program and undergraduate program

c. Monitoring and evaluating university to implementation of government policy

d. Professional organization as a collaborator of DGHE for reviewing feasibility if UGM will establish a new study program, especially for professional program

e. Professional organization provides some information to facilitate benchmarking with other universities

2. Curriculum Development

a. Professional organization give some signal of professional competency , and faculty will developed it into curriculum

b. As a partner to set up and / or develop curriculum

3. Teaching – learning process

a. In teaching-learning process, professional organization will facilitate some practitioners to deliver their experiences and some information to students about issues in the field or real life


c. Giving professional or competence certification when student finish their study in professional program.

4. Continuing professional development

a. Professional organization and its affiliation always facilitate their members to share new knowledge and technology or experiences, increasing new skill through annual meeting or conferences. Professional organizations also publishes journal to distribute some research results. Other functions of professional organizations for continuing professional development such as: state networking, providing discount rate for subscription of professional publications for members, holding annual conference and supporting meetings by professional affiliation

b. In collaboration with faculties, professional organization will prepare a continuing professional education and through this program, academic staffs of the faculties can improve their professional skills.

UGM Academic staffs always try to use the services. To which in the next step will allow values adoption to improve teaching learning quality and as an impact, employability of graduates will increase much better .

Conclusion and Recommendation

It can be concluded that professional organizations have strategic and important role to improve graduates’ employability. UGM has to maintain and expand the networking between professional organization and HE institution, not only for Indonesia professional organization but also to expand the network and cooperation with regional and international professional organization as well as to continuously improve the quality and employability. This kind of collaboration is very useful and it will make the university still keep up with the development of science, knowledge and technology.

Reference


Forum of Communication and Consultation to Enhance the University-Stakeholder Networking System at Airlangga University

Ni Nyoman Tri Puspaningsih*, Unggu Heriqbaldi, Soetjipto, M. Zainudin, Fasich

*Academic Director, 2 Head of Quality Assurance Center, 3,4 Vice Rector and 5 Rector, Airlangga University, Kampus C-Unair, Mulyorejo, Surabaya 60115, East Java, Indonesia

*Contact person: nyomantri@yahoo.com

Abstract

Forum of Consultation and Communication (FKK) was designed as one of Airlangga University strategy plan to open network system with stakeholder. Airlangga University as source of science and technology produce graduates who will compete at global job market or creating job market. Student development program was done using four quadrant learning program consist of hard skills and soft skills learning process. Hard skills development (intra and co-curricular) was designed on specification study program curriculum. Curriculum design also involve the stakeholder, such as industry, local government, professional, alumna. That’s mean that university concerned with stakeholder competency need for producing the excellent graduates. Soft skills development (intra, co, and extra-curricular) was designed and called as State of the art on Soft Skills Development in Airlangga University. The activities compose of leadership, team work, entrepreneurship, communication, and social responsibility training program. Implementation of that program was done partly at stakeholder’s company such as internship, field study/case study, and community services. Those implementation showed that graduates waiting time for getting first job (less than 3 months) was increased during three years of academic year (2005/2006 – 2007/2008) from 14.91% (2005/2006) to 44.90% (2007/2008). To strengthen the university-stakeholder relationship and enhancing the students competency, Airlangga University developed Research Based Entrepreneurship University. Regarding to that goal, Airlangga University has developed FKK-Airlangga Entrepreneurship Unit (FKK-AEU) as part of Career Development and Entrepreneurship Center.

Keywords: FKK-AEU, state of the art, hard skills and soft skills

1. Introduction

Vision of Airlangga University are (1). become an autonomous, innovative and prominent university in the national and international levels, (2). become a pioneer in the development of science, technology, humanity and arts based on religious morality. As public autonomy university, and regarding to Indonesia Directorate of Higher Education on Higher Education Long Term Strategy (HELTS 2003-2010) to enhance the Nation’s Competitiveness, Autonomy, and Organizational Health, Airlangga University has developed educational hard skills and soft skills learning process. Hard skills development (intra and co-curricular) was designed on specification study program curriculum. Curriculum design also involved the stakeholder, such as industry, local government, professional, and alumna. That’s mean that university concerned with stakeholder competency need for producing the excellent graduates. Soft skills development (intra, co, and extra-curricular) was designed and called as State of the art on Soft Skills Development in Airlangga University. The activities compose of leadership, team work, entrepreneurship, communication, and social responsibility training program. Implementation of that program was done partly at stakeholder’s company such as internship, field study/case study, and community services. Based on university self
evaluation report in 2008, there are several key points on learning program that should be improved, (1). Several study program specification curriculum are not synergize with stakeholder based need, (2). Graduates are still low competency on entrepreneurship values to create job market, (3). Access of job position information are still low, (4) collaboration networking between university and stakeholder is not integrated at university level yet, (5) university-stakeholder information and communication should be improved for example with industry, local government, professional especially to discuss about their need on graduates competency, and (6) due to the limited chance for university to communicate with stakeholder, the empowering natural resource of local potency also reduce. To solve those problems, Career Development and Entrepreneurship Center has developed The Forum of Consultation and Communications (FKK) in Airlangga University, beside as one of university strategic plan to face the globalization, it also build as vehicle to link between university (as science and technology source) and stakeholder (as a graduates user). One of its activity is developing FKK-Airlangga Entrepreneurship Unit (FKK-AEU) to enhance the synergism collaboration between university and stakeholder especially for supervise the student entrepreneurship program. It also become networking system between Airlangga University and government, industry, associations, professional, and public community to improve institution, graduates competency that link and match with job market. Interaction will be reversible and packed in communication forum to disseminate scientific product that still in progress or that will be developed. The university also develop the teaching-learning method such as Problem Based Learning (PBL), Research Based Learning (RBL), Evidence Based Learning (EBL) to enhance the graduates competency based on stakeholder problems and need. By that program, the stakeholder/users can get information related to their problems.

FKK-AEU program was designed through two institutional approaches, internal and external. Institutional internal approach is focused on enhancing the coordination and empowering all of the university asset and potency related to academic activities (namely Tri Dharma Perguruan Tinggi) consist of education, research, and community services to support the FKK. SWOT analysis based on university self evaluation especially on collaboration and development unit will support FKK to construct and mapping the capacity and competency of Airlangga University before enhancing the forum. External approach is focused to identify the potency, problems both on the university and stakeholder as a partner model. After that, the implementation and sustainability of the program can be done to develop the FKK-AEU.

2. OBJECTIVES

General objective of FKK-AEU is creating synergism and beneficial collaboration among Airlangga University and government, industry, NGO, professional, and alumni.

Specific objective of FKK-AEU are (1).Improving the beneficial networking system between Airlangga University and stakeholder especially to enhance the capacity and quality from each other, (2). Creating link and match between university and stakeholder who involve in the forum based on the same vision and mission to increase the self-potency, (3). To build synergism collaboration between university and stakeholder, among stakeholder themselves to optimize resources, human resources, and their competency, (4).Improving the students entrepreneurship competency to become job creator, (5). Redesigning the study program curriculum related to stakeholder competency need, (6). Implementing the integrated activities between university and stakeholder and/or among stakeholders to enhance and develop excellent science and technology research, (7). Creating the effective, efficient, communicative, and consultative network between university and stakeholder, and/or among stakeholders that beneficial for each other to accelerate nation’s competitiveness.
Coordination and management structure of FKK-AEU is showed in Figure 1 below.

Figure 1. Structure Organization of FKK-AEU

3. CAREER DEVELOPMENT

Airlangga University has established Job Placement Center (JPC) since 2003. JPC program are giving (1). Training program for the graduates candidate before their graduation day to prepare good application for a job in English and Bahasa Indonesia, also to improve their confidence to do their self-presentation and interview, (2). Announcing the work job information and position to the faculties by poster, letter, or university electronic media website (http://warta.unair.ac.id), (3). Conducting the staff recruitment and selection system based on the stakeholder position need (industry, Bank, Private or Government Company, etc.). Those JPC program can decrease the waiting time for graduates to get their first job. JPC also conducting Career Planner training for students/graduates to create their realistic carrier plan, then they will motivate to finish their study and ready to compete in job market.

Since 2007, Airlangga University also deeply focused on students soft skills development to enhance their capability to get and compete at a global job market. But on the contrary, the number of job position is getting limited compare to number of graduates. Based on that situation, Airlangga University also designed entrepreneurship training program for students and academic staff. In the future, the graduates will be not only as a job seeker, but can also be a job creator. Regarding that, JPC was recently converted as Career Development and Entrepreneurship Center (March, 2009).

Career development was designed at university level to (1). Create their social entrepreneurship to live together on learning interaction and communication system among...
students from different study program and faculty before they enter the complicated public community and (2). Improve the graduates quality and competitiveness when they are entering a job market and professional practice. They will ready to work with public community/stakeholder. Career development has been done through soft skills development system. The program will be started from incoming students until last of their study (last semester) during 4 year’s study. The state of the art of soft skill development is showed in Figure 2. Students will also learn the soft skills at intra and co-curricular (soft skill integrated in the teaching-learning process) and extra-curricular.

Based on the state of the art in Figure 2, personal/soft skills development at university level was designed using phase-gradual strategy during the period of study as follow.

a. Soft skills development for incoming students. The training program compose of learning skill how to study at university, self motivation training, academic ethics, nationalism, and improving their pride to the university. This program was designed for the first year of the students.

b. Soft skills development for ongoing students (the second year’s students). The activities compose of improving student communication competency (public speaking), problem solving, and creative-critical thinking.

c. Program for the third year’s students are developing their capability to live together, improving their social responsibility during their community practical study based on their study field (health science, social/humanity, life sciences). They can directly know the outcome of their study in public community. During this study, students will get soft skills learning process on team work-interpersonal, reliability and social responsibility.

d. Program for the last year’s student are entrepreneurship training, leadership, motivation others and students professionalism development. This program will prepare students/graduates candidate to improve their self-confidential that can be compete in job market, or as entrepreneur/professional, also increasing their entrepreneurship, leadership-management, motivation others, and professionalism.

Figure 2. State of the art for Students Soft Skills Development at Airlangga University
Development of student soft skills at university level should be totally design synergism among intra, co, and extra-curricular activity. At the end, university will produce excellent graduates who have competency on hard skills and soft skills. It also involve the role of stakeholder especially to communicate and create link and match between university and stakeholder. The effective communication and consultation will be continued and also will be centralized at FKK-AEU.

4. COLLABORATION BETWEEN AIRLANGGA UNIVERSITY AND STAKEHOLDER

Based on university self-evaluation (2008), Airlangga University has signed MoU, MoA and MoI with national and international stakeholder. Field of collaboration are education, research, and community services. Collaboration Profile of Airlangga University in the last three years is listed in Figure 3, 4a,b; and Table 1.

Table 1. Numbers of national and international collaboration/faculty in the last three year

<table>
<thead>
<tr>
<th>Faculty</th>
<th>National</th>
<th>International</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty of Medicine</td>
<td>22</td>
<td>7</td>
<td>28</td>
</tr>
<tr>
<td>Faculty of Dentistry</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Faculty of Law</td>
<td>14</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Faculty of Economy</td>
<td>26</td>
<td>1</td>
<td>27</td>
</tr>
<tr>
<td>Faculty of Pharmacy</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Faculty of Veterinary</td>
<td>12</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Faculty of Social and Political Science</td>
<td>65</td>
<td>5</td>
<td>70</td>
</tr>
<tr>
<td>Faculty of Science and Technology</td>
<td>36</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>Faculty of Public Health</td>
<td>23</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>Faculty of Psychology</td>
<td>8</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>Faculty of Humanity</td>
<td>6</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Institute of Tropical Disease</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Institute of Research and Community Services</td>
<td>58</td>
<td>6</td>
<td>64</td>
</tr>
<tr>
<td>University</td>
<td>52</td>
<td>-</td>
<td>52</td>
</tr>
<tr>
<td>Jumlah</td>
<td>331</td>
<td>48</td>
<td>378</td>
</tr>
</tbody>
</table>

Figure 3. Collaboration profile of Airlangga University in the last three year
Table 1 indicated that national collaboration was still focused to study program, faculty and university development. Group of field on national collaboration in the last three year showed that the number of collaboration was increased (Figure 4a and b). The data showed that public trust to Airlangga University has increased year by year to be a partner with stakeholder and public community.

Based on study program self-evaluation data indicated that service collaboration more focused on training, human resources development, and consultation program. Meanwhile, international collaboration more focused on research than the others field (Figure 4b) Joint research have done especially to share the instrumentation and joint publication. The international joint research will accelerate the university academic milestone achievement on education, research and publication.

Some of the prominent research collaboration are AMRIN STUDY (Antimicrobial Resistance in Indonesia) among Faculty of Medicine-Airlangga University and Leiden University Medical Centrum, Erasmus, University Medical Centrum, dan Robound University Medical Center; Oral Health Impact on Prosthodontic, between Faculty of Dentistry-Airlangga University and Hiroshima University, University of Groningen, Nanyang University of Technology. Excellent Research have improved internationally in the field of HIV & AIDS projects (USAID), health (Ford Foundation), Biochemistry and Biotechnology (University of Groningen, the Netherlands), Malaria (WHO), and Bird Flu (Kobe University dan Kyoto University, Japan). Academic award also has been received from overseas institute/foundation, such as JICA, DAAD, USAID, Ford Foundation, British Council, NEC, etc. Recently, national and international collaboration on bird flu research has been established MoU with pharmaceuticals industry (PT Bio Farma), Indonesian Ministry of Health and Japan Government to install Bio Safety Level 3 (BSL-3) Laboratory, producing avian bird flu human vaccine and build infectious hospital in the future. Strengthen on research collaboration and field of the research internationally will improve the quality and competency of student to enter job market. Airlangga University also has continued its collaboration with the stakeholder (industry, government) especially to open beneficial collaboration (joint venture).

Collaboration on community services between Airlangga University and Local Government has given public outcome. Those are improving the public knowledge and skills in the field of resources, financial management, business plan through training, and consultation. Training on entrepreneurship management also has improved public knowledge on entrepreneurship especially people who work as fisherman. Mentoring program to local government produced the local rules, local budget plan, strategic plan of local government, and hospital management accreditation. Natural disaster that often happened in Indonesia...
make airlangga university build center of natural disaster management system to help people during and after disaster. The university community services program also involve students. The activity called Kuliah Kerja Nyata-Belajar Bersama Masyarakat (KKN-BBM), means students-public community study. Students who involve on community services activity and research above indicated that their length of study were shorter and waiting time for getting their first job also shorter. The data showed in Table 2,3 and 4.

Table 2. The average of length time of doing thesis for Bachelor Program last three year

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>1 semester</th>
<th>1 &lt; X ≤ 2 semester</th>
<th>&gt; 2 semester</th>
<th>Graduates numbers</th>
<th>Average length of doing thesis (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>%</td>
<td>Amount</td>
<td>%</td>
<td>Amount</td>
</tr>
<tr>
<td>2006/2007</td>
<td>613</td>
<td>28,11</td>
<td>810</td>
<td>37,14</td>
<td>520</td>
</tr>
<tr>
<td>2007/2008</td>
<td>860</td>
<td>31,56</td>
<td>805</td>
<td>29,54</td>
<td>495</td>
</tr>
<tr>
<td>Average</td>
<td>697</td>
<td>29,48</td>
<td>794</td>
<td>34,13</td>
<td>505</td>
</tr>
</tbody>
</table>

Table 3. The average of bachelor graduates waiting time to get their first job last three year

<table>
<thead>
<tr>
<th>Academic year</th>
<th>&lt;3 months</th>
<th>3 ≤ X &lt; 6 months</th>
<th>6 ≤ X &lt; 12 months</th>
<th>&gt;12 months</th>
<th>Sample</th>
<th>Grad. number</th>
<th>Average waiting time (m)</th>
</tr>
</thead>
</table>
|               | Amount    | %                | Amount            | %          | Amount | %            | Amount                  | %           | Amount | %            | Amount | %            | Amount | %          | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %            | Amount | %          

5. References

1. Airlangga University self-evaluation. 2008. Center of University Plan and Development

University of Kelaniya, Sri Lanka 155
Sub-Theme C

Issues for Non-Professional Faculties

Maithree Wickramasinghe, PhD.
Department of English
University of Kelaniya
Sri Lanka

E-mail: maithreeuk@yahoo.co.uk

Introduction

Since its inception as a discipline in the country, the various strands of English Studies in Sri Lankan universities have reflected, rejected, complemented and contradicted the historical needs and events of the nation as a whole. Above all, it has engaged with and is a significant aspect of the hybrid (Bhabha 1994), if not multibríd history and culture of Sri Lanka. As a teacher, scholar and practitioner of English, it is due to an extreme sense of frustration about the state of English Studies in the country today (discussed later on) that I have felt compelled to write this paper on restructuring the discipline. This is because I view the discipline as a living, evolving entity (as it can never be an end-product), that need to be constantly revised -- if it is to have meaning, relevance and validity to those who are part of it and those who pursue it. Consequently, my attempts at consciously re-conceptualizing English Studies have to be located not only in the internal developments, cross-fertilizations and advances within the discipline globally but also in the socio-political, cultural and economic currents of the ground situation in Sri Lanka. It is from this standpoint that this paper aims to take stock of the contemporary trends and triumphs of the discipline of English within the universities as well as to conceptualize its challenges and possibilities for the future.

The research methodology for the paper included a selective literary review of material related to English Studies in Sri Lanka (and globally); the analysis of responses to email interview schedules by nineteen academics employed (or who were employed) at the English Departments and the English Language Teaching Units (ELTUs) of the universities of Batticaloa, Colombo, Jaffna, Sri Jayawardenapura, Kelaniya, Peradeniya, and the Open University; and references to experiential evidence of working at the English Departments of the universities of Peradeniya and Kelaniya during the last nineteen years. My respondents were assured of confidentiality vis-à-vis their responses so as to encourage frankness in airing their opinions. They have therefore been anonymized and all identifying markers erased in this paper.

Given my grounding in the research methodologies of both the Humanities and the Social Sciences, I have subscribed to a degree of reflexivity in writing the paper. This is because of my epistemological understanding of knowledge generation as requiring the explicit articulation of a scholar’s subjectivity and standpoint as a means of providing validity; as opposed to striving for scientific objectivity that is ontologically arguable.

This paper highlights what has been identified by academics of English (including myself) as some of the salient characteristics of contemporary disciplinary practice, the
challenges to the departments of English as well as possible ways of restructuring the discipline to suit future needs. However, it makes no pretence of providing an all-inclusive understanding of the issues pertaining to the practice of English Studies. Rather, the knowledge that it produces/constructs is, as all knowledge is, partial in that it is subjective and incomplete, as well as located in time and place.

The Origins of English as a Discipline

Though tracing origins is a questionable venture from a post-modern understanding of the world, I have undertaken the project to contextualize the proposals contained in this paper. Furthermore, the different motivations for the establishment of English Studies in different parts of the world become important when considering the relationship between education and society. In US universities, the formal study of English literature as a subject was begun in the 1860s as a means of teaching a unifying language for the many migrant citizens of that country. By the 1890s the discipline had undergone changes from its earlier focus on composition, pronunciation and speech to literary topics in order to gain ‘access to the higher parts of the human body and soul, creating taste and artistic discernment .... in opposition to industrialization and urbanization’ (Durant and Fabb 1996: 21). In Britain the discipline was proposed by the school inspector, poet and critic Matthew Arnold in 1869 as a cultural bonding agent in a culture weakened by the scientific treatise and developments of the period. It therefore began as a means of providing a Humanist education for the many officers destined to serve the British Empire in the colonies (ibid.). In India, the study of English literature began much earlier as a complicit method of ‘civilizing the natives’ by creating ‘a class of persons Indian in blood and colour, but English in taste, in opinions, in morals and intellect’ (the infamous Macaulay: 1835).

As far as Sri Lanka is concerned, English became an issue of vigorous public interest from the late 19th century onwards due to the colonial government's policy of preference for English educated employees for government vacancies. Wickramasuriya (1976:16) records the clash between the resultant popular ‘craze’ for an English education (including its grammar/literature and as an exclusive medium of instruction) on the one hand, and the demands of intellectuals, nationalists, political leaders and missionaries for a more prominent place for the indigenous languages and literatures of Tamil and Sinhala on the other. Those who fought against an exclusive English education resisted on the grounds of the limited scope for the English educated within the government service (as they were relegated to the lower echelons). They critiqued the institution of a new class/generation of Ceylonese who did not possess knowledge of the vernacular languages and who were alienated from their cultural roots and their Sinhala/Tamil-speaking parents. Thus the relationship between the English language/discipline and society has been one of great complexity since colonial times.

The origin of the discipline of English in Sri Lanka is more recent in comparison with the US, UK and India, and seems to be linked to the general objectives of establishing the University College in 1921. Students at the University College Ceylon offered English as a subject for the BA external examination conducted by the University of London. English was pursued by academics like H. A. Passé, E. F. C. Ludowyk, and Doric de Souza at the University College in the 1920s under Leigh Smith and David Hussey (Ludowyk 1979). As ‘the child of University College’ (ibid.) the Department of English then became part of the newly-instituted University of Ceylon in 1942. With the establishment of the new university, the Ceylon Medical College and the Ceylon University College lost their separate identities and were absorbed into the new institution. The Department of English moved to the newly-built campus at Peradeniya along with the Faculty of Arts from 1951/2 onwards when another generation of academics like Ashley Halpé, Lakshmi de Silva, Yasmine Gooneratne, Kamal de Abrew, D. C. R. A. Goonetilleke, Siromi Fernando and Ryhana Raheem read English literature. In 1956, as a consequence of the democratization of university education and the institution of Sinhala as the official language, there was a sudden swell in the admission of students and the need for language courses in English -- as the majority of university students were not proficient in English. The English Department responded to these changes by teaching English as a second language -- initially through a Sub-department in Colombo. Today each of the fifteen universities in the country has an English Language Teaching Unit.
irrespective of whether they have a department of English. Furthermore, the ELTU of
the University of Kelaniya is currently in the process of upgrading itself as the Department of
English Language Teaching with the primary objective of training English teachers. The
establishment of other universities in the country (Kelaniya and Sri Jayawardenapura in the
1950s, Jaffna, Moratuwa and Ruhuna in the 1970s as well as a number of others from the
1980s onwards) eventually led to several autonomous departments of English.

The ‘origins’ traced above convey the varying impulses for the establishment of
English Studies internationally as being located in the practical, political, social, institutional
and cultural needs of the time periods and countries in question. Furthermore, over the
decades, it is possible that not only the epistemological, theoretical and thematic interests
within the discipline but the socio-political realities of each country have impacted on the
evolution of English Studies worldwide. The following list of contents (incomplete) within
English Studies compiled from an internet search gives an idea of some of the disciplinary,
interdisciplinary, theoretical and thematic strands of the subject worldwide.
Modern English usage
Modernism
Writing skills

The above attempt at listing the contents of English Studies courses is testimony to how the discipline has evolved on several different tracks. They can be loosely categorized as founded on studies relating to literature, language / linguistics, theory, culture, sociology, education, the arts and the media. This deconstructs the claim of English literature studies as being symbiotic of ‘Englishness’ or English culture and illustrates the divergent strands of English Studies based on the interests, specializations, and the country-specific needs of each department.

**English Studies in Sri Lanka**

In making a case for restructuring and rejuvenating English Studies in Sri Lanka, it is a strategic act on my part as a researcher to briefly consider some of the disciplinary developments in English Studies between the original institution of the discipline and now. For instance, undergraduates who read English at the University College in the 1920s sat for the London External degree:

> with its Old English, its Middle English, its History of the Language, its Gothic (if one did the honours course), the dreariness of Sri Garwayne as Tolkien and Gordon put him across, Chaucer – slightly less dreary, but bedevilled by etymology and the dull posts of M. E. grammar. All of this to be literally crammed; the only mitigation was Shakespeare and English literature which stopped dramatically in 1880.

(Ludowyk 1979: 2)

As one of the students of University College, Lyn Ludowyk’s boredom and dissatisfaction with the iron limits set by the London syllabus is clear in the above extract. Yet given the handful of students (sometimes a single student, as in the case of Ludowyk) working with legendary professors Leigh and Hussey, there were no restrictions on what was read outside of the syllabus (*ibid*). When the department was moved from Colombo to Peradeniya as part of the University of Ceylon, the emphasis in the new syllabus was placed on literature, language and phonetics as well as the student’s own evaluation in both Part A and Part B of the Tripos syllabus. Given the links between the departmental staff and the University of Cambridge, the specific inputs and influence of F. R. Leavis and other leading figures of Cambridge University were in evidence.

For a long time, the syllabi of many departments of English were founded on literature as involving the study of compartmentalized literary periods. A couple of my respondents who graduated in the 1950s and 1960s from the University of Peradeniya attests to the department of English providing ‘a grand sweep of literary eras and of literature’ written primarily in England and an overview of how English developed as a language (Riza). In many instances, this has now been replaced by categorizations of literary texts according to themes / genres / movements such as war literature, migrant or women’s writing.

Over the decades the contents of courses have also responded to the internal thematic and theoretical currents in the discipline. An academic who graduated in the early 2000s from Kelaniya, Rani writes ‘I gained knowledge in English Literature (Sri Lankan, British, American Lit, Modern Lit, critical theory, etc.) I also had training on critical thinking and analytical skills’. Another respondent, Ganga notes that past courses have subscribed to an ‘archaic type of Practical Criticism and appreciation of literary techniques called “Dating” … which has proved to be less than useful in retrospect’ (unless one was interested in philology). These have been replaced by courses that incorporate the application of theory -- sometimes in preference to Practical Criticism -- given the impact of critical and literary theories from the 1970s onwards.

---

9 Raymond Williams (1989) is one of the critics who has argued strongly against the idea of English literature signifying Englishness or the creation and expression of the nation – especially on the grounds that until the 19th century a vast majority of people in the UK were illiterate.

10 In the 1960s this sweep terminated with Modern writers such as E. M. Forster and Joseph Conrad.
In the language front, the lack of student proficiency in language skills and grammar has led to virtually all the universities incorporating language courses and thereby diluting the earlier primacy of literature courses. An overview of how English developed as a language has been supplemented by a range of courses on language structure (morphological, phonological, semantic, and orthographic), history and discourse features, English Language Teaching, and Professional English – some of which have been designed for language proficiency. From its inception in 1990 the Open University of Sri Lanka has focussed on teacher training as has the English Language Unit of the Kelaniya University in recent times. Diplomas in English Language Teaching have now been developed into fully-fledged BA degrees in ELT. My respondent from the Open University states ‘our concept of English Studies includes a sound knowledge of the language, its structure … its history and development and its discourse features as well its literature from Elizabethan to post-colonial times, including literature translated into English and New Englishes’.

As a result of postcolonial consciousness both at material and theoretical levels, curricula have incorporated not only texts from other postcolonial countries\textsuperscript{11}, but also indigenous texts in translation as well as comparative studies. The University of Peradeniya, for instance, conducts a long-standing course outlining Sinhala and Tamil Literature ‘in an attempt to keep students grounded in the specific context of literary production in Sri Lanka’ (Vivian).

The understanding of what constitutes ‘a literary text’ has also been expanded to include all written material, communication media, artifacts, the visual realm, social and cultural discourses. Vivian therefore contemplates that ‘English academics now publish on just about anything bringing discourse analysis and cultural studies to bear on what they read—be it literature, society, culture, politics, whatever’. Consequently, English Studies also involve ‘interdisciplinary studies … with reference to gender, culture, and the construction of meaning’ says Malini. As a university teacher who graduated from the University of Kelaniya, she feels that it would be more appropriate ‘to call the Department one of literature, language and culture studies now, rather than the traditional Dept of English literature’ in view of its current interdisciplinary focus. Vivian sums up the status in her department by saying ‘all major orientations in English Studies—Literature, English Language Studies, Theory, Linguistics, Cultural Studies—are now represented in our syllabus’.

The above vignettes of how some departments of English have evolved over the years indicate some of the divergent strands pursued in the practice of English Studies in Sri Lanka. When it comes to literature courses, the supremacy of the Humanist canon of literature\textsuperscript{12} and the touchstones of literature valorised in the early part of the 20\textsuperscript{th} century have been subverted chiefly due to the epistemological influence of feminism, Marxism, postcolonialism and poststructuralism/postmodernism in knowledge generation. These critical theories have undermined the legitimacy of a literary canon by exposing the phallocentrism, arbitrariness, elitism and social/aesthetic values of the criteria in selecting the standards for such a canon. Inputs from linguistics, women’s studies, cultural studies, sociology, media and communication studies, management, philosophy, political sciences and education have significantly explored the disciplinary boundaries of English resulting in new dynamic possibilities.

Consequently, English Studies in Sri Lanka is today an interdisciplinary subject that incorporates the study, teaching and research of 1) literatures written in English (including British, American, postcolonial literatures and translations) 2) language and sociolinguistics, 3) literary, critical, political and philosophical theories, 4) gender, culture and society 5) media and communication, 6) pedagogy and research methodology. The internal growth and diversification within the discipline have taken place as a response to academics and teachers pursuing further studies abroad, interacting at a global level with other international departments and academics, presenting their work at global knowledge forums, being published worldwide as well as through keeping abreast of avant-garde knowledge developments.

\textsuperscript{11} Halpé (1993) discusses the problems of naming these literatures in English, internationalism, the criteria for inclusion / exclusion, and balance in his paper on English and the curriculum.

\textsuperscript{12} An English literary canon was originally advocated by F. R. Leavis (1948).
Contemporary Issues and Challenges relating to the Study of English

The selective literature survey on English Studies in Sri Lanka, the responses to my Interview Schedule as well as my own experiences as a teacher, researcher or practitioner of English Studies led to the identification of the following issues that need to be taken into consideration in re-conceptualizing English Studies.

To begin with, there is a need to engage with the postcolonial resistances and paradoxical emotions towards English within the wider populace in the country. There are dominant misconceptions that are prevalent with regard to the discipline of English. I refer to the stale and sour remnants of nationalist allegations of the presumed interests of English courses as being British and eurocentric, as being ‘western’ and therefore alienated from Sri Lankan culture, as catering only to the Sri Lankan elite, and as not serving national needs. These accusations reflect the tensions of the complex, complicit and contradictory relationship of those who do not possess English language skills and who see themselves as alienated or estranged from these facets of Sri Lanka’s multibrid culture. Thus the way in which English (‘kaduwa’)13 becomes a metonymy for a particular aspect of culture, class, kingship, colonialism, and non-democratic power at varying times are explored by a number of Sri Lankan scholars (including Fernando 1976; Kandiah 1984; Gunesekera 2005).

On the other hand, there is grudging acknowledgement of the indispensability of English when it comes to employment opportunities. The supremacy of the English language within the globalizing processes of economic migration, trade, travel, information technology and the media have thus fuelled a massive demand for English language proficiency. This hunger for competence in communication has also resulted in aspirations to read for a BA in English – sometimes based on the assumption that such a degree is founded on language (or as leading to greater language proficiency). There does not seem to be adequate understanding that the current degree in English is founded on a high proficiency in English language, analytical and critical skills. Often, departments of English are expected to be solely committed to teaching English language to those not proficient in English, despite the work done by the English Language Teaching Units. There is a national demand to make undergraduate degree programs more “vocationally oriented”. This places demands on English departments by making them opt for more “professional/vocational” content rather than the more academic. More support in terms of funding and research opportunities go to ELTUs as opposed to departments of English (the World Bank grants being case in point)” writes Rizvina, a respondent from an ELTU.

This mismatch of expectations on the part of potential undergraduates and the disciplinary standards / diversity that constitute the discipline of English today have resulted in large numbers of angry, disappointed and alienated students who unfortunately do not qualify to read English at the universities each year. Currently, English departments do not have the requisite expertise or the institutional capacity to meet these erroneous expectations at university level (so as to enable graduate employment via English proficiency as well as associated competencies in IT and ‘numeracy’ skills). However, it must be noted that a number of English departments have incorporated courses on soft / personal skills into their syllabi in recent times. The lack of compatibility between student expectations, the professional requirements of a transitional country like Sri Lanka and the capacities and expertise of departments of English would need serious contemplation in restructuring English Studies.

Within universities, a critical issue affecting the quality of English Studies is the plummeting standards of English language proficiency in undergraduates of the English departments in recent years. Proficiency in reading and writing has dropped. My respondent Riza writes of the ‘poor knowledge of English, of the language, its structure, vocabulary, idiomatic and rhetorical patterns. This is probably because the reading habit has not been encouraged for a complexity of reasons -- linked to this is the lack of analytical and writing skills. Lack of reading has also led to ignorance of the world, its history and its literature.

13 The Sinhala term that came into prominence in the 1970s to signify the power of English language use as a weapon of privilege related to class / culture (though it is not so frequently used now).
Students tend to be culturally ‘monogamous’!! They only know – if ‘know’ is the correct verb -- about their own religion and culture. For the first time in the history of the Department of English at the University of Kelaniya, there were no undergraduates qualified to sit for a Special Degree in English in 2008. The abject state of English can be related to a number of reasons. At the macro-level, though successive governments in the country have identified the urgent demand for English by the populace, but there has not been a sustained, integrated approach to respond to this need over the years except through ad hoc policy changes and provisional measures. The appointment of teachers not always adequately trained or qualified to teach English in schools and the diminishing faculty influence over English teaching and ‘A’ Level marking at secondary levels over the years could be other contributory factors. Less stringent marking at the A/Ls and the lowering of the pass mark at the Dept of Examinations in order to increase the number of A/L English passes …. results in students who normally would not have been admitted to study English at the degree level, now gaining entrance to universities’ writes Malathi (usually to ensure that a larger number of students qualify and are selected to read English at universities). This has resulted in greater diversity amongst students as the bigger intakes draw ‘on students from both provincial and urban, rural Maha vidyalayas 14 and elite schools’ as pointed out by Dhamani. The changing profile in the aptitude of undergraduates who read for a BA in English needs to be taken into account in restructuring efforts.

It must be stressed here that the problem is not simply one of language acquisition; rather, it is a far more complex challenge of corrective action that neither the Departments of English nor the English Language Teaching Units have the adequate pedagogical expertise to address. ‘We have not been trained to address, or ‘unteach’, or solve the problems of decades of faulty English language learning’ writes Kumari from an English Department. The departments therefore are faced with not only a disciplinary but an ethical / political dilemma. Options for most departments have been whether to stick to departmental standards and fail students (with the attendant slog of additional paper marking each year for the already overburdened faculty); provide supplementary grammar / writing courses and individual tutorials for weak students (identified via internal testing) in the vain hope that these students will catch up; restructure courses in such a way that the bulk of student assignments focus on oral presentations rather than written work; or bring down the standard of marking and pass students. Options for students are exceedingly limited. Those who have obtained ‘A’ and ‘B’ grades as well as those who have received simple passes are now informed that their aptitude is worthless. Their enthusiasm and confidence are crushed; and some of them are actively discouraged from pursuing their subject choice. Where they have achieved ‘competence’ during their school years, they must now struggle to deliver and for some it may not be possible to do so. The following comments exemplify the debate within English departments with regard to English Studies today.

Students who are identified as “weak” in English are given extra classes in English. These classes are not for credit but we expect all our students to attend those classes. Some members of staff (those who teach the “language” sections of the syllabi) are assigned the task of teaching these students. Of course, how to do remedial English classes is a question not yet successfully resolved: small groups, one-on-one, what type of writing (academic / personal / creative?), whether the focus should be on writing assignments that the students do for credit courses, etc. This year, because we have a Fulbrighter who regularly teaches writing in the US, we are offering these remedial English classes at the first year level. Some feel we should catch them as soon as they enter or even before…. We have also assigned a young lecturer to attend the classes in order to train him to take over instruction once the Fulbrighter leaves. We are also debating whether to give up the First Year entirely to teaching writing (a lot of resistance there from staff), to take over one of the compulsory first year courses for this purpose, to bring the students offering English along with the rest of the student population for the intensive course and to offer them special instruction’.

14 This refers to the central schools in the rural areas of Sri Lanka.
English Studies also needs to grapple with the challenges posed by competitive and highly commercialised local knowledge economies. Within the country, there are numerous unregulated institutions, ‘tutories’, and self-proclaimed experts who teach spoken and written English as well as ‘A’ Level English. Even some prestigious institutions offer dubious external and sub-standard internal degrees and diplomas when it comes to English. Indiscriminate printing of lesson materials, study guides and translations by publishing houses and individuals have further relaxed standards and compromised on quality. In fact, the potential of English teaching as a commercial venture is being exploited to the fullest — though not by Sri Lankan universities.

The goals of organisational efficacy in universities through periodic organizational restructuring funded by global multilateral agencies, though designed to maximize on higher education, have not always yielded the expected results. In particular, the changes to curriculum according to course systems have led to a tapering in academic interests while a single-minded pressure to focus on quantitative outcomes have been at the expense of processes. Thus it must be observed that without compromising on the desired objectives of institutional efficiency, evaluation methods need to be diversified to prevent superficiality in appraisals and a lowering of academic standards. This struggle is evident in ‘Faculty trying to reconcile standards they are expected to maintain vis-à-vis majors in English without crashing the entire system by failing 70% of those who sit for their first year examinations — those who really should fail’ writes my respondent Prabath. Maintaining departmental or disciplinary standards in quality have thus become a critical issue.

For decades, the overwhelming majority of undergraduates reading English have been women. A number of departments have responded to this demographic fact by focussing on women's perspectives and issues as well as mainstreaming gender concerns into the syllabi so as not to alienate women students. Nonetheless, the situation requires further contemplation -- for the discipline as well as for the students themselves. Do we need to consider special provisions for male students for the sake of gender equality? Do we need to orient the discipline in recognition of the gendered interests of its women students?

As noted earlier, we have also to engage adequately with the status of English Departments as progenitors of interdisciplinary scholars and research studies. The interdisciplinary nature / phase of English Studies need formal sanctioning not only for epistemological reasons but also because of its implications vis a vis the job market. Furthermore, ‘English Studies (literature) is also an elitist discipline to a large extent in Sri Lanka. Therefore it is inevitably confined to a small group of people. On-line courses could make it more accessible. The attitude to English should change -- one need not have an inherent aesthetic sensibility to appreciate English literature. So the syllabi need to change -- English lit also should not act as a status symbol’ writes Vasanthi, another respondent. Doubtless, exploiting the technological revolution in information would broaden access to English Studies to some extent.

As academics of the discipline of English we are unavoidably aware of the politics associated with the teaching and study of English language and literature. A number of critical essays within the discipline have dealt with the politics and ethics relating to English. Recent examples are Crusz (2008) on an aesthetic of and duty to justice; Wickramasinghe (2008) on the ethics of reading and researching English literature; Nuhman (2008) on Tamil / Sinhala and Sinhala / Tamil translations of literature as a socio-political and literary activity designed to sponsor mutual understanding and harmony amidst moribund ethnic relations. This brings us to the point that, despite being caught up in unresolved postcolonial identity politics, we have not exploited the full potential of English in supporting ethnic harmony. Thus even at this juncture it is important that there are integrated efforts on the part of the government and the universities to devise national policies and programs aimed at peace and reconciliation through English Studies. Furthermore, as pointed out by Kanagaratnam, a respondent from an ELTU, ‘English Studies need to further expand its relevance to indigenous cultures / languages’ especially given the implications of Sri Lankan English and bilingualism / trilingualism in today’s context. Given the commercialization of academia in recent times, it is
critical that restructuring attempts are located in Humanist and liberal values as well as the critical tradition of English Studies – if the academic core of the discipline is not to be diluted.

Rejuvenating and Restructuring English Studies in Sri Lanka

The issues and challenges highlighted in the earlier section need to be the base of any project aimed at restructuring English Studies, and in the words of Gayathri Chakravorty Spivak:

“I am attempting to suggest our pedagogic responsibility in this situation: to ask not merely how literary studies, more correctly the universitarian discipline of English studies, can adjust to changing social demands, but also how we could, by changing some of our assumptions, contribute toward changing those demands in the long run.”

Gayathri Chakravarthy Spivak (1987: 100)

Spivak’s concerns were focused specifically on deconstructing the positioning of English Studies as separate from society / ideology; and for a reading that supported dialectical and continuous engagements between these two areas. This paper is founded on the assumption of a symbiotic relationship between society / ideology and English Studies as a whole (constituting strands of language, literature, theory, linguistics, culture, gender, media etc.). Consequently, the crucial question remains the same. To put it simply: in relation to English Studies in Sri Lanka, how can we reinvent and restructure the discipline of English at the University of Kelaniya and other universities in Sri Lanka so as to a) to meet the social needs of the country; b) to not compromise on the integrity and standards of the Department; c) to change our assumptions about the discipline; and d) to create new social / disciplinary demands. ‘The primary challenge is to remain an academic discipline while catering to the needs of the job environment’ as asserted by Rizvina. This would require changes to the curricular and discipline, teaching and pedagogy, educational structure (new programs), institutional structure, networking and linkages as well as departmental inputs at national level and international levels, concludes Dhamani.

Firstly, the Discipline and the Educational Structure

In the earlier sections of this paper, I discussed the evolution of English Studies on several different tracks simultaneously – globally as well as in Sri Lanka. However, the educational structures have not always changed correspondingly to accommodate these developments. In Sri Lanka, changes to the educational structure would involve expanding and diversifying the conceptualization of ‘English Studies’ to include several different B A and MA degree programs over a period of time. The University of Colombo has already instituted the option of specializing in either literature or linguistics in their B A Special degree programs. Jaffna University is also ‘planning a degree course named English Language Studies accommodating English linguistics, language skills, translations, Sri Lankan cultural studies (accommodating Dalit and women studies) solely on English and English related studies for a three and four year study programme with specialization in ELT, English language and literature designed in a semester system’ writes Kanagaratnam. The following are other possibilities.

• B A in English Language

This degree could be designed to address English language proficiency needs in the country – by immersing students in courses that focus on English language acquisition (reading, writing and speaking skills) and remedying inappropriate usage as well as support courses on literature, linguistics and other interdisciplinary aspects of English Studies.
Students could specialize in Business English, Medical English, Legal English and other varieties of technical Englishes that are required for various professions.

- **B A in English Literature**
  
  A degree in literature could engage those interested in literatures in English (including translations from world literatures) and could conform to the more traditional disciplinary bent towards the analysis of literary and other texts and critical thinking. Traditionally, many of our graduates have exploited the skills developed from the traditional core of English Studies – critical analysis – in various job sectors. Given that today, texts have come to include newspapers, films, policy documents, graphics, legal drafts, advertisements, historical writings, letters, diaries, websites, artefacts, etc., critical and analytical expertise can be utilized in the following fields as pointed out by Durant and Fabb (1996). Training in rhetorics can develop skills in analysing techniques of speech, writing and persuasion for speech writers in politics, professions, business and the media. Training in Christian theology and hermeneutics has assisted in delving into the possible meanings of religious and legal texts in other countries. Philology and textual criticism have established accurate versions of texts (especially historical texts). Professional criticism and reviewing courses have assisted critics in evaluating contemporary creative work. Academic criticism has served to engage with / inform teachers and students. In general, the fields of education, advertising, journalism and the media have generally recognized the worth of English degrees. To provide value addition however, English departments need to professionalize / market this valuable training in textual analysis by orienting it to the employment needs of the legislature and politicians, policy-makers and lawyers, theological institutions and research organizations, the Department of Archaeology, the National Archives, etc.

- **BA in English Linguistics**

  A degree in English linguistics could encourage the study of the English language; its structure (morphological, phonological, syntactic, semantic, and orthographic) its history and development and its discourse features especially with special reference to Sri Lankan English, bilingualism and trilingualism. It would serve to ground English Studies in the Sri Lankan context and aim to address some of the burning political / ethical needs of the hour.

- **B A in Interdisciplinary Studies in English**

  This degree could incorporate the global trends in the discipline towards interdisciplinary studies. It could acknowledge the special status of English in promoting interdisciplinary post-graduate work relating to women, gender, culture, communication, ethnicity, politics, peace, development, disability, and the media, to name a few examples. These interdisciplinary characteristics have often led to our graduates finding employment with INGOs, NGOs, development organizations, research institutions, media institutions and institutions of higher education.

- **B A in English Professional Studies**

  This B A degree can build on the technical expertise related to English Studies in the form of courses in translation methods, interpreting, critical analysis, editing, drafting, speech writing, website designing, report writing, screen writing, copywriting, teaching and pedagogy as well as research methodologies. With the assistance of other departments and faculties (Business Management, for instance) in the university it could develop a bank of professional experts in English Studies who could also be self-employed if they so wished.

- **B A in English Language Teaching**

  There is no doubt that teaching English language should be a priority in the country. As argued by Vasanthi, “a literature degree should not be seen as a qualification to just teach
the English language. It should be considered as a clearly defined discipline’. Both the Open University of Sri Lanka and the University of Kelaniya are currently offering degrees in English Language Teaching. This is aimed at building the capacity and a corps of English language teachers to address English language proficiency needs in the country at primary and secondary levels.

- **B A in Creative English**
  
  With an emphasis on creative writing, this degree could train students to capitalize on their innate talents for creative purposes with the help of other departments and faculties (for instance, Liberal Arts) as well as creative and professional writers from the community. Students could also be given practical skills on writing book proposals, developing manuscripts, writing funding proposals for creative projects, budgeting theatrical productions, accessing sponsorship etc., so as to direct them into generating their own work opportunities.

  The degree programs outlined above need not be conceptualized in complete isolation from one another. In order to preserve and maintain the academic integrity of English Studies it is vital to ensure that the core facets of the discipline (literature, language, linguistic, interdisciplinarity and research) remain as important components of each degree.

**Secondly, the Institutions**

Given these manifold possibilities for future English Studies, the current institutional casing and compartmentalization into a singular department of English would need reorganization into a number of departments under a Faculty of English Studies (along the lines of the law or medical faculties). The final goal would be the institution of departments of English Literature, English Language, English Linguistics, English Language Teaching, Interdisciplinary and Multidisciplinary English Studies, English Pedagogy and Policy Studies, and a Centre for English Research Studies -- to name a few. Under the institutional structure of a faculty, students should take courses only from English Studies, thereby immersing themselves in the subject as far as possible. Other faculties from within the university (such as the Faculty of Management) could provide supplementary courses that could professionalize degrees and provide self-employment / income-generating components. Such initiatives would lead to diversified but inclusive programs of study that are scholarly and cutting-edge, professionalised and needs-based. If undertaken, the objectives delineated above need careful consideration and adaptation according to the ground situation of each university. Keeping in mind the different historical, socio-political and cultural priorities of each institution, universities should formulate long-term policy and a step-by-step comprehensive plan calculated to fund, equip, and develop academic cadre so as to institute Faculties of English over a period of time.

**Thirdly, the Departments**

The lack of a strong ties and consistent networking (especially with the English departments in the North and the East) as well as the lack of an inter-university forum on English Studies have led to the English departments in the country working in virtual isolation. In order to be in the forefront of English Studies and influence national policy directions it is important that English departments organize themselves into a convincing force / academic cum professional body that can engage with the challenges of our times. As proposed by Pushparani, one of the tasks would be to formulate common benchmarks in the quality of English Studies that all universities should endeavour to follow.

Today, the institutional cultures within universities (promoted by global reorganization efforts) challenges academics to ‘makeover’ from top-down approaches, isolated research work and distanciation from students to more engaged, participatory and interactive roles within departments. While these may allow for a greater degree of innovation in teaching, it does not always allow space for research. On the one hand, this needs to be urgently rectified given the significance of research (for instance, in teaching methods / pedagogy to ‘unlearn’
flawed English; to develop benchmarks in quality; for inputs into national policy on English within the discipline; and to move towards the establishment of guiding principles on Sri Lankan English for primary, secondary and tertiary levels of education). On the other hand, departments need to be professionalized through in-house staff training on the latest in pedagogy, research methodology, networking techniques, ethics and participatory leadership and updated resources if they are to become forerunners in English Studies. This could be complemented by the establishment of local and international linkages, networks with employers, employers’ federations, professional bodies, academic bodies, media and arts organizations, creative writers etc. Furthermore, many English departments ‘lack variety in specialization; confine themselves to internal recruitment so no new blood (we seem to like clones); no postgraduate students’ writes Dhamani. Measures need to be taken to diversify academic interests and ensure a vibrant academic cadre from other universities and specializations. A considerable chunk of resources need to be allocated to engaging with internal and external students via the internet.

At National and Regional Levels

Any attempt at restructuring English Studies requires a national approach as well as the support of the state. ‘I think restructuring English studies in the universities necessitates restructuring English studies in the school system, the A/L teaching, evaluation and marking as well. Isolated restructuring of the higher education system is going to be a flop’ writes Piyumi. Referring to the emphasis on English language teacher training in the educational reforms of the early 2000s, Raheem (2004: 42) concludes ‘in contrast to the past the assumptions of society at large, the views of the legislature and the goals of the ELT practitioner seems to have coincided’. She goes on to list the challenges that need to be faced given the harmonizing in policy and practice: they include appropriate guidance for teachers in terms of the required methodologies and approaches; equitable distribution of qualified teachers and resources to underprivileged areas; teacher higher education and training; re-skilling’.

The quality of English language teaching is a recurring issue. ‘Given the mushrooming number of tuition classes around the country, I don't think that accessibility is the issue, its quality that matters. Therefore, the quality of primary and secondary English teachers should be improved to foster a culture that discourages students from attending tuition classes’ writes Devini. Consequently, it is also imperative to re-establish the English Departments’ lost status as the drivers, standard-setters and final authorities of English Studies nationally, as one reason for sliding standards is the marginalization of university academics from powerful decision-making bodies and the corresponding disinterest of academics to contribute to these bodies. The contributions of academics would lead to a strengthening of linkages between English at primary / secondary levels and the universities, the adherence to common quality standards and the infusion of the latest developments into the discipline at secondary level.

Another issue that requires state support is the status to be assigned to Sri Lankan English within the education system. Rizvina writes of the need to remove ‘the stigma attached to those who don't speak “standard” English …. The concept of standard vs non-standard has to be challenged’. In 1994, Raheem and Gunesekeere discussed this very issue of defining standards for the spoken varieties of English in Sri Lanka given the complexities associated with English usage. In today’s context, given the challenges discussed earlier, it becomes even more urgent to subscribe to a consistent policy on written and spoken Sri Lankan English at all levels, especially as there seems to be a mismatch between the variety of English accepted at secondary level and tertiary level.

The vibrant possibilities of re-conceptualizing English Studies discussed above could explode, once and for all, some of the more fundamentalist and parochial condemnations of the discipline of English within the country as elitist, impractical, colonial remnants. At the same time, it is also necessary to look outwards in terms of how Sri Lankan universities could engage with the increasing English language requirements of the South and South East Asian region. ‘The ELTU of the University of Kelaniya has over the years attracted students from Asian countries to some of our courses’ write Kumeri. This seems to be the way forward as well as by improving networks and linkages with universities from other countries so as to
facilitate the expansion and exchange of updated knowledge on the discipline from different perspectives as proposed by a number of respondents.

* * *

As discussed hitherto, the potential for English Studies is immense -- if we apply an alternative paradigm of engagement. This requires long-term policy and structural changes first, a systematic program of action at university level and the preparation and training of adequate specialised cadre for some of the areas outlined. Given the necessary groundwork, such a prospect may not be immediately achievable. However, it should be a goal for the not-too-distant future if we have an inclusive and liberal vision, the intellectual courage and the ethical conviction to plan ahead and prioritise funding; and to re-design and re-structure the discipline. Such initiatives should not only meet the local on-ground needs of national concord and individual economics but also engage with global epistemological movements and knowledge possibilities. Thus in view of the diverse issues relating to English Studies and the varying standards of English proficiency in the country, there needs to be multi-pronged approaches to rejuvenate and restructure English Studies in Sri Lanka. In so doing the original classicist humanist objectives and the critical tradition in learning should not be compromised. Furthermore, contemporary goals of interdisciplinarity, flexibility, fusion and dynamism in what constitutes knowledge in English Studies must be maintained. Only then can English Studies be a form of progressivist education that can assist the critical, intellectual, professional, as well as commercial growth in individuals and address the national needs of the country.

Bibliography


Kandiah, Thiru (2008) “And how can we know the dancer from the dance? Postcoloniality, the unified sensibility, self-reflexivity and Ashley Halpe, man, poet and much else” in Chelva Kanaganayakam (ed.) Arbiter of a National Imaginary: Essays on Sri Lanka - Festschrift for Professor Ashley Halpe, Colombo: International Centre for Ethnic Studies.


Factors Affecting Employability of Graduates holding Non-Professional Degrees in Sri Lanka

E.R.K. Perera\textsuperscript{a}, and A.N.F. Perera\textsuperscript{b}

\textsuperscript{a}Faculty of Agriculture, University of Peradeniya, Sri Lanka
\textsuperscript{b}Wayamba University of Sri Lanka, Kuliyapitiya, Sri Lanka

E-mail: kalyanip@pdn.ac.lk, Phone: +94 81 2395328, Fax: +94 81 2395322

Abstract

Enhancing employability of the graduates is a challenge faced by the Faculties which offer degrees that are not considered as 'professional' degrees in the University system of Sri Lanka. This paper presents the findings of several questionnaire surveys and reviews. The job market has changed rapidly over the past several years. More employment opportunities have opened for graduates from certain disciplines, while for a considerable proportion of the graduates, finding an employment has become a problem. Time taken to secure the first job after graduating varied among institutes, disciplines, and the grades. Generic skills of the graduates, industrial training, attitude of the employers, graduates and the teachers influenced employability. Job satisfaction, job security and salary play an important role in continuing with the first job. Most of the Faculties attempt to address this issue by improving relevance and quality of the degree programme through curriculum review to improve generic and professional skills of undergraduates and establishment of industrial links, and introduction of innovative student centered teaching learning and assessment strategies. Details are given in the paper.

Key words: Graduate Employment, Non-Professional degrees, Issues

Introduction

Education is considered as the currency and the key determinant of prosperity of future generation in the 21st century knowledge economies. Sri Lanka holds a unique status in the world education arena as a model developing country that has achieved extraordinary success in providing universal primary education and attaining high levels of male and female literacy rate at a reasonably low expenditure. In fact, the educational institutes of the country have been celebrated in South Asia even during the 1\textsuperscript{st} century B.C., when education was in the hands of the clergy. The present education system that encompasses primary, secondary and tertiary sectors is an evolutionary product of the British education system instituted when the country was under British rule. After gaining independence in 1948, the education system was subjected to periodic modifications to cater to the needs of the county. Prior to independence, access to education was limited to the rich and elite. In 1949 the independent Sri Lanka introduced the 'Free Education Act' to open the doors of education to the general public, and witnessed remarkable and continuous increase in school enrolments. Later in 1998, another legislation - 'Compulsory schooling for 5-14 year olds' was passed accelerating school enrolments to exceed 99% and increasing the literacy rate to the superior level that Sri Lanka enjoys at present.

The modern system of University education is also an evolutionary product of the higher education model introduced to the prevailed advanced education system of the country by the British. The first University – The University of Ceylon established in 1942 has been subjected to considerable changes over the past six decades since independence. When the demand for higher education rose as a result of increased access to school education, a number of new Universities were established to provide greater access to higher education. Admission criteria were modified to make more equitable access to University education to
students from the ‘disadvantaged’ districts. Furthermore, several new degree programmes that deviated from the mould of traditional degree programmes offered by conventional Universities were also introduced. Despite all those efforts, the public University system of Sri Lanka funded by the state failed to expand adequately to provide opportunities for higher education to the increasing number of students who become qualified for admission to University, due to financial constraints encountered. University admission policy was thus modified to admit only the most meritorious students of those who qualified. During the years that followed, the country witnessed the emergence and escalation of yet another problem - graduate unemployment. Today, the higher education system of Sri Lanka is confronted with dual challenges – increasing access to higher education and improving graduate employability. This paper presents a brief overview of the progression of the University education in Sri Lanka and the findings of several studies conducted on graduate employment with special emphasis on the factors affecting employability of the graduates holding degrees that are not considered as ‘professional degrees’ in Sri Lanka.

Progression of the University Education in Sri Lanka

The predecessor of the modern University system of Sri Lanka – The University of Ceylon was established on 1st July 1942 as a modest version of the Oxford – Cambridge model that was celebrated at the time. It was to be unitary, residential and autonomous. There were only four Faculties - Arts, Oriental studies, Science and Medicine, which collectively had 55 members in the academic staff and 904 undergraduate students. The medium of instruction was English. Only the rich and elite could access University education. Most of the senior academics were foreigners as the country did not have sufficiently qualified local candidates to be recruited. The prime objective of the University was to produce intellectuals needed for the administrative and professional services. The academic programmes implemented under the guidance of the foreign professors were mostly similar in disciplines and standards to those offered in their respective Universities. This helped the University of Ceylon to secure international recognition for the degree programmes conducted in its two campuses - Colombo and Peradeniya.

This system continued until 1959, when two centres of traditional Buddhist learning - The Vidyalankara and Vidyodaya Pirivenas were elevated to University status to increase access to higher education. Initially the two new Universities were exclusively allocated for male students and to academic programmes in Arts and Humanities streams. Due to these limitations, granting of fully fledged University status was delayed until the Faculties of Science were established, and admission of female students was allowed to both institutes. The two new Universities were renamed as the University of Kelaniya and the University of Sri Jayewardenepura, respectively. In later years Commerce and Management streams were also introduced to the Universities of Kelaniya and Colombo.

In 1960s Sri Lanka witnessed the entry of the beneficiaries of ‘Free Education’ to the Universities. The demand for University education began to rise as the student numbers qualifying for University education increased with time. The state could not increase the student intake at the same rate due to financial constraints encountered in providing free University education. However four ‘new’ Universities – The Universities of Jaffna, Ruhuna, Moratuwa, and the Eastern University of Sri Lanka were established between the late 1970s and early 1980s. University admission policy was modified to limit admission. An apex body - The University Grants Commission (UGC), was established in 1979 to allocate funds to public Higher Education Institutes (HEIs), plan and coordinate University education, maintain academic standards, and regulate the administration of and admission to HEIs. The Open University was created in 1980 to provide access to higher education through distant mode to interested qualified individuals who could not secure admission to state funded public Universities. In addition eleven ‘Affiliated University Colleges’ were established at provincial level to offer certificate and diploma courses to those who could not secure University placement. The plan was to absorb the interested and qualified diploma holders to Universities through lateral entry. However, this plan was never materialized and the ‘Affiliated University Colleges’ were amalgamated and elevated to University status creating four new Universities – the Rajarata University, the Sabaragamuwa University, the South Eastern University and the Wayamba University in the 1990s.
However, increasing demand for higher education was not the only problem that the country had to be dealt with. Graduate unemployment was on the rise since 1960s and when these new Universities were established, an initiative was taken to introduce ‘employment oriented’ degree programmes. This trend continued and two additional Universities – the Uva-Wellassa University of Sri Lanka and the University of Visual and Performing Arts were established in 2005.

Apart from these Universities, several distinguished institutes of higher learning were also elevated to degree awarding status during the 1977 – 2005 period. Table 1 presents the list of state funded Universities and Institutes of the University system of Sri Lanka, the years of establishment and the student enrolment as at 2007.

Table 1. The State Universities and other Higher Education Institutes in the University System of Sri Lanka, Year Established and Student Enrolment

<table>
<thead>
<tr>
<th>UNIVERSITIES</th>
<th>Year Established</th>
<th>Student Enrolment (2007)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Colombo</td>
<td>1942</td>
<td>12158</td>
</tr>
<tr>
<td>University of Peradeniya</td>
<td>1942</td>
<td>11736</td>
</tr>
<tr>
<td>University of Sri Jayawardenapura</td>
<td>1959</td>
<td>9291</td>
</tr>
<tr>
<td>University of Kelaniya</td>
<td>1959</td>
<td>8071</td>
</tr>
<tr>
<td>University of Moratuwa</td>
<td>1972</td>
<td>4718</td>
</tr>
<tr>
<td>University of Jaffna</td>
<td>1974</td>
<td>6084</td>
</tr>
<tr>
<td>University of Ruhuna</td>
<td>1978</td>
<td>7203</td>
</tr>
<tr>
<td>Eastern University of Sri Lanka</td>
<td>1981</td>
<td>2242</td>
</tr>
<tr>
<td>South Eastern University of Sri Lanka</td>
<td>1995</td>
<td>1223</td>
</tr>
<tr>
<td>Rajarata University of Sri Lanka</td>
<td>1995</td>
<td>3269</td>
</tr>
<tr>
<td>Sabaragamuwa University of Sri Lanka</td>
<td>1995</td>
<td>2668</td>
</tr>
<tr>
<td>Wayamba University of Sri Lanka</td>
<td>1999</td>
<td>1833</td>
</tr>
<tr>
<td>University of the Visual and Performing Arts</td>
<td>2005</td>
<td>2633</td>
</tr>
<tr>
<td>Uva Wellassa University of Sri Lanka</td>
<td>2005</td>
<td>362</td>
</tr>
<tr>
<td>Institute of Indigenous Medicine</td>
<td>1977</td>
<td>738</td>
</tr>
<tr>
<td>University of Colombo school of Computing</td>
<td>1987</td>
<td>983</td>
</tr>
<tr>
<td>Gampaha Wickramarachchi Ayurveda Institute</td>
<td>1995</td>
<td>342</td>
</tr>
<tr>
<td>Swamy Vipulananda Institute of Aesthetic Studies</td>
<td>2005</td>
<td>182</td>
</tr>
</tbody>
</table>

(Source: UGC)

By 2009, the University system of Sri Lanka consisted of 14 Universities and 4 institutes that offer 90 different degree programmes, for which a maximum total of 20270 new students will be enrolled. This is a significant progress from the 4 degree programmes and 904 students the University of Ceylon started with in 1942. However, as evidenced from the pattern of upward mobility of students (Figure 1), only about top 2% of the age cohort that entered Grade 1 for school education gets the opportunity for University education. As the cost of undergraduate education at the public Universities is borne by the government (Table 2), the University system could not expand in the same pace as the demand for higher education increased. This led to the emergence of the problem of limited access to higher education.
Sub Theme C - Issues for Non-Professional Faculties - ASAIHL 2009

Figure 1. Upward Mobility of Students in the Education System of Sri Lanka
(Source: Planning division, Ministry of Education)

Table 2. Higher Education Expenditure, Admissions & Graduate output in Sri Lanka

<table>
<thead>
<tr>
<th>Year</th>
<th>1995</th>
<th>2000</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher Education Expenditure as a % of Gross Domestic Product (GDP)</td>
<td>0.47</td>
<td>0.49</td>
<td>0.50</td>
<td>0.51</td>
</tr>
<tr>
<td>Higher Education Expenditure as a % of Total Government Expenditure</td>
<td>1.45</td>
<td>1.59</td>
<td>1.80</td>
<td>1.78</td>
</tr>
<tr>
<td>Number of New Admissions/yr</td>
<td>9,245</td>
<td>11,805</td>
<td>14,520</td>
<td>16,598</td>
</tr>
<tr>
<td>Admissions as a % eligible</td>
<td>15.59</td>
<td>16.08</td>
<td>13.0</td>
<td>13.97</td>
</tr>
<tr>
<td>Expenditure per student Rs/=/yr</td>
<td>90,863</td>
<td>111,926</td>
<td>185,057</td>
<td>203011</td>
</tr>
<tr>
<td>Number of Graduates Produced /yr</td>
<td>4,476</td>
<td>9,027</td>
<td>12,067</td>
<td>16,812</td>
</tr>
<tr>
<td>Undergraduates</td>
<td>307</td>
<td>1,996</td>
<td>3,401</td>
<td>3,071</td>
</tr>
<tr>
<td>Postgraduates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source : UGC)

Other than the state funded Universities and HEIs, the Open University of Sri Lanka, a number of professional institutes and more than 50 cross border and private higher education institutes also conduct degree programmes on ‘fee levying’ basis. Moreover, about 150,000 ‘external’ students are enrolled at the state Unisversities to obtain undergraduate education on ‘fee levying’ basis. Accurate figures are not available with respect to student enrolment in these higher education institutes. A rough estimate (Table 3) suggests that the real enrollment rate –covering all public, cross border and private institutions could be more than 10% of the age cohort. This reflects the existing demand for higher education in Sri Lanka.
TABLE 3. Approximate Student Enrolment in Higher Education (2006)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Sector Universities (undergraduates + postgraduates)</td>
<td>71208</td>
</tr>
<tr>
<td>Higher Education Institutes</td>
<td>12674</td>
</tr>
<tr>
<td>Open University</td>
<td>23992</td>
</tr>
<tr>
<td>External Students</td>
<td>150142</td>
</tr>
<tr>
<td>Private Sector Institutes</td>
<td>45700</td>
</tr>
<tr>
<td>Grand Total</td>
<td>303716</td>
</tr>
</tbody>
</table>

(Source: Anon, 2007)

The higher education system of Sri Lanka is not limited to undergraduate institutes. During the past three and a half decades seven Postgraduate Institutes (PGIs) in the fields of Agriculture, Archeology, Medicine, Management, Science, English and Pali & Buddhist studies (Table 4) have been established to offer part time and full time postgraduate degree programmes mainly to the graduate employees in the government and private sectors. Considering all these facts, annual graduate output has to be estimated. Approximately 20,000 graduates are annually produced by the state Universities. If a minimum of 10% of the student population registered in the Open University, private institutes and as external students complete degree programmes annually, it will add about 23,000 more graduates resulting in a total graduate output of 45,000 – 50,000 per year.

Table 4. The Postgraduate Institutes, Year Established and Student Enrolment (2007)

<table>
<thead>
<tr>
<th>POSTGRADUATE INSTITUTES (PGIs)</th>
<th>Year Established</th>
<th>Student Numbers Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postgraduate Institute of Medicine</td>
<td>1974</td>
<td>934</td>
</tr>
<tr>
<td>Postgraduate Institute of Agriculture</td>
<td>1975</td>
<td>403</td>
</tr>
<tr>
<td>Postgraduate Institute of Pali &amp; Buddhist Studies</td>
<td>1975</td>
<td>348</td>
</tr>
<tr>
<td>Postgraduate Institute of Archeology</td>
<td>1986</td>
<td>109</td>
</tr>
<tr>
<td>Postgraduate Institute of Management</td>
<td>1986</td>
<td>144</td>
</tr>
<tr>
<td>Postgraduate Institute of Science</td>
<td>1996</td>
<td>26</td>
</tr>
<tr>
<td>Postgraduate Institute of English</td>
<td>2005</td>
<td>-</td>
</tr>
</tbody>
</table>

(Source: UGC)

Economy, Employment Generation and Labour Force in Sri Lanka

The contribution made by the Agriculture, Services and Industry sectors to the Gross Domestic Product (GDP) of Sri Lanka changed considerably after the introduction of liberal economic policies in 1977. The prevailed agriculture dominated economy transformed into a service sector dominated one. The share of the government and the private sector in employment market also changed because the introduced macro-economic policy framework was conducive to the growth of a private sector-led, export-oriented economy. The public sector, which served as the conventional employer for the large majority of University graduates slowed down due to resource constraints and lack of organizational planning, while the private sector expanded and became the dominant player.

During the decade of 1997-2008 a total of 14, 99,454 new jobs have been generated, amounting to an average annual employment generation potential of 1, 50,000 new jobs in the Sri Lankan job market. In relation to the growth of the economy, the average employment generation potential had been approximately 44,000 new jobs per 1% growth of GDP (Wimalaweera, 2008). During the period of 1946-2002 approximately 1, 20,000 new entrants (between 10 to 29 years of age) have joined the Sri Lankan labour force annually.
To absorb these new entrants, the Sri Lankan economy needs to achieve a minimum of 3.1% annual growth rate (Wimalaweera, 2008). Although the unemployment rate has declined gradually from 13.8% in 1993 to 5.2% in 2008 (LMI, 2008), it has remained higher among the educated youth including graduates (Table 5), suggesting that the absorption rate of graduates by the employment market is lower compared to the absorption of less educated.

Table 5. Unemployment Rate by Level of Education – 1993 to 2005

<table>
<thead>
<tr>
<th>Year</th>
<th>No schooling</th>
<th>Grade 0-4</th>
<th>Grade 5-10</th>
<th>G.C.E. O/L</th>
<th>G.C.E. A/L &amp; above</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>3.1</td>
<td>4.9</td>
<td>13.7</td>
<td>21.3</td>
<td>23.3</td>
</tr>
<tr>
<td>1994</td>
<td>2.6</td>
<td>5.0</td>
<td>13.0</td>
<td>19.6</td>
<td>23.7</td>
</tr>
<tr>
<td>1995</td>
<td>1.8</td>
<td>3.1</td>
<td>14.7</td>
<td>18.4</td>
<td>23.4</td>
</tr>
<tr>
<td>1996</td>
<td>2.8</td>
<td>3.2</td>
<td>12.2</td>
<td>16.5</td>
<td>19.2</td>
</tr>
<tr>
<td>1997</td>
<td>2.0</td>
<td>2.4</td>
<td>10.6</td>
<td>15.9</td>
<td>19.3</td>
</tr>
<tr>
<td>1998</td>
<td>1.0</td>
<td>2.4</td>
<td>9.0</td>
<td>13.7</td>
<td>17.5</td>
</tr>
<tr>
<td>1999</td>
<td>0.4</td>
<td>1.9</td>
<td>8.2</td>
<td>13.6</td>
<td>17.9</td>
</tr>
<tr>
<td>2000</td>
<td>1.2</td>
<td>2.2</td>
<td>7.1</td>
<td>11.8</td>
<td>15.3</td>
</tr>
<tr>
<td>2001</td>
<td>0.5</td>
<td>1.5</td>
<td>7.5</td>
<td>11.3</td>
<td>14.9</td>
</tr>
<tr>
<td>2002</td>
<td>1.0</td>
<td>1.7</td>
<td>7.4</td>
<td>13.3</td>
<td>16.8</td>
</tr>
<tr>
<td>2003</td>
<td>1.0</td>
<td>2.0</td>
<td>6.9</td>
<td>12.3</td>
<td>16.8</td>
</tr>
<tr>
<td>2004</td>
<td>0.8</td>
<td>1.8</td>
<td>6.3</td>
<td>11.5</td>
<td>13.8</td>
</tr>
<tr>
<td>2005</td>
<td>0.5</td>
<td>1.8</td>
<td>6.3</td>
<td>11.5</td>
<td>13.8</td>
</tr>
</tbody>
</table>


Employment Status of Graduates

A number of studies conducted during the past decade shed light on the employment status of graduates. Most of these studies have focused on the graduates produced by the state funded Universities in Sri Lanka.

Undergraduates vs. Postgraduates

Several consecutive mailing surveys conducted during 2001-2004 period among the first degree holders and postgraduate degree holders in Agriculture, Science and Engineering passed out during 1998/99, 2001/02 period from all state funded public Universities (including the Open University) and Postgraduate institutes in Sri Lanka revealed that even after one year of graduating14.6% to 19.7% of the first degree holders and 4.9% of the postgraduate degree holders remained unemployed (Dilrukshi et al., 2005). All unemployed postgraduates were M.Sc or M.Phil. degree holders. The general trend among the first degree holders is to pursue postgraduate studies after becoming employed. Only an occasional graduate opts to enrol for postgraduate studies without waiting for a job. This explains the reasons for the lower unemployment rate prevailing among the postgraduates.

Professional vs. Non–professional degree holders

Similar to the University systems operating elsewhere, the University system of Sri Lanka also offers diverse first degree programmes which can be classified either as ‘Professional’ or ‘Non–professional’ based on the definition given in Box 1.
Box 1. Definition of ‘Professional’ degree

A first ‘Professional degree’ is an academic degree that prepares the holder for a particular career or profession, by emphasizing practical skills over theory and analysis, in fields where scholarly research and academic activity are not the work, but rather the practice of a profession. Disciplines such as architecture, law, medicine, engineering, dentistry, accounting, podiatry, audiology, physical therapy, optometry, pharmacy, etc., which often require such degrees for licensing belong to this category.

(Source: Wikipedia)

A simple grouping of the first degree holders produced by the University system of Sri Lanka clearly indicates that the majority has been, and will continue to be the holders of ‘non-professional’ degrees. For example, even with all the ‘new’ degree programmes that have been introduced recently, of the total 20270 students that the UGC plans to enroll in the year 2009 to follow 90 degree programmes conducted by the 14 state Universities and 4 institutes (UGC Admissions, 2009), less than 20% will be admitted to follow ‘professional degree’ programmes.

There are a number of underlying causes which have led to this situation. As it was indicated earlier, the University of Ceylon was established with the objective of preparing intellectuals for administrative and professional services. Only one stream – Medicine, out of the four streams was designed to produce ‘professional’ graduates and the country did not have a clear ‘Higher Education Policy’. Although the school education system progressed to make the country the ‘Star of South Asia’ in terms of primary education and literacy rate, the majority of the schools in the rural areas did not, and still do not have adequate human and physical resources to provide satisfactory science based education. Thus the school system continues to produce more students to follow degree programmes in Arts and Humanities streams than in science based streams. Even when the number of Universities was increased and new degree programmes were introduced in response to the increased demand for higher education, most of those degree programmes were in the traditional disciplines that do not prepare students for any specific profession. This trend continued until recently resulting in the production of greater number of graduates holding ‘non professional' degrees than those holding ‘professional’ degrees by the state University system of Sri Lanka.

A comparison of the employment prospects of the holders of first ‘professional’ and ‘non-professional’ degrees can be made by considering results of several studies. The previously mentioned consecutive mailing surveys conducted during 2001-2005 period among the graduates in Agriculture, Science and Engineering after one year of completion of the degree (Dilrukshi et al., 2005; Dilrukshi & Wickramasinghe, 2007), revealed that the Engineering graduates (‘professional’ degree holders) enjoy a higher employment rate (80% to 96%) compared to the Agriculture (70% to 76%) and Science (60% to 70%) graduates (‘non professional’ degree holders). Further evidence on prevalence of higher employment rate among ‘professional’ degree holders comes from a similar survey which reported 1.1% unemployment rate among the Engineering, Architecture and Information Technology graduates of the University of Moratuwa (Kottahachchi, 2008). A separate survey conducted among the graduates of University of Colombo has revealed that while 78% of Science (B.Sc.) graduates and 65% of Management graduates were employed after one year of completion of the degree, only 15% of the Education (B.Ed) graduates, 20% of Law (LLB) graduates and 25% of the Arts (B.A) graduates (25%) were employed (Wimalaweera, 2008). These results clearly indicate that the holders of first ‘professional’ degrees enjoy better employment rates compared to the holders of ‘non-professional’ degrees. Furthermore these findings indicate that the employment rates differ among the holders of different ‘non professional’ degrees and that the worst affected are the graduates in the Arts and Humanities streams.
The underlying reasons for the lower unemployment rate among ‘professional’ degree holders are revealed by a ‘Demand Analysis’ conducted in 2006 through newspaper survey over the course of one year. Out of the total number of vacancies (excluding government vacancies) advertised in the weekend newspapers for graduates, 72.67% was for B.Sc. (Biological, Physical, Computer Science, Engineering and Management) degree holders, while the majority (17.2%) was for Civil engineering graduates (LMI, 2007).

Factors Affecting Employability

Since the holders of ‘non-professional’ degrees are the most affected group in terms of employment prospects compared to the postgraduates and the holders of ‘professional degrees’, the remainder of this paper will focus on the factors affecting employability of ‘non-professional’ first degree holders produced by the national Universities in Sri Lanka. The term ‘Employability’ implies the ability to acquire a job and to carry out the duties pertaining to the job effectively to the satisfaction and benefit of self, the employer and the society at large. Most of the studies conducted in Sri Lanka have focused on the aspect of securing an employment.

Government Policy / Availability of Job opportunities

Availability of suitable job opportunities in the employment market is undoubtedly a factor affecting employability. As indicated earlier, annually about 45,000 graduates enter the job market (20,000 from national Universities) while about 1, 50,000 employment opportunities are created in the Sri Lankan economy. Only some of those created jobs require graduates. Most jobs are created in the private sector which dominates the economy. However, the unemployment rate among graduates seems to follow the government policy on recruitments. For example, unemployment rate among graduates increased from 14.6% in year 2000 to 30.5% in 2003 and then declined through 19.7% in 2004 to 4.5% in 2005 (Dilrukshi et al., 2005; Dilrukshi & Wickramasinghe, 2007). The years that recorded the highest and the lowest rates of graduate unemployment coincided with the years that the Government stopped all recruitments (2003) and recruited 40,000 graduates (2005), respectively. This relationship reflects the degree of influence the government recruitment policy has on graduate employment in this private sector dominated economy. Job security and retirement benefits attached to the government sector employments are the main reasons for this behaviour of graduates. However, the proportion employed in the private sector increased from 37.8% in 2001 to 54.4% in 2004 (Dilrukshi & Wickramasinghe, 2007). In 2008, 74% of the graduates from Colombo University were employed in the private sector (Wimalaweera, 2008). Despite the diversity of sources, these findings provide evidence for increasing role played by the private sector in graduate employment.

Absorption Rate (Waiting Time to the First Job)

While considering employment rate it is equally important to examine the waiting time to the first job, which serves as an indicator of the absorption rate of new entrants to the available employment opportunities. Accumulated absorption rate increased from12% in 3 months after graduating to 18% in 6 months after graduating for the non-professional degree holders produced by the Colombo University (Wimalaweera, 2008). Of the unemployed graduates, 46% had been in search of employment opportunities for more than one year, another 26% had been waiting for 6 to 12 months, while 18% had been on the search for jobs for 3 to 6 months. The consecutive surveys (Dilrukshi et al., 2005) conducted in 2001-2005 period reported an accumulated absorption rate of 50% within the first six months of graduating and 79% within one year.

Separate surveys conducted during 2000-2004 period among Agriculture graduates of the University of Peradeniya and during 2005-2009 period among Agriculture, Food and Nutrition, Management and Applied Science graduates of the Wayamba University of Sri Lanka (Perera & Perera, unpublished) indicated average waiting time of 6.6 months (range 0-15 months) for the Peradeniya agriculture graduates and 4.2 months (range 0-25 months) for Wayamba University graduates. The change of government policy on recruitment of
graduates in 2005 may have affected favourably on Wayamba graduates. A bi-modal pattern could be seen in the distribution of time to employment among all groups. A considerable number of graduates become employed within 6 months of graduation, while few others take longer than one year, sometimes about two years. The existence of such a bi-modal pattern in graduate employment has been reported by Tan and Chandrasiri (2004) as well. Waiting time was shorter for the graduates who have secured first class degree compared to those who have secured general pass. Those with a first class degree had almost no waiting time. Furthermore, the two sets of data clearly indicated that for Peradeniya Agriculture graduates waiting time varied among different fields of specialization, while for Wayamba graduates waiting time varied among different degree programmes, confirming the findings of previous researchers (Dilrukshi & Wickramasinghe, 2007).

These findings indicate that employment rate as reflected by the waiting time for the first job after graduating varies among institutes, disciplines, and the grades secured.

Selection Criteria (Employability skills)

In the public sector, recruitments are made mainly based on academic qualifications unless otherwise stated. So, the graduates stand a better chance of acquiring a government job compared to non graduates if vacancies for graduate positions exist and recruitments are made. However, the capacity of the public sector to provide employment is limited. On the other hand, the qualifications sought by the private sector which dominates the employment market are not limited to the academic qualifications. A ‘Demand analysis’ conducted through newspaper survey revealed that additional qualifications and skills including English language, Computer literacy, Information Technology, Communication skills, Interpersonal skills, Positive & Motivated attitude, Team work and Outgoing personality are expected along with the degree qualification from the graduates by the Private Sector (LMI, 2007).

Furthermore, a number of unstated criteria such as family connections, the schools attended, the sports participated and the Universities passed out from etc are used by the private sector during the recruitment process (Nanayakkara, 2004).

a. English Language Competency

Since almost all entrants to the Universities have had their school education in the mother tongue and the majority of the ‘non professional’ degree programmes especially those in the Arts and Humanities streams are conducted in native languages, English language competency of the majority of the graduates from Arts and Humanities streams is limited. Employers, especially those from the private sector consider satisfactory competency in English language as a requirement for recruitment (LMI, 2007) because the official language used in the private sector establishments is English. Thus, inadequate English language competency becomes an obstacle against employability of the graduates (Dilrukshi et al., 2005, Dilrukshi & Wickramasinghe, 2007; Nanayakkara, 2004; Wimalaweera, 2008). Having realized this most of the graduates and undergraduates try to improve English language competencies by enrolling in English classes that are mostly found in the cities. How effective are these classes in imparting necessary language competencies is yet another aspect to be investigated. It is desirable if the students are provided with adequate opportunities to develop satisfactory English competency throughout the school years and undergraduate period.

b. Computer literacy and IT skills

Most of the degree programmes that have been initially introduced in the traditional lines (Arts, Humanities, Social Science) have not changed sufficiently to incorporate skills such as computer literacy and Information Technology. Although few graduates manage to obtain additional qualifications such as CIMA, Computer literacy and IT skills and become employed, the majority find it difficult to obtain such skills or additional qualifications following graduating (Dilrukshi et al., 2005). The existing gap between the skills required by the employers and the profile of the graduates has been reported as a reason for unemployment (Weligamage & Siengthai, 2003).
c. Other generic skills

Other skills such as Communication skills, Interpersonal skills, Positive & Motivated attitude, Team work and Outgoing personality expected by the employees are transferable/generic skills which need to be developed over a period of time. Neither the school education nor the undergraduate education received by most of the graduates has provided sufficient opportunities for them to develop such skills. Thus they shun private sector employment. Responsible authorities should pay attention to this fact and incorporate appropriate learning activities to develop these skills through the undergraduate study programmes.

Because of the above deficiencies in the education system, the majority of graduates (especially in the Arts and humanities steam) finds it almost impossible to fulfil the stated and unstated criteria used by the private sector and remain unemployed. They prefer government jobs which generally require only the degree qualifications and wait until such opportunities become available. As the private sector will become and remain as the main employer of graduates in future, to prevent this problem of skills mismatch from getting worse, responsible authorities need to pay urgent attention to devise and implement effective mechanisms that provide sufficient opportunities for undergraduates to develop employability skills during their University study period without compensating the academic quality of the degree programmes.

Relevance of Undergraduate Training & Application of Knowledge

The degree of relevance of the knowledge and skills acquired during undergraduate career to the nature of duties and responsibilities pertaining to the job opportunities available are yet another important factor that affects employability of graduates. The island wide survey conducted among graduates during 2001-2005 revealed that the relevance of most of the degree programmes offered is not satisfactory. 14-20% employed graduates indicated that the content of the degree they completed had no relevance to their employment. This has made them frustrated and disappointed. About 42% of them continued with the job due to lack of alternative employment, while another 36% continued because of the salary and the possibility for future promotion. Only about 30-40% employed graduates indicated direct relevance of the degree to their present job while another 20-30% mentioned some relatedness (Dilrukshi & Wickramasinghe, 2007).

These findings are not surprising considering the fact that most the degree programmes have been initially formulated with emphasis on subject disciplines that provide knowledge and skills to produce intellectuals for government sector administrative positions and/or academic positions. Since then the majority of the study programmes (with some exceptions) continued in the same line with little sensitivity to the socio economic transformations taking place and the fate of the graduates produced. The content and/or teaching and learning strategies or assessment methods were not revised much. This practice has led to reduce the relevance of degree programmes. It is heartening to note that a number of Faculties have taken initiative to revise the curricular of the degree programmes offered to improve relevance and quality. It is important for the other Faculties that have not initiated such action to consider revision if their graduates face difficulties in securing employment due to lack of relevance.

Application of Knowledge

One of the common complaints often made by both the public sector and private sector employers is the inability of present day graduates to apply the sound theoretical knowledge they have to approach problems in an integrated and practical manner. The graduates also admit this as a weakness on their part. Unless the students are provided with opportunities to apply the subject knowledge to real life situations in an integrated manner, it is difficult for them to develop such skills after graduating. Thus, the responsible authorities need to pay due attention to initiate appropriate corrective measures such as introduction of interdisciplinary courses, incorporation of learning activities that promote integrated approach to learning and problem solving to the study programmes. Modern pedagogical approaches...
such as problem based learning, community based learning, problem centered learning, experiential learning etc that promote student centered learning would be of assistance in this regard.

**World of Work: Awareness and Training**

A considerable proportion of graduates had no idea about the expectations of the prospective employers, the nature and competitiveness of the employment market, types of job opportunities available, the nature of work that they will have to perform, the future prospects of different jobs etc during the period of their undergraduate studies. Had they been provided with such information they would have been more prepared they claim. University authorities can easily introduce diverse yet simple strategies such as introduction of career guidance programmes from the early years of the undergraduate programme, formation of industry links, arranging special lecture series from the industry personnel, organizing industry days, mock interviews, career fairs etc., to make the students aware of the world of work.

Work experience is yet another factor considered by employers during the recruitment process. The private sector expects the prospective employees to possess related work experience especially if they are recruited at a relatively 'old' age (above 25 years of age). The graduates who enter the job market at 25-27 years of age with no work experience are at a disadvantageous position due to this reason. Science and Technology graduates indicated lack of experience or professional qualifications sought by the employees as the major obstacle faced by them when finding a job (Dilrukshi et al, 2005). Introduction of modules such as industrial training / in-plant training to the curriculum to provide short term training in the industry sector to students by some Universities appears to be an effective way of overcoming this problem as indicated by the graduates who received such training. Such exposure to 'real world of work' helps the students to be aware of the nature of work and discipline expected. It is heartening to note that most of the degree programmes that have been revised or undergoing revision have incorporated such exposure / training components into the curriculum.

**Age**

As explained earlier, the age of the graduates becomes a barrier against employability especially in the private sector, because the private sector prefers younger persons to provide on the job training to equip them with necessary skills and experience to carry out the relevant duties (Nanayakkara, 2004). The majority of the present day graduates are above 25 years of age (usually 25-27 years of age) when they join the labour force, but they are intellectually superior. If they are not given an opportunity, the investment made on them will be wasted because some of them may leave the country contributing to brain drain, while others may join disruptive groups out of frustration. The employers should be mindful of these facts and try to create opportunities to make use of this intellectually superior work force produced at the expense of the state for the benefit of the industries and the country.

**Gender**

All available data on unemployment rate points to the existence of a higher unemployment rate among the female labour force compared to the male labour force in Sri Lanka. This trend seems to prevail among graduate population also as evidenced from the reported employment rates of 60% and 24% among male and female graduates of the University of Colombo (Wimalaweera, 2008). Furthermore, only 30% of executive grade positions in the private sector were held by female graduates compared to 70% held by male graduates (Dilrukshi & Wickramasinghe (2007). In the government sector which makes recruitment based on academic qualifications also the percentage of female graduates holding executive and managerial positions is lower compared to male graduates although the situation is changing and accurate figures representing the current status are not available. This suggests gender discrimination by the employers when recruiting or promoting graduates for the executive and managerial positions and / or the differences in
attitudes of male and female graduates towards such positions in particular and employment opportunities at large.

**Attitudes**

Private sector is generally reluctant to recruit graduates not only because of the relatively ‘old’ age, inadequate English competency and employability skills, but also due to the misconception that all graduates are radicals, which is far from the reality (Nanayakkara, 2004).

Awareness of such attitudes held by the private sector combined with the fear of being subjected to uneasy situations by the superiors, coworkers or subordinates who are non-graduates but more conversant in English and better connected to upper social network make the graduates reluctant to enter the private sector. In addition, the preference of the graduates to be employed in formal protected jobs, which will meet their aspirations, and their tendency to wait, sometimes for a long period of time until the preferred employment becomes available in the formal sector are the other factors affecting employability. This attitude and behavior are much stronger among female graduates who expect job security, opportunities for further education, retirement benefits, good working conditions and fair treatment at the working place than the male graduates who consider monetary and nonmonetary benefits, career prospects and reputation also as important factors. Possibly because of these attitudes that in the year 2005, when the government recruited 40,000 graduates, most left the private sector jobs and joined the government employment.

Furthermore, a certain section of the academicians are of the opinion that the role of higher education is limited to generation and transmission of knowledge and graduate employment is the responsibility of the government. Curriculum revision or incorporation of alternative strategies to improve relevance of existing curricular is not appreciated. Thus, the problem of graduate unemployment is a complex one and the solution is neither simple nor straightforward.

**References**


Planning Division, Ministry of Higher Education.


UGC. UGC website www.ugc.ac.lk


Wikipedia. en.wikipedia.org

Sub-Theme D

University Industry Partnership
UNIVERSITY-INDUSTRY PARTNERSHIPS

Syed Asad Hussain
Assistant Professor
Shaheed Zulfikar Ali Bhutto Institute of Science & Technology
Islamabad
Pakistan

(asad@szabist.isb.edu.pk)
(http://asad.szabist.isb.edu.pk)

Summary

This paper focuses on highlighting the importance of partnerships between industry and academia. The aim of higher education and university-industry partnership is to produce future managers, business leaders, scientists, engineers, researchers, professors, etc., who are active to play their due role in the nation building process. However, in Pakistan, this partnership has not been very encouraging so far. That said, the business curriculum, across most of the universities, has no direct or very limited relevance to the real world problems and graduates in most cases don't come up to the expectation of industry. As a consequence of availability of poor quality of faculty, the teaching pedagogy has remained weak to finding solutions of the real world problems. However, universities also argue that industry, at the same time, has also shown resentment in allowing academia to interact freely with them; the blame game continuous.

Scope of the study

The scope of the paper is, however, limited to discussing the issues related to business education and designing of curriculum. The proposed research is surely expected to enhance the university-industry partnerships. The main aim of this research is to improve any potential mismatch within the market. This research aims at discovering the heart of the problem that is impeding the business involvement with the education. Universities can amply benefit from the proposed research as well as businesses and open new communication platforms.

Organization of paper

The paper has two sections. In the first section, the study develops a three tiered Cone Model involving the three important stakeholders of the process, namely; the Higher Education Commission of Pakistan (HEC), universities and industry. In the second section, the author presents a semester wise more focused MBA sample curriculum which can be expanded and applied across all other curriculums. The approach is drawn in the light of feedback received from the industry experts.
Introduction

In the backdrop of growing economic challenges due to globalization, the importance of knowledge and innovation and human ingenuity cannot be ruled out. However, in Pakistan, the higher education in general and business education in particular is passing through a hit and run test. Both academia and industry are connected with weak interface.

Employers in Pakistan often seem complaining that Pakistani business graduates are yet to meet the level of competence that corporate sector needs. They argue that business education curriculum needs to be aligned with industry needs, students are usually not exposed to business world experience during the study period, and above all teaching pedagogy has remained unlinked to finding solutions of the local real world problems. It is noted that most of the textbooks used in the syllabus would reflect the working of western economies and carry no in depth discussions on the local issues. Hence this leaves a knowledge gap.

The HEC was created, as an autonomous body in 2002 to accredit and prescribe the guidelines for both public and private sector universities in Pakistan. As a watch dog it is entrusted with the mandate to improve the quality of higher education in Pakistan. In order to qualify for the grant and degree awarding status recognized by the HEC, the prospective institutes must meet the Cabinet Criterion in respect to infrastructure facilities, such as, land and building, library (number of books and journals) number of full time faculty and staff members, and financial resources. With exceptionally high economic growth rates (averaged 7 percent) during 2002-2007, the demand of fresh business graduates increased significantly albeit has remained low as per international standard. The participant rate is only 5 percent in Pakistan against 12 percent in India and 68 percent in Korea.

According to the HEC, there are 124 universities in Pakistan of which 68 are public and 56 private sector universities and institutes. Of which, 87 (28 in public sector and 59 in private sector) recognized academic institutions offering business degree programs in Pakistan and around 57,000 (2004-05, provisional HEC figure) students were enrolled in various business degree programs, such as; Bachelor of Business Administration (BBA), Master in Business Administration (MBA), Master’s in Science (MS) and Doctor of Philosophy (PhD).

Before the creation of the HEC, universities were operated in isolated chambers with no clear direction and guidelines, curriculum they followed were decade old and length of the various degree programs varied from universities to universities (2-3 years for bachelor’s degree, one to 2 years for master’s, one to 2 years for M.Phil. and 2 to 3 years for PhD) with little or no check on quality. Later, the HEC suggested a uniformed curriculum for all degree programs.

Now all Pakistani universities are required to follow HEC 4-years bachelor’s degree prescribed curriculum. However, 3-years BBA program is still offered at some universities. The MBA/EMBA program is of 2 years for applicants having 4-years professional degree. However, the length of the program, in some cases, could stretch up to 3-4 years if the applicant has 2 years BA or B.Sc. (gradually phasing out now) degree. The internship program has been made mandatory for the completion of the degree. All bachelor’s degree programs are now required to complete 16 years of schooling, master’s degree 18 years, and PhD 21 years.

Prospective students are usually tested through entry test and an interview and or group discussion. In most cases, this seems to be only a formality. However, GMAT, GRE, SAT, IELTS, TOEFL tests are also acceptable but yet to be made mandatory. Few years back, the National Testing Service (http://www.nts.org.pk/AlliedUniversities/ptcl.htm) was launched as autonomous body to conduct tests for admissions to all programs. Some of the universities have now replaced their tests with NTS score or accepting it in lieu of GRE/GMAT.

In the first three years of study, the BBA 4-years curriculum (for EMBA/MBA first year of study) students study broad areas such as, interpersonal skills, accounting, management, communications, ethics, and finance. The last year courses are more focused on the area of
specialization. High demand areas include, major in finance, human resource management, marketing and general management.

Assessment criterion varies from universities to universities but mostly follow final, monthly and mid term exams, quizzes, assignments, case study evaluation, class participation, business and research projects, and presentation.

Universities in Pakistan are still struggling to recruit qualified faculty members. There is absolute shortage of PhD degree holders. No accurate data is available, however, it is widely accepted that most of universities, as a consequence, are content to hire foreign master’s degree holders. The quality of faculty varies from universities to universities and is very much dependent upon the management practices, finance, goals and visions of the universities.

In addition, it has been experienced that the teaching pedagogy is focused on sharpening the memory of students, rather than building their intellectual skills. Thus academic research and teaching pedagogy stands disconnected or isolated with the issues facing the real world.

The corporate sector in Pakistan is modestly developed and reflects mixed performance and has shown a certain degree of resentment in allowing academia to interact freely with them. However, in some cases, they have reviewed their old days closed door policy and have now opened doors to interact with academia, yet the interaction has remained and confined to very selective areas such as, job placement, internship programs, and guest speakers sessions. Except, some limited examples, there is hardly any solid link of research and development found between academia and industry.

The challenges, solutions and the current state of University-Industry partnerships are discussed in depth in the Cone Model on the following pages.

**Literature Review**

As a country’s population attains a higher educational level, it adds to its skilled labor force. Universities are known to be centers of wisdom and capable of backing countries innovation system (Dr. Esham 2008). There is a strong linkage between knowledge and competitive advantage and planning for the future is the key to success (Vinhuta 2006).

Ideally speaking academia and industry should share the similar goals. The most common goals would include, understanding the employers need, developing specific skills relevant to the market needs, training requirements and top level interaction between the two. The Academia-Industry Interface could be defined as interactive and collaborative arrangement between academic institutions and business corporations for the achievement of certain mutually inclusive goals and objectives (Irfan and Ashita, 2005).

The importance of the linkage between industry and the higher education institutions cannot be underestimated (Harayama, 2003). Quality of education surely hinges upon active involvement of the business sector with higher educational institutions. Not only does this active cooperation and collaboration produce meaningful results in the form of real solutions to problems, but also boosts business performance besides enhancing education quality (Kusunomi, 2001).

The Japanese government, In 1998, adopted the “Law of Promoting Technology Transfer from University to Industry”. The law was aimed at supporting academia-industry collaboration (R &D) and establishing Technology Licensing Offices at universities in Japan.

The industry-academia partnership primarily helps educational institutions to align their curricula with industry requirements. The realization of the need to build and strengthen these linkage is being felt in many quarters, however, it has been noted that very little movement towards this goal is actually happening in Pakistan.
One can find at least three missing links in the system of higher education in Pakistan:

- First missing link can be observed between the strategy for promotion of research culture and the curriculum. The system emphasizes the memorization of texts and mechanical use of the concepts and formulas. This problem was created because of the stereotype lectures and the extensive use of the study guides and short notes.

- The second missing link is the disconnection of research degrees with knowledge creation.

- The third missing link is between the academic research and economic development. It is a notable difference between the role of higher education and vocational education that higher education institutions lead the industries because they work for future. They innovate, invent and develop the new products, process and systems with the help of new ideas and knowledge advancement. While, vocational education supplies the workers and qualified professionals for the existing system.

Collaboration provides industry with the means by which to have access to advance technology and know-how at a lower cost and with less inherent risk as universities possess a large pool of expertise (Dr M. Esham, 2008).

C. Beard (1994) suggested a number of recommendations to improve linkages between academia and industry, which include, greater degree of collaboration between the two, real involvements with industry to give exposure of practical experiences to students, arranging guest speaker sessions, and encouraging faculty to undertake consultancy work. As seen from industry’s point of view, the collaboration with academia is needed because industry lacks in-house R &D, limited finance, and shortening of product life cycle. Universities also have shown interest to work closely with industry in order to create funds to keep the R & D department humming. One important reason to bring academia and industry together is to gain access to students as potential future employees and to aid on product development (Links and Raees, 1991).

Universities play three major roles within an innovation system. These include, undertaking general process of scientific research, partly producing knowledge, and providing major inputs for industrial innovation processes (Schartinger et al, 2002). Joi L. Roberts (2007) outlines several opportunities, for strengthening the academia-industry interface. For the academic community, it was suggested to bring the real world into the classroom or take the classroom into the real world; students need to be educated in international studies, stay connected to industry and continue to explore new research opportunities.

For industry, it has been suggested that industry try offering more work opportunities to interested students and professors, build deeper relationships with students and redistribute the funding. Both academia and industry expand collaboration, halt the impending identity crisis, expand the diversity of the design community and modify academic rewards structures to encourage collaboration. Lastly, seek creative synergies.

Tata Consultancy Services, India, argue that academic institutions seek industrial partnerships to: align research with problems in industry; applications of academic research work, create a framework for joint research; and get funding for R & D. On the other hand, industry seeks academic partnership to: project the problems in industry, applications of academic research work, create a framework for joint research; and supporting academic R & D.

**Success stories**

The Institute of Bankers, Pakistan (IBP) is actively participating in the MBA (Banking & Finance) program in different universities in Pakistan to build the value of the academic qualification at MBA level. It regularly provides inputs to update the curriculum to help bridge the skill gap in MBA graduates. It also offers supervised internship programs to students in banks and financial sector (www.ibp.org.pk).
The Lipton Tea, Unilever Pakistan launched the Talent Hunt Scheme last year. It was a multipurpose program; searching the talent from the management schools through effective marketing strategy. By visiting the top business schools of Pakistan they created a sense of competition among selected universities and gave them a real taste of competition. It was a good initiative taken by them to generate cooperative environment between academia and the corporate world (http://liptontalenthunt.com/).

The Habib Bank Ltd., one of the largest banks in Pakistan, has designed the HR strategy in order to hire skilled fresh business graduates to serve their customers across the country (http://www.habibbankltd.com/).

An international provider of high quality telecommunications services came up with a Global Trainee Program, aiming to recruit up to 20 young talents from countries in which the Telenor operates offered the great opportunity for students as a fast track of career growth by the Telenor (http://www.telenortrainee.com).

For the first time in Pakistan, the Telenor Pakistan in partnership with Nokia Siemens Networks and TEVTA provides a 2 year higher national diploma based on an advanced curriculum, scholarships, hands-on-training and internship opportunities to students.

University-Industry Technology Support Program (UITSP) of the HEC encourages researchers to undertake joint research projects with international organizations in the priority areas which could help for socio-economic development of the country.

PepsiCo Pakistan sponsored 3.4 million rupee to SZABIST Islamabad campus for providing better research facilities for students. This partnership is seen as one of the Corporate Social Responsibility chapters (www.szabist-isb.edu.pk).

The three tiered Cone Model of University-Industry Partnerships

Since, there are few shortcomings both from industry and the education sector, a real commitment is needed of industry as well as academia as a whole to enhance linkages on a strong footing. They can delineate the guidelines for the fresh intake and elaborate on the exact type of skills needed by their respective companies. This may include details regarding the interpersonal, time management, presentation, communications and problem solving skill sets.

They can also group the graduates into levels and explain their expectations from individuals at the graduate and undergraduate levels. In addition, clear guidelines can be given regarding degrees such as MBA and its specializations such as Finance, Marketing, and Human Resource Management (HRM) etc. The Human Resource (HR) department in the industry may also play a leading role in identifying the exact needs in terms of interpersonal skills and job specific requirements. They should lay down a clear competency level about problem solving skills, team building skills etc., and share it with universities.

Another measure could be pilot testing and selection of selected industry entities that are willing to contribute in this endeavor. Thus an effort can be made to building relationships and to put a dent in the prevalent inertia. Hence, a start can be made to initiate linkages where the private sector is willing to engage itself with academia.

On the other hand, academia can take certain measures that can enhance the linkages. To make sure that the curriculum conforms to the needs of the industry, emphasis should be laid inside universities in arranging meetings and sessions for streamlining curricula. This can be done through a review process of the curriculum at regular intervals. The business world is changing fast. The export oriented business has to deal with a constantly changing global business environment. Academia is in the right position to improve their curriculum and teaching according the latest developments happening in the world.

In addition to indicating the measures that can be taken at both academia and industry, the study proposes a three stage approach to deal with the contemporary situation in the context of industry- academia linkage in Pakistan. This Bottom-Up Approach also named as The Cone Model of University-Industry partnerships, is presented here, gives a three tiered solution to the problems being faced in this regard. The Cone Model will lead to an ideal way to strengthen industry academia linkage and give it a start where it is completely lacking. This
would ultimately help in nation building process, requiring complete involvement of business sector and academia, which is the need of the hour.

The Cone Model (see figure below) gives a roadmap for the implementation of the above mentioned goals of university-industry linkage. As depicted in the model, a close interaction between the industry and the academia would result in maximization of benefits for the human capital development in Pakistan. The HEC has a greater role to play as a facilitator in the Isolation stage to bring together these two important pillars. The model assumes that the HEC role lessens in degree as the industry and the academia linkage reaches the desired maturity level. It is also assumed that, the widening of the cone towards the maturity stage shows superior quality input realized by industry as these linkages get strengthened.

1. **Isolation Stage** - The stage entails a virtual absence of interaction between academia and business world. This is a worst case scenario in which the academia mostly works in isolation. Thus two most important pillars of nation building process stand almost aloof.

   It is believed that the prevailing state in the country is more or less similar to the Isolation stage or stands in between the Isolation and the Ascending stage. There is very little interaction with industry and in most cases academia is somewhat not moving forward and industry takes a sit-back attitude. It has also been noted, that most of the limited interaction taking place between academia and industry is based on “personal contacts”. In the current scenario, “personal contacts” and “links” are the main source of any industry-academia linkage in Pakistan. Thus when these contacts leave the organization, the whole interaction process also dies down. As seen in many cases, there is a complete trust deficit between academia and industry at the moment (Gaskill, 2003).

   Not only is there a virtual absence of interaction between industry and academia, but a proper understanding of the need for such an activity also seems to be lacking. To create trust and most importantly awareness, it is upon us - the academic community to play an active role in the media and other forums, in highlighting this problem and presenting solutions.
The HEC which is actively involved in the promotion and enhancement of higher education in the country can take a lead in the isolation stage. To start with, the HEC can hold bi-annual conventions or meetings in bringing together academia and industry. This should act as a forum of trust-building between the two. The forum may primarily focus on the following broad questions:

- What can be done to reduce the trust deficit between academia and industry?
- How can we build better communication processes between the two?
- Who will do what in breaking the barriers?
- Can a linkage process be streamlined into a set of procedures?

2. **Ascending Stage** - This stage assumes that industry is reluctant to cooperate and to fully engage with academia. Here universities and other educational institutions need to be proactive to convince and seek cooperation from industry to strengthen this much needed productive activity.

    It is encouraging to note that in the context of Pakistan's business sector, there are a few examples which show a certain degree of industry-academia interaction. However, much needs to be accomplished in this regard. Here too, the HEC has a role to play in improving and facilitating these linkages. The desirability of HEC's involvement has been depicted in the diagram, as the Cone has been enveloped by the HEC initiatives. Projects being undertaken between the university and industry can be used in the HEC university ranking process. In addition, the HEC can also collect data from industry on a voluntary basis, to rate universities that have been taking proactive role in strengthening the linkages between academia and industry.

    The Research and Development (R&D) department in universities can also take measures and invite the executives from industry on a roundtable conference or to seminars, symposiums, conventions, as guest speakers, etc., to induce them to take advantage of the available unutilized resources that academia is offering.

    Internship programs are an important component for students' professional development. Such programs also provide them with an opportunity to experience industry for the first time. It has been noted that in some cases the internship programs do not help students to learn new skills. Internees' feedback suggests that in some cases, they are asked by the supervisor to do jobs which do not directly or indirectly contribute in their professional & personal development. This also demonstrates the lack of understanding on the part of industry to inculcate the vital skills in the internees. The process has certain ambiguities as these internship positions are open to universities who have contacts within industry.

    There is a need to ensure that industry has more quality and result oriented internship programs and also play a proactive role that adds value to a student's personality and overall grooming. It is recognized that certain businesses in Pakistan have strong internship programs, however, most of the businesses are not fully cognizant of the importance of such focused, and result oriented programs. There is also a need for these programs to have certain predefined job roles that are reasonably challenging. Hiring internees into clerical work is not much helpful as has been the prevalent practice in most cases. The model assumes that this approach regarding the internship programs is encompassing all three stages.

3. **Maturity Stage** – This stage demonstrates that the industry and academia linkage has reached a maturity level as depicted in the model where HEC’s role is likely to get minimal. Given the current pace of interaction between the industry and academia in Pakistan, it is likely to happen within the next two decades. Career placement centers in universities and higher education institutions will become a part of this exercise.

    The human resource department of corporate sector will meet at least once a year, preferably before finalizing the curriculum at universities, with deans of respective departments. Through this interaction they will be provided with a vent to communicate their most current requirements to academia. Socializing and relationship building would facilitate
placement of bright students in the businesses. Thus, academia would not be left in dark about the most current needs of industry as there is a mechanism for the much needed interaction.

On the other hand, academia will help industry by preparing case studies and undertaking research projects to solve their real time problems. Again, openness and cooperation of industry to allow undertaking such research will play a major role in this regard. An element of this is also found in the Ascending stage. The Pakistani business sector will need to be more open in allowing students and researchers to have access to information and data. Not only will these case studies / research projects give a chance to students to enhance their analytical and research skills as already evident from the experience of certain prestigious universities, but also allow the businesses to project themselves in the academia.

Another step is the involvement and motivation of students in this much needed activity. Once the requirements of industry are communicated to academia, students in the maturity stage would be motivated to meet the course requirements that are in-line with the industry standards. In addition, internships which have already been made a necessary component of the business degree programs; will further strengthen the linkages between industry and academia.

The Sample MBA Curriculum

The productivity of industrial sector is driven by inputs used to produce the final product. Technology, human resource and production process itself are perhaps the most important inputs, which would set the productivity level of industry. Without better human resource (knowledge and skills of managers/engineers in decision making), the other two factors would make less sense to the productivity process.

In this backdrop discussion, a more generic but practical approach is presented in the figure below and on the following page which is aimed at contributing in a country’s productivity cycle. It starts with interlocking common interests of academia and industry. As a consequence, the exact need of industry is identified which is translated into the selection of courses (updated curriculum) which are likely to contribute producing highly skilled human resource.

The course contents and teaching methodology, and assessment criterion are defined by teachers in the light of objectives of the pre-defined semester deliverables which are flown down to the program preset outputs.
Once graduates are out there in the market and start working, their performance is constantly and effectively monitored both by employers (performance appraisal) and universities (alumni network), which would result in gradual improvement of quality of human resource needed to help industry. The application of the model is presented below which can be amended, expanded, and applied to all other business and non-business degree programs. The core essence of the model calls for drawing down learning outcomes of each semester which are linked to course selections, course contents, teaching pedagogy and assessment methods.
Schematic flow diagram of semester based approach two years MBA degree

Semester 1
- Course selections (list)
- Course outlines/objectives
- Assessment & teaching method
- Teachers’ qualification

Deliverable 1
Skills/ knowledge (expected)

Semester 2
- Course selections (list)
- Course outlines/objectives
- Assessment & teaching method
- Teachers’ qualification

Deliverable 2
Skills/ knowledge (expected)

Semester 3
- Course selections (list)
- Course outlines/objectives
- Assessment & teaching method
- Teachers’ qualification

Deliverable 3
Skills/ knowledge (expected)

Semester 4
- Course selections (list)
- Course outlines/objectives
- Assessment & teaching method
- Teachers’ qualification

Deliverable 4
Skills/ knowledge (expected)

Program outputs/Achievements
Quality of fresh graduates
Course Plan

The following curriculum has been designed and will be presented to the Academic Committee of SZABIST for approval.

Semester 1
- Quantitative Analysis for Decision Making
- Accounting for Business
- Business & Electronic Communication

Learning outcome:
At the end of semester the student should be able to understand the basic quantitative tools used to solve management problems and the accounting terms. The course in communication helps the student to learning writing effective office memos/letters/emails, long and short reports and preparing effective presentations.

Objective: To build confidence by enhancing the quantitative and communication skills of the student.

Semester 2
- Management Decisions
- Contemporary Marketing
- Business Finance

Learning outcome:
At the end of semester the student should be able to understand the basic management, marketing and finance theory. Emphasis is laid on learning through case study method where the student develops analytical skills to solve a management dilemma, a marketing problem, or a number game.

Objective: To improve the analytical, critical, and decision making skills of the student.

Semester 3
- Human Resource Management
- Economics for Business
- Corporate Strategy

Learning outcome:
At the end of semester the student should be able to understand jargons used in the world of economics and problem of scarcity of economic resources. The case study learning method will help the student to learn the role of economic policies, the best human resource practices and necessary skills required to craft business strategies for the employer to remain not only competitive but to continue to grow in today’s fast changing environment.

Objective: To improve the resource planning and critical thinking skills of the student.

Semester 4
- Business Project
- Leadership & Motivational Techniques
Supply Chain Management

Learning outcome:
At the end of the semester the student should be able to apply the theory of management, marketing and finance which they have learnt during the course of their study to solve a real world problem, preferably a problem related to their own workplace/organization. The student also learns the basic theory of leadership and management where emphasis is given in creating and challenging the leadership skills among the participants. Success stories and cases are shared to create motivation among the participants to lead from the front.

Objective: To enhance the leadership qualities and problem solving skills of the student.

Core competencies expected to be gain after the completion of each semester.

<table>
<thead>
<tr>
<th>Quarter 1</th>
<th>Improved Communication/Quantitative Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter 2</td>
<td>Improved Analytical Skills</td>
</tr>
<tr>
<td>Quarter 3</td>
<td>Improved Planning Skills</td>
</tr>
<tr>
<td>Quarter 4</td>
<td>Improved Leadership Skills</td>
</tr>
</tbody>
</table>

Program outputs

Conclusion
There seems to be a visible trust deficit between industry and academia at present, and both do not seem to be moving forward. The question is who will bell the cat first? Of course, the answer lies in academia. It can be rightly concluded that industry also has to be proactive and be more open in dealing with academia, which may take a certain amount of time.

The involvement of the HEC in Pakistan is of great importance in all three stages. The HEC would act initially as a leader and gradually transforming itself into a facilitator in encouraging these vital industry-academia linkages.

The Cone Model provides a good picture of our current scenario and also outlines a plan of action for all the stakeholders involved. It runs on the assumption that an increasing level of synergy between these will contribute towards providing better human resources for the economic development of the country.

The sample curriculum presented in this study demonstrates the importance of objective driven curriculum which is designed keeping in mind industry requirements. The feedback of corporate sector plays key role in shaping the syllabus. This approach allows teachers and students to remain focused on what is to be delivered and the outcome expected. Self-check mechanism through alumni network and performance appraisal in workplace will act as indicators of improvement.

References


Dr Ayub Mehar (2007, Importance of the Industrial Sector in Economic Development-role of CCIS, FPCCI


List of HEC Recognized Institutions
http://dev.hec.gov.pk/UniversityFinal2/RegionUniversity.aspx

Cabinet Criterion, 2002
http://hec.gov.pk/QAI/Quality_Assurance/University_Accreditation/UA_Establishment_Of_New_University.html

The Higher Education Commission of Pakistan (www.hec.gov.pk)

The Institute of Bankers, Pakistan, www.ibp.org.pk

The UniLever Pakistan, http://liptontalenthunt.com

The Habib Bank Ltd., http://www.habibbankltd.com

Telenor Pakistan, http://www.telenortrainee.com

Shaheed Zulfikar Ali Bhutto Institute of Science and Technology, www.szabist-ism.edu.pk
University- Insurance Internship Partnerships in Bangkok

Brian Lawrence, MSc, BA, FCII, Chartered FCIPD, Chartered Insurer

Asst. Professor Brian Lawrence,
ABAC Assumption University, School of Management,
Ramkhamhaeng Soi 24, Huamak,
Bangkok 10240,
Thailand.

bLawrence@au.edu, T/p: 02-723-2150  Fax: 02-719-1962

Abstract

Especially now, as more countries fall into economic and financial decline with a consequent reduction in recruitment by most companies, there is a need for universities to enhance graduate employment prospects. Among the methods of achieving this, internship has a long history. However it needs to be reviewed and improved so as to make it fit for its modern purpose.

This paper bases itself on an internship scheme involving Bangkok insurance companies, used by Assumption University’s Department of Insurance. The format of this scheme is examined, and the experience of some students and insurers identified by qualitative research using semi-structured interviews.

The findings, about the application of knowledge and skills, are evaluated, and then placed in the context of recent research into theories of learning, revelations from neuroscience, the transfer of learning, and company training, as well as uncovering some modern myths about learning. There is a wider context too, involving the prevalent Just-in-Case approach in education, and a Just-in-Time approach more suited to the fast-changing nature of work and technology.

From this context, a more structured approach (or model) is designed, for use in the Bangkok insurance internship scheme, including the need for integrated collaborative research. This also has relevance for many other fields of work. This will not increase the number of jobs, nor halt the decline in recruitment, but it should enhance employment prospects of those students involved, as well as enhancing the way in which students and employees learn.

Keywords: internship, skills, theories of learning, neuroscience, transfer of learning, Just-in-Case and Just-in-Time education, employment prospects.

Introduction

Universities were originally founded as communities of experts and learners to provide excellent vocational training, for doctors, lawyers, and priests. They provided a combination of theory and practice, as do those university courses today. Much later, the newer universities became more academic, focusing on classics of literature and philosophy. Their aim in Europe was to produce cultured gentlemen who shared a common outlook on life shaped by what they had learnt. In China the aim of this classical education was to produce men to run the civil service and judiciary.

For a time, universities shunned vocational education for industry and commerce, considering it not respectable, not professions, as medicine and the law were. Gradually they realised that they must serve their age and its needs for excellence in knowledge and skills.
for the multiplying industrial and commercial economies. Some would argue that they have gone too far, and that they are now so geared to the economic interests that they ignore the deeper more fundamental issues of the nature of humanity and its place in the scheme of things. Departments of Philosophy have all but disappeared. However, the widespread economic and financial collapse which began in 2008 has reinforced the need for universities to provide excellent vocational courses so as to equip their graduating students with knowledge and skills in a shrinking job market.

The collapse has also aroused a feeling that the economic world is only part of the human world, and that a deeper understanding of values, and an awareness of the importance of the wider context in which individuals, organisations, societies, nations, and globalisation are set. The wider context is not the focus of this paper, but should not be forgotten in the understandable desire to help students find employment by equipping them with specific knowledge and skills relevant to job sectors, including university-industry internships.

Having painted a broad picture, we now proceed to fill in the details. First we introduce the focus of this research, insurance internships for undergraduates nearing their final year at Assumption University in Bangkok. Then we examination of the nature and practice of internships, generally, with some examples. This is similar to a Literature Review. Next, we describe the exploratory empirical research into the internship programme at Assumption University, from which we extract some themes, discuss these, and make recommendations for improvement and further research.

The Insurance Degree at Assumption University, Bangkok

In 1984, Assumption University in Bangkok began offering an Insurance specialisation in undergraduate Business degrees. A range of courses evolved, covering the span of insurance topics. The degree was supported by the Insurance Commissioner in the Thai government's Ministry of Commerce, and by the Chartered Insurance Institute of Britain (the eminent professional body which has members in many countries). Local and international insurance experts were recruited to the faculty, and it is still the case that they all have practical experience of working for insurance companies as well as having academic qualifications.

Over the years, graduating insurance students have had almost no difficulty in finding a job in Thailand. There is now an impressive and influential alumni always ready to help. The first Dean, a foreigner, died suddenly of a heart attack soon after appointment, and his successor was the first Insurance Commissioner (retired) who had gained an insurance Master's degree in USA (and had also been a Member of the Thai Parliament). He became a Director of several Thai insurance companies. Thus, from the beginning, the insurance degree consisted of courses that were both practical and academic, a blend of theory and practice, rooted in the insurance industry.

In Thailand, insurance companies are either locally owned or branches of huge international insurers. Thus, the university graduates have a rich employment market, offering a range of types of jobs and companies, with the real chance of foreign experience with multinational companies. From its foundation, Assumption University has taught in English, to prepare students for the global world where English is the language of business.

Early on, an internship programme was arranged with Bangkok insurers, with the strong support of the two Insurance Associations (General and Life) to which all insurers must belong. The course description reads as flows:

“In the final semester, with the consent of the Department Chairperson, a student may arrange for an Internship Programme with an insurance company in Thailand for not less than 300 working hours. Weekly progress reports, approved by the immediate superior, must be submitted. A final evaluation will be made, in consultation with the company, and a grade accorded.” (ABAC University Handbook, 2008, p310).

In practice, the chairperson is the manager of the programme, has a close liaison with the companies, knows the students, and is thus able to pair a student with a company. The student has a choice, but will take the advice of the chairperson as to which company fits his
preferred type of job, and whether with a local or foreign company. Companies also have a choice, in that they can reject an applicant, but rarely do so. They also can choose not to offer an internship. On average, 15 internships are provided each year. The duration is from two to three months.

**Internship – Its Nature, Scope, and Practice**

An intern is usually a college student who works in a temporary position, for two months or longer, for work experience (Wikipedia, 2009). Internships provide opportunities for students to gain experience, to decide if this is the chosen career or job or firm, create a network of contacts, or gain college credits. Internships also provide employers with cheap labour, typically for low-level tasks, and provide a chance for the student to join the firm later, with some worksite knowledge/skills already gained.

Internship is the trying out of what has been learned (theory) in actual work (practice). This ‘trying out’ is itself a learning experience, and it is therefore appropriate to consider theories of learning. In the traditional school room pedagogy, the teacher pours facts into young brains. In many parts of Asia that is still the unexamined theory of learning, although governments are trying to change it as it does not fit the modern world in its complexity and change. Experiential learning (Kolbe, 1983) is found to be more appropriate.

Other research scholars who greatly contribute to our still imperfect understanding of learning are Friere in Brazil (Torres, 1990) and Vygotsky in Russia who developed the concept of ‘zone of proximal development, emphasizing the importance to learning of the other members of the group (Vygotsky, 1980). Constructivist learning is topical, stressing the changing nature of the teacher to a facilitative role, students’ having an active role which involves collaborating with each other, engaging in challenging activities and questioning attitudes (Tynjala, 1999).

Our new knowledge of the brain informs us that all its activity operates through its neurons (nerve cells). Neuroscience is about how our knowledge and behavior are changed by experiences. Interestingly, challenge, stimuli and success protect our brains from damage (while stress causes damage). Sophisticated scans have shown that parts of the brain devoted to particular functions can be increased by our activities, e.g. playing the violin improves finger dexterity generally (Rawlins, 2003).

However, there is an argument that as the world’s most pervasive religion is money-capitalism, most universities now feel compelled to exist solely to feed manpower into corporations, and that education is solely to get a good job, with little need for critical thinking which may indeed be unwelcome (Bahrawi, 2005).

Gardner’s 1980s research identified several intelligences, not just Binet’s original 100-year old IQ, or even EQ, but also social, personal, musical, environmental, and physical smartness (Gardner, 1999). These could be used to restructure evaluation of intern’s performance.

The inclusion of internships in a university programme should not be the only recognition of the need to transfer learning through application. Opportunities must be sought in the classroom to provide real-life experience, through simulation, role-play, and field trips (Krishnan, 2008a).

Just-in-case learning is the old long-lasting idea that schools, colleges and universities, should fill their curriculum with as much content as they can fit into three or four years as this is the Bank of Learning to set them up for life. Include material just-in-case they will need it during the next forty years. As though we can now predict even the next five years such is the pace of change. A better alternative is to copy the Japanese inventory technique of just-in-time, when it is needed (Krishnan, 2008b). Up-to-date knowledge is now so readily available, often free, though the internet, or from libraries. This concept is similar to Lifelong Learning. Friere had developed his attack on passive ‘banking pedagogy in the 1960s, replacing it with that of an active learner, even proposing that the student-teacher relationship become that of equals (Torres, 1990).
Internship is not only good for students in helping them to learn to apply, but also for employers in being able to assess a potential employee in better conditions than a couple of interviews or even an assessment centre. It is thus a part of the intense competition which is such a feature of our modern world, not just between individuals and companies but between nations. Singapore, a small vulnerable nation with no natural resources other than its people, plans to build its citizens into knowledge workers so as to guarantee that their market value is better than other workforces in Asia (Bahrawi, 2005).

To turn now to examples, many countries have internships involving insurance companies. The author supervised such a programme in Singapore when he was a lecturer in the Department of Insurance at Nanyang Technological University for seven years. This too was strongly supported by the Insurance Associations and the government's Insurance Commissioner, and was based on a set of written objectives, daily programme, evaluation, and review procedure, agreed between the university and companies.

Another example is a Summer Internship programme arranged by an Insurance Association of member companies in USA for students considering an insurance career. The Association claims that it is the foundation for a career and offers networking opportunities. Travel costs and accommodation are provided, plus a stipend, for four weeks with a broker followed by five weeks with a company (NAPSO, 2009). One intern is selected for a three-weeks internship the following Summer at a Lloyds broker in the City of London, the most important insurance centre in the world. Naturally, there is a rigorous selection procedure as it is not an arrangement with only one university but seeks a wide field of candidates.

Sentry Insurance, USA, also offers internships, in nine specialist job types. It deliberately sees this as a way of training students whilst still at college with the goal of offering them full-time employment on graduation. Interns receive competitive pay, practical work experience, flexible work hours, paid housing, career counseling, plus training and development opportunities (Sentry Insurance, 2009).

As an alternative to internships, but with many similarities, some large companies have set up their own educational institutes, which they sometimes call colleges or universities. An example is the large CP Group in Thailand which in 2008 established its Panyapiwat Institute of Technology to educate graduates in essential skills, working systems and culture, especially in retail, logistics, and food processing (Prawain, 2009). For half of each semester, its students work at real jobs as apprentices in CP's various businesses. It has 700 students and plans for 1,000 in 2010. Interestingly, its courses include ethics and Buddhism, as the company does not want people who are intelligent talented people but lack morality. The company used to involve many universities to meet its personnel needs, but decided that its true needs could only be met by its own Institute.

In Britain, the RSA Insurance Group (formerly Royal Sun Alliance) formed a Technical Academy in 2006 consisting of Fellows, Senior Members and Members, governed by a Strategic Board (RSA, 2006). Although its priority is technical insurance skills, it cannot avoid dealing with generic skills. Also in Britain, the government has instituted a strengthening of links, with sizable funding, between higher education and business, based on employers’ skills needs (Hodge, 2003).

Employers are obviously a significant set of university stakeholders (along with students, their parents, government, etc.). In addition to providing internships, graduating students look to them for jobs; they have important views on what knowledge and skills are relevant, they provide a rich field for research, they contain alumni, and they send employees to undertake Masters or Doctors programmes (Lawrence, 2008). The importance of employers has generated Outcome-Based Education (OBE) as a tool to improve students’ marketability (Nor, 2008). It has been suggested that the boundaries between universities and the real world be made more permeable (Thamraksa, 2008). This has been given institutional form in a university in the Philippines where an Industry-Academic Linkage Centre was set up in 1987. Its membership and scope has greatly increased since then indicating its need by the university and firms (Atienza, 2008).

The skills learned at university are of obvious concern to employers and to those offering internships. Usually a formal evaluation is made by the employer of an intern’s performance and this is usually based on skills criteria (Shonhaji and Lindiawati, 2008).
addition to the obvious technical skills, such as insurance, these usually focus on generic skills or core competencies, such as problem-solving, and taxonomies of these have been created and tested by different researchers, so that they can be developed in university courses and company training. For example Ariffin, Idris and Najmuddin (2008) empirically examined three types of marketable skills, namely communication, leadership and teamwork, in 635 Malaysian students, and recommended that university lecturers must create more opportunities to develop these skills. The selection of significant skills will vary to some extent between trades, (Canning, 2007).

An Exploratory Empirical Survey in Bangkok

An exploratory qualitative survey was conducted in February 2009 with four randomly selected Thai graduates from the Bachelor of Business (Insurance) specialisation at Assumption University who had participated in the internship programme with insurance companies in Bangkok in 2006. Semi-structured confidential interviews were arranged at neutral locations in Bangkok, in accordance with standard qualitative principles as in Miles and Huberman (1994). Eight questions were used, and answers were explored, if necessary, for more information. The seven questions were:

1. Why did you choose this elective (not mandatory) course?
2. What were the objectives?
3. What happened?
4. Did you have any problems or dislikes?
5. Did you have any successes or likes?
6. How would you change the internship to improve it?
7. Should the university continue insurance internships?

Answers were recorded in shorthand. Representative comments are shown below. This qualitative data was later analysed for themes, which are described later.

1. Why did you choose this elective course?

   For new experience. To know the process/system.
   To taste the experience, what it’s like. It’s an introduction to work. To practice theory. It’s the real thing. A great opportunity, and I don’t understand those students who do not choose this.

   The university supervisor recommended this Insurance Surveyor Company, even though there is no pay, because I’ve grown fond of the idea of surveying risks and I prefer an outside job.

   To see the real picture of insurance. I chose an Insurance Broker because they pay interns well.

2. What were the objectives?

   To be in a company without pressure, as good preparation for a real job later. To learn office procedures. It would give me a better perspective of the university subjects and their relevance, and a better understanding through practice. For the company, the objectives would include a pre-vetting of a potential employee.

   To experience various insurance products in practice – policy cover and exclusions. To apply textbook material in an up-to-date way because this is real work happening now, whereas textbooks are seldom up-to-date.

   To see how each client is treated differently according to the situation.

   To be exposed to real work. To apply what I had learned in class.
To gain real experience so that I won’t panic when I get a job on graduation.

3. **What happened?**

I was given small claims to handle, and to organize each claim file. I had to contact clients to remind them of the need for documents to support their claim, but not to discuss the claim. I met surveyors and Loss Adjusters to update the files and establish relationships: it was essential PR between different types of insurance company.

I handled small claims involving mobile phones, from a telephone company client, so there were hundreds of small claims. I also did filing.

I had good support advice from my university supervisor. When I returned to my classes the relationships I had made as an intern were very useful as I could phone people to ask for practical advice on class-work problems.

I learned the processes, ways of doing things, the application of policy cover and conditions, and how to help a client when a loss occurs. I was responsible for the annual process of renewing policies, reminding on-line clients who had not yet paid. I was 100% fully occupied.

If I had a problem I would read the policy details or consult a colleague.

I went out with a senior executive, to see many different accident sites. That would not happen in a university course, except maybe on a field trip. I learned how the executive dealt with different people to solve problems, and how they reacted.

Sometimes I had to sit around in the office, as there was not enough work to give me which I could handle, even though I asked. That was about 60% of the time.

I wrote reports, and was not good at this, but learned from the executives’ comments. They also asked me to interpret reports, and then pointed out things I had missed, nuances. All this decided me – I wanted that sort of job in that company.

It was my good luck to be in that firm, with staff who trusted me to try, and wanted me to do worthwhile work.

4. **Did you have any problems/dislikes?**

I disliked so much the lack of work. But I was their very first intern, so it was new ground for them. I felt bad, as the employees were working so hard.

An initial problem was discipline: my university is so very strict over correct dress, yet this office was relaxed and asked me to dress normally; no need to wear a tie or belt.

I didn’t like it when they gave me a task but I didn’t know how to do it.

I was not allowed to talk to clients when visiting them as the executive felt I was inexperienced.

It was hard to understand some new things e.g. relationships with other insurers. Were they ‘family’ or not?

Sometimes they didn’t care about grammar so long as letters to clients were sympathetic, especially when a claim had to be rejected. I prepared letters, and the manager would make corrections before sending.

Older men treated me like a cute girl.

I would have liked more diversity of work.

I was seen by management as a ‘smiley’ person, not firm enough.

5. **Did you have any successes / likes?**

It was real work, not like university. I dealt with clients and met surveyors.
Even when I only had copying to do, it was in a real workplace environment. I had to negotiate with clients about amounts and explain my position as an insurer and also understand theirs as a client.

6. **How would you change the internship to improve it?**

To avoid the problem of not enough work, there should be a specific programme planned in advance for each week, to maximize the benefit to student and firm.

Each manager in the company seemed to have a different attitude to the programme: there should be a co-ordinated approach.

I was not aware that the firm evaluated me at the end. Students should have some input into this process.

The pre-programme briefing should be fuller, more specific, and with do’s/don’t’s.

7. **Should the university continue insurance internships?**

On balance, yes, as there were more good things than bad. It is a challenge, and therefore good. I got a clearer picture of theories I had learned at university. It prepared me for real life in a firm. The insurance community is comparatively small, and this experience of social immersion is good.

Yes, continue, because employers then know some candidates. Companies also see this as good PR for them, helping the insurance community.

Yes, because it was so rewarding, and even though I had to wake up early to go a long way to the office it was such valuable experience, especially the relationships with helpful workers.

**Employment**

Two aspects emerged which were not specific questions: employment and evaluation.

One student who decided that she did not want a job with her intern firm because she found the work lacked variety, included her internship in her CV when applying for a job elsewhere and was offered a job after a probing interview, mainly because of her account of the internship. One of the firms she then had to deal with was her intern firm, and, of course, she knew the people there. The intern firm used to phone her to try to lure her away.

Another student was asked by her intern firm to help them out because of a surge of work. She worked there for three weeks but had to quit because she also had to attend classes. She later applied for a job with that firm, but there were too many other applicants. She soon got a job elsewhere.

Another was asked to wait for three months until a vacancy occurred. He accepted another offer, but stayed only three months because the firm made him work only in the office, and he wanted outside tasks. He now works for a non-insurance firm.

Another does not work for the intern firm but found that the experience was immensely helpful with another firm because of the knowledge acquired of systems, attitudes and people.
Evaluation

Each intern firm had to complete a form at the end of the programme and send it to the university supervisor. There were 15 criteria, each evaluated on a four-point scale:

- Knowledge/ability in insurance
- Ability to work with others
- Ability to learn new things
- Analysis & solving of problems
- Quick response to problems
- Initiative
- Communication
- Punctuality
- Attitude
- Commitment
- Customer relationships
- English proficiency
- Work proficiency
- Determination
- Application

As the evaluation records from 2006 had not been kept, it was not possible to make a comparison between what the graduates said and how they had been evaluated by the company supervisors. Interns also had to keep a daily diary of events, tasks, and problems.

Themes

Many of the themes in the intern’s comments confirmed the aims and purpose of internships.

- They wanted this experience of real work in a real firm, as an introduction to work and as a trying out of a chosen career or type of job and firm.
- They seized the opportunity to test their university knowledge in practice.
- Pay was an issue for some, but not for others.
- Their actual experience was mixed.
  - Some were 100% occupied, others only 40%.
  - Some dealt with clients, Loss Adjuster and Surveyors.
  - They learned about relationships, processes, problem-solving, report-writing.
  - Some were given simple tasks; others found they ‘trusted me to try’.
  - For one at least, it decided him that this career/job/firm was for him.
  - Unusual comments were about the relaxed discipline of dress and grammar, the confusion about whether other insurers were ‘family’, that one intern was treated as a ‘cute girl’ and another not considered firm enough but too ‘smiley’.
  - Their ideas for the future were unanimous – they wanted these internships to continue because they were so rewarding, and even simple filing was at least done in a real work environment. But they wanted improvements: a more comprehensive briefing, a specific programme in advance, a co-ordinated approach within the firm, and involvement in evaluation.

Conclusions and Recommendations

It must be remembered that this is only an exploratory survey, limitations of time and resources preventing a wider sample and the involvement of insurers and lecturers. As in most qualitative research, it is not valid to assign percentages to findings. The value lies in the intern’s comments, their details and themes. It is for further research, qualitative and quantitative, to provide more depth and breadth and quantification. However, it can be said that the findings confirm many ideas, mentioned in the literature review above (Internship – Its Nature Scope and Practice) of what internship should be, and what improvements are needed.
Gardner’s 1980s research which identified several types of intelligence, could be used to restructure evaluation of intern performance, after reviewing the appropriateness of the 15 present criteria for insurers as mentioned by researchers above who emphasised how these skills can vary between jobs and industries. There are many books available such as Ciafolo (2008), Liang (2008), which offer guidance to co-ordinators of intern programmes, and also provide advice to interns. The reverse side, what employers want graduates to know, can be found in other books such as Coplin (2008) whose ten crucial skill groups are: work ethic, physical performance, speaking, writing, teamwork, influencing, research, numerical, critical thinking, and problem solving.

The need to review the criteria and the evaluation scheme for insurance internships in Bangkok should be part of a closer partnership with the university’s company stakeholders. Many researchers recommend such closer collaboration, to identify needed skills and to plan who should do what to develop these. For example, Shonhaji and Lindiawati (2008, p662) propose this, and talk of ‘the innovative inclusion of industry into the campus’. This could include collaborative research into the intern programme, which could examine the relevance and application of such theories of learning as proposed by Friere, Kolb, Vygotsky, and Constructivism, as some of the interns’ comments indicate a need for this. Neuroscience also stresses the importance of challenge and stimulus and success (Rawlins, 2003), and this should influence an improved design of insurance internships. Immediate research, to develop the base described in this paper, should select a wider group of ex-interns, representative of the different types of insurer, plus insurance managers involved in the programme, as well as insurance lecturers at the university. It should be a combination of qualitative and quantitative methodologies.

Referring the contrasting syllabus content, just-in-case and just-in-time, a radical step for collaborative research and discussion would be whether the university insurance curriculum should focus more on generic skills and insurance principles, and less on a wide range of specific factual products. This could be part of a degree course that contained more practical experience through internships.

The need to go across boundaries and strengthen university-industry collaboration is not easily done. A comparative study of this in UK, Japan, and USA by Hatakenaka (2004) found that internal and external boundaries influence new types of relationship and each of the three universities studied define these boundaries differently. Abiola (2008, p671) also adds a warning, that ‘the relationship between the university and the wider community it serves is a very complex one’, but insists that it must improve.

Collaboration should include designing an agreed model for this internship programme. As a basis, the following is suggested, the detail for each item needing to be varied for each type of company/job:

- **Objectives of the programme**
- **Skills: essential / desirable**
- **Evaluation Content**
- **Programme schedule**
- **Briefing of managers and students**
- **Induction for each intern by the company**
- **Monthly joint reviews by university adviser and company co-ordinator**
- **Evaluation and debriefing, by company, student, and adviser**
- **Annual joint review of the programme, followed by agreed changes.**

The process is both linear and iterative, a continuous cycle.

With the spreading economic and financial crisis, internships, and the wider field of education and training, are receiving greater attention, as enabling people to become more employable, and as a way of keeping the unemployed occupied. Britain has announced a national internship scheme, companies being encouraged to take on graduates for three-
months, with modest pay from the government. The aim is to make them more employable (http://ik.news.yahoo.com, 10 January 2009). Also in Britain, there are now National Skills Academies for employees, launched by the government in 2006, each focused on specific sectors of the economy, created and directed by employers (Cave, 2009). All of these innovations are commendable – but they will not create jobs for all, only a better chance for the lucky few. But they do achieve other objectives, as does the Bangkok insurance internship programme.

REFERENCES

Abiola, Oduola O. (2008), Understanding the Relationship Between the University and the Wider Society in the Knowledge Based Economic World Order, SEEAIR Conference Proceedings, Surabaya, Indonesia, 4-6 November.
Ariftin, Siti Rahayah; Idris, Rodiah; Namjuddin, Ashiqin (2008), Communication, Leadership and Teamwork Skills as Core Competences among Higher Education Students, ASAIHL International Conference, Bangkok, 7-10 April.
Bahrawi, Nazri (2005), Road to Education Reform in SEA. Bangkok Post, 28 November.
Coplin, William D. (2008), 10 Things Employers Want You to Learn in College, USA
Krishnan, Roy Edward (2008a), Transfer of Learning, Bangkok Post 9 December.
Krishnan, Roy Edward (2008b), Quality over Quantity, Bangkok Post, 11 November.
Lawrence, Brian (2008), Strengthening Capacities for Graduate Research, SEAAIR Conference, Surabaya, Indonesia, 4-6 November.
Liang, Jengyee (2008), Hello Real World: A Student’s Approach to Great Internships, Co-ops and Entry Level Positions, USA
Nor, Norazman Mohamad (2008), National Defence University Malaysia Riding on Outcome-Based Education, ASAIHL International Conference, Bangkok, 7-10 April.
Prawain, Yuthana (2009), CP ALL Invests B1bn in Educational Institute, Bangkok Post 26 January.


Shonhaji, Nanang, and Lindiawati, S.E.S. (2008), Analysis of Managerial, Technical, and Soft Skills in an Internship Programme, SEAAIR Conference Proceedings, Surabaya, Indonesia, 4-6 November.


Torres, C. (1990), Paul Friere's Pedagogy of the Oppressed Twenty Years After, Aurora 13(3).


Customer Centric Service Leadership - Service Culture: Human Capital Transformation in Malaysia

Mohd Azam Nair (azam@uniten.edu.my)
Mohmad Sakarnor Deris (sakarnor@uniten.edu.my)

Universiti Tenaga Nasional
Malaysia

ABSTRACT

To achieve vision 2020 steps have to be taken to understand, research and implement the key initiatives in the services sector that could help make the service culture an integral domain of Malaysian economy in augmenting productivity. This paradigm focuses on service orientation and service excellence as the services sector of our economy is the next wave of growth in a competitive business environment of today and the future. The services sector economy, organisational culture, consultations, research and training are the essential programmes to be focused on in realising a constructive service culture in a robust economy. The management of service culture profoundly depends on leadership qualities, values adhered to, theories put to practice, and compliance to standard criteria of measurement in the service industries. The process and development of the service culture need to be rigorously in tandem and relevant to the services sector demand for its effectual formation. The consolidation process to service culture gains momentum only when tangible results are achieved in the organisation and the economic sector. As such, to make this paradigm a reality appropriate consultation, research and training (CRT) services need to be offered in the various sub-disciplines within the service culture component of university curricula to further enhance the academia, graduate employability as well as the economic sector of the nation. This paper elucidates the paradigm shifts that need to be initiated and are necessary for the human capital transformation in Malaysia.

1 INTRODUCTION

Looking at the economic performance in 2006, Malaysia's total trade increased by 3.8 percent to US40 billion, with a trade surplus of US29 billion, the second highest ever achieved and also the 10th consecutive year that surpluses were recorded (MITI, 2007). Total investment in the manufacturing sector amounted to US17 billion, which was more than a two-fold increase over the target, while investments of US19 billion in the services sector surpassed the investment target by more than 40 percent.

Despite the uncertainties in the external environment, Malaysia's economy continued its strong growth momentum and expanded by 6.3 percent from 5.9 percent in 2006.

The manufacturing and services sectors continued to be the major engines of growth, contributing 30.1 percent and 53.6 percent respectively to the gross domestic product (GDP) in 2007 (Bernama, 2008).

However, the present slowdown in the US economy, weaker demand growth in Europe and Japan, and the rise in inflation ensuing from the escalating energy and food prices, have posed challenges to both the public and private sectors. The outlook of the world

---

15 1US dollar is now approximately equivalent to RM (Ringgit Malaysia) 3.60. In 1997 the rate was 1US to RM2.50.
economy in 2008 and ahead has become increasingly uncertain, as a result of the current global economic developments.

With the present economic slump felt by almost all countries in the world, Malaysia being an export oriented hub in South-East Asia has not being spared. Export figure for manufactured goods and natural commodities for the first quarter of 2009 is forecast to drop by more than 20 percent and this is projected to drop by another 30 percent by the second quarter. Prices of commodities too dropped heavily affecting our foreign exchange. Malaysia's international reserves stood at US100.2 billion on October 31, 2008 down more than US125 billion earlier in the year (Asean Affairs, 2008). The economic downturn in importing countries, mainly the US, has affected the economy of Malaysia. Buying power has dwindled with higher US dollar compared to Malaysian ringgit. Inflation has risen to over 9 percent within the past one year and unemployment rate has shot up to 12 percent. The GDP is projected to grow less than 2 percent for this year and may record a negative 2.2 next year.

The Malaysian demographics profile as of the July 2008 census is estimated of a nation with a population of 25,274,133 citizens made up from 50.4 percent Malay, 23.7 percent Chinese, 11 percent Indigenous, 7.1 percent Indian and 7.8 percent of others. The median age of Malaysians is 24.6 years with an average life expectancy of 73.03 years (MIDA, 2009).

The country's poverty rate will increase from 3.7 percent to 24.3 percent if the poverty line is raised from the current US230 to US430 per household. Between 2007 and 2008, total domestic and foreign investments in the country only increased by about 5 percent in terms of ringgit amount. This is insufficient to sustain the economy.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarawak</td>
<td>39</td>
<td>568.1</td>
<td>3665.9</td>
<td>4333.1</td>
<td>23</td>
<td>115.1</td>
</tr>
<tr>
<td>Selangor</td>
<td>302</td>
<td>818.9</td>
<td>2572.8</td>
<td>3391.7</td>
<td>318</td>
<td>1997.1</td>
</tr>
<tr>
<td>Johor</td>
<td>173</td>
<td>661.5</td>
<td>2684.7</td>
<td>3346.2</td>
<td>188</td>
<td>713.0</td>
</tr>
<tr>
<td>Penang</td>
<td>151</td>
<td>1448.2</td>
<td>1452.6</td>
<td>2901.8</td>
<td>134</td>
<td>472.1</td>
</tr>
<tr>
<td>Melaka</td>
<td>41</td>
<td>52.1</td>
<td>986.3</td>
<td>1038.4</td>
<td>38</td>
<td>462.4</td>
</tr>
<tr>
<td>Perak</td>
<td>50</td>
<td>199.1</td>
<td>695.2</td>
<td>894.6</td>
<td>59</td>
<td>186.2</td>
</tr>
<tr>
<td>Kedah</td>
<td>46</td>
<td>82.3</td>
<td>651.2</td>
<td>733.5</td>
<td>46</td>
<td>2244.8</td>
</tr>
<tr>
<td>N Sembilan</td>
<td>26</td>
<td>234.6</td>
<td>84.2</td>
<td>318.8</td>
<td>40</td>
<td>141.0</td>
</tr>
<tr>
<td>Pahang</td>
<td>23</td>
<td>290.8</td>
<td>18.0</td>
<td>308.8</td>
<td>28</td>
<td>116.3</td>
</tr>
<tr>
<td>T’ganu</td>
<td>9</td>
<td>181.9</td>
<td>101.6</td>
<td>283.5</td>
<td>11</td>
<td>795.1</td>
</tr>
<tr>
<td>Sabah</td>
<td>40</td>
<td>177.3</td>
<td>98.2</td>
<td>275.5</td>
<td>41</td>
<td>308.8</td>
</tr>
<tr>
<td>Perlis</td>
<td>2</td>
<td>18.1</td>
<td>30.6</td>
<td>48.7</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>KL</td>
<td>12</td>
<td>26.9</td>
<td>6.8</td>
<td>33.7</td>
<td>12</td>
<td>15.1</td>
</tr>
<tr>
<td>Kelantan</td>
<td>3</td>
<td>5.0</td>
<td>18.9</td>
<td>23.9</td>
<td>9</td>
<td>15.0</td>
</tr>
<tr>
<td>Labuan</td>
<td>2</td>
<td>2.8</td>
<td>3.1</td>
<td>5.9</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>919</td>
<td>4767.6</td>
<td>13070.1</td>
<td>17938.1</td>
<td>949</td>
<td>7584.0</td>
</tr>
</tbody>
</table>

Source: MIDA

Maintaining Malaysia's position among major trading nations is crucial in sustaining the economy. Collaboration between the government and industry is needed to ensure that Malaysia remains among the major global trading nations in the future.

Looking into workforce training a lot more has to be the hub. Graduates are presently ill-equipped to diversify their talents in the job market. The government's focus on an export economy thus far has not bided well for the country and the training of manpower. With a relatively smaller population compared to neighbouring countries like Indonesia, Thailand and...
the Philippines and experiencing a lesser buying power the country cannot depend on home consumption per se to stabilise its economy. Banking on the manufacturing industries for export purposes has indubitably not neglected the services industries for the past over ten years. The potentials in the services industry have traditionally been given focus but this could further be ascended. The services industry is where the government should now lay more focus on to generating a more viable economy. The services industries such as the health, education and the tourism sectors should be enhanced to cushion the economic doldrums the country is facing. The country has the potentials and human capital to embark on these sectors. Thus, the universities should play an important role in churning out graduates who are apt at prompting positive service culture in promoting the services sector as well as the other sectors. Besides specialised knowledge in the areas of the services industry, graduates should be trained in services positioning, value, performances and culture as areas that they should be strong at in order to survive in the business market. This is to create a more efficient human capital to face the economic downturn. This paper will look into the areas of service culture that will help in the human capital transformation contributing to the increase in employability of graduates and creating a more resilient workforce.
Figure 1
Service Culture

SERVICES INDUSTRY SPECTRUM

National / Corporate Plans

Roadmap Target

Strategies/ Delivery

Programmes

Projects

Applications

Disciplines

Refer to list of Workforce Sub-Disciplines
Figure 2
Workforce Disciplines

ALIGNING THE WORKFORCE TO TOTAL SERVICE CULTURE

GENERIC SUB-DISCIPLINES

SERVICES SECTOR ECONOMY (FOCUS/NEEDS)
- The Way Forward
- Services sector Focus
- Services sector Development
- Services sector Contribution
- Services Demand
- Trade in Services

ORGANISATIONAL CULTURE (THEORY AND PRACTICES)
- Literature
- Organisational Values
- Attributes of Culture
- Levels of Culture
- Behaviour and Artefacts
- Services Values
- Assumptions and Beliefs
- Services sector Relevancy
- Synthesis of Sub Cultures
- Formation of Service Culture
- Peer Interactions
- Employee-employer Interactions
- Interaction with Senior Co-workers

CONSULTATION, RESEARCH AND TRAINING (DIRECTIONS)
- Service Culture within Sub Cultures
- Desirable and Undesirable Service Culture
- Service Transformation Strategies
- Form over Substance
- Overcoming Organisational Crisis
- Role Modelling, Teaching and Coaching
- Reward Criteria
- Recruitment Criteria
- Service Culture of Mistrust
- Misconception of Service Culture
- Measurement of Service Quality
- Service Delivery System
- Customer Service Awareness
- Communicating Excellent Customer Services
- Training on Service Culture
- Group Performances
- Customer Relations
- Competencies
- Job Satisfaction
- Retrenchment
- Creating Service Culture for Customers (PS3-3-1)
- Identifying Customers
- Differentiating Customers
- Building Customer Relationship
- Customizing Services
- Moment of Truth
- One-to-One Customer Relationship
- Customer Feedback
- Customer Service Environment (PS3-3-2)
- Standards of Performances
- Determining Standards
- Compliance to Accountability
- Recognition and Reward
- Behaviour Standards versus Employee Performance
- Internal Customers
- Service Negativity
- Revigorating Customer Service
- Communication Skills
2 SERVICES SECTOR ECONOMY: THE WAY FORWARD.
(PS3-1)

Figure 3
Rethinking Malaysia

Excerpted and adapted from Rethinking Malaysia – Meeting the Challenges of the New Era with Rowan Gibson, 10th May 2004 @ Nikko Hotel by Wilson Tay

2.1 Services sector: The focus

The services sector in the country accounts for about 60 percent of employment and GDP (Thivagi, 2003), and this is expected to reach about 70 percent by 2020. Growth in services is also recognised as an important aspect of economic development and is significantly associated with income growth and economic modernisation (Francois and Reinhardt, 1996). Malaysia’s services sector currently accounts for 58 per cent of employment and the economy is poised to enter into the post-industrial phase of development. A services-dominated economy is currently being reinforced by policy changes as part of the national strategy to diversify the sources of growth.

The new economic scenario in the country has driven policy makers to re-engineer the economy, focusing on the development and the sustainability of the services sector and services trade. Post 1997/98 crisis saw the pegging of the ringgit and selective capital controls, debt structuring and recapitalisation of the banking system. This has helped strengthen the economy, to a certain extent.

The high dependence on manufacturing exports and FDI has affected the economy in the present increasingly uncertain and competitive global environment. The FDI inflow into manufacturing has slowed down and seems improbable to reach pre-crisis levels. The export of electrical and electronic goods that represent about 70 percent of manufacturing exports has slowed down as well. Malaysia has also been facing intense competition in manufacturing from regional economies, especially with the emergence of China and India as the economic powerhouse. Overall it has dampened investment climate, and there is a limit to public investment to sustain economic growth in the longer term.

The services sector has overtaken manufacturing in terms of jobs created, accounting for about 57 percent. The manufacturing sector currently accounts for about 30 per cent of GDP and has reached its optimum share in the economy, based on the growth experience of industrialised economies. The manufacturing sector may continue to develop in absolute terms, but increasing its relative share may not be easy. The principal source of growth for the next stage of development must come from the services sector. More recent evidence shows that services have become a prerequisite for economic
development rather than its final demand.

Adequate provision of services is undeniably a vital element in ensuring dynamic economic growth. The inadequate development of intermediate services -- services that contribute to the production of other goods and services - could inhibit the growth of the other sectors. Recognising these constraints, the Second Industrial Master Plan (1996-2005) emphasised the importance of developing supporting services for manufacturing under its Manufacturing++ or the cluster-based, industrial development strategy. The development of the services sector forms an integral component of the cluster-based industrial development strategy adopted since 1996. The Malaysian experience also shows that the existence of a dynamic manufacturing base alongside a relatively weak services sector results in heavy reliance on imported services, and contributes to a huge outflow of foreign exchange.

Unlike manufacturing, the services sector comprises a whole range of sub-sectors, such as tourism, education, health, finance and banking, training and consultancy. There is potential for these services to be exported as well enhanced locally to attract foreign currency. The development of selected niche areas can be prioritised to serve as the future engine of growth. The trend to outsource their services rather than providing them in-house would see the turn round when the services sector is prioritised. Even the non-commercial services -- the public sector -- have expanded with the increase in population and better living standard.

2.2 Services sector development in Malaysia

Services do not anymore solely border on relative intangibility of service outputs, the close links between production and consumption or the relative labour intensity of services compared to the goods producing sector (Thivagi, *ibid*). With improvements in information technology, which enable services to be delivered over distance the use of ICT in the production and delivery of some services such as finance, transport and telecommunications makes services a highly capital and technology intensive industry, contrary to the traditional view of services as a labour-intensive industry.

2.3 Services sector contribution to the economy

The services sector has expanded gradually over the years from 1975, with the exception of a marginal slide in the early 1980s, when it fell from about 49 percent in 1975 to about 45 percent in 1980 largely due to the slow growth in government services. The services sector share also fell in 1990, but this was largely attributed to the large-scale privatisation of public services.

<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaysia: Contribution of Services to GDP, 1975-2002 (Percent)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Construction</td>
</tr>
<tr>
<td>Electricity, gas &amp; water</td>
</tr>
<tr>
<td>Transport, storage &amp; communications</td>
</tr>
<tr>
<td>Wholesale &amp; retail trade, hotels &amp; restaurants</td>
</tr>
<tr>
<td>Finance, insurance, real estate &amp; business</td>
</tr>
<tr>
<td>Government services</td>
</tr>
<tr>
<td>Other services</td>
</tr>
<tr>
<td>Total services</td>
</tr>
</tbody>
</table>

Agriculture & mining  | 32.2  | 33.0  | 31.2  | 28.5  | 21.0  | 16.0  | 14.8  |
| Manufacturing       | 16.4  | 19.6  | 19.7  | 26.9  | 33.1  | 32.3  | 28.5  |


The leading sub sectors were wholesale and retail trade, and hotels and restaurants which accounted for about 14.0 per cent of GDP, and finance, insurance, real estate and
business services which contributed approximately 13.0 percent of GDP in 2002. With the exception of government services, all other sub sectors have expanded. The government services share of GDP has declined by almost 50 percent since the mid-1980s, from 12.2 percent in 1985 to 6.7 percent in 2002. The downward trend is part of the national strategy to withdraw from direct participation in economic activities and to assume a more regulatory role, and to shift the engine of growth to the private sector.

Table 3
Malaysia: Contribution of Services to Employment, 1975-2002 (Percent)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>5.6</td>
<td>7.6</td>
<td>6.3</td>
<td>8.9</td>
<td>8.1</td>
<td>8.0</td>
</tr>
<tr>
<td>Transport, storage &amp; communications</td>
<td>3.9</td>
<td>4.3</td>
<td>4.5</td>
<td>5.0</td>
<td>5.0</td>
<td>5.2</td>
</tr>
<tr>
<td>Finance, insurance, real estate &amp; business</td>
<td>2.9</td>
<td>3.5</td>
<td>3.9</td>
<td>4.7</td>
<td>5.5</td>
<td>6.2</td>
</tr>
<tr>
<td>Government services</td>
<td>13.3</td>
<td>14.6</td>
<td>12.7</td>
<td>10.8</td>
<td>10.6</td>
<td>10.4</td>
</tr>
<tr>
<td>Other services</td>
<td>20.3</td>
<td>22.6</td>
<td>26.1</td>
<td>25.5</td>
<td>27.6</td>
<td>28.4</td>
</tr>
<tr>
<td>Total services</td>
<td>46.0</td>
<td>52.7</td>
<td>53.5</td>
<td>54.8</td>
<td>56.8</td>
<td>58.2</td>
</tr>
<tr>
<td>Agriculture &amp; mining</td>
<td>38.5</td>
<td>32.1</td>
<td>26.6</td>
<td>19.5</td>
<td>15.6</td>
<td>14.6</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>15.5</td>
<td>15.2</td>
<td>19.9</td>
<td>25.7</td>
<td>27.6</td>
<td>27.1</td>
</tr>
</tbody>
</table>

Notes: Government services include public administration, health, education and defence; other services include electricity, gas and water, wholesale and retail trade, hotels and restaurants, and other services. Source: Ministry of Finance, Economic Report, various issues.

In terms of employment, services accounted for about 58 percent of total employment in 2002 (Table 3). Services employment share has been on the rise since 1980, when it accounted for about 46 percent of total employment. Other services, which include electricity, gas and water, wholesale and retail trade, and hotels and restaurants was the largest employer, and it accounted for about 28 percent of total workforce in 2002. Employment in all sub sectors has been on the rise, with the exception of government services, whose employment share has declined from 13.3 percent in 1980 to 10.4 percent in 2002. As noted earlier, this is due to the downsizing of the public sector and to privatisation of several public agencies.

2.4 Demand for Malaysian services

Table 4

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate demand</td>
<td>44.1</td>
<td>48.2</td>
<td>46.1</td>
<td>38.5</td>
<td>32.3</td>
<td>32.6</td>
<td>23.3</td>
<td>29.1</td>
<td>31.1</td>
</tr>
<tr>
<td>Private consumption</td>
<td>11.5</td>
<td>11.1</td>
<td>11.9</td>
<td>23.2</td>
<td>18.4</td>
<td>14.1</td>
<td>20.3</td>
<td>21.0</td>
<td>20.8</td>
</tr>
<tr>
<td>Government consumption</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>18.8</td>
<td>18.7</td>
<td>14.2</td>
</tr>
<tr>
<td>Gross capital formation</td>
<td>4.0</td>
<td>2.4</td>
<td>3.7</td>
<td>4.5</td>
<td>2.8</td>
<td>4.6</td>
<td>23.0</td>
<td>16.5</td>
<td>20.8</td>
</tr>
<tr>
<td>Exports</td>
<td>36.5</td>
<td>34.6</td>
<td>36.4</td>
<td>34.2</td>
<td>47.2</td>
<td>49.5</td>
<td>7.4</td>
<td>10.1</td>
<td>8.5</td>
</tr>
<tr>
<td>Imputed bank charges</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>3.2</td>
<td>4.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Change in stocks</td>
<td>3.8</td>
<td>3.7</td>
<td>3.7</td>
<td>-0.4</td>
<td>-0.6</td>
<td>-0.9</td>
<td>0.3</td>
<td>0.0</td>
<td>0.3</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>


The services sector plays a vital role in its linkage with the other sectors of the economy. In 1983, about 63 percent of the total services produced in the country were consumed as final demand, while about 27 percent was channelled into other sectors as intermediates, while only 7 percent was exported (Table 4). In 1991, about 56.0 percent was consumed as final demand, and 31.0 percent was used in the production of other goods and services, while only about 9 percent was exported. Thus, unlike agriculture and manufacturing, the services industry is a more domestic-oriented industry and the bulk of its services are consumed as final demand. As the economy advanced, the consumption pattern of the services industry has diversified slightly, with a slight increase in intermediate demand. However, the export of services has not shown any improvement and in fact has
declined from 10.1 percent in 1987 to 8.5 percent in 1991.

2.5 Trade in Services

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Malaysia: Trade in Services; 1965-2002 (Note the deficit in the balance of payment) (RM millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipts</td>
<td></td>
</tr>
<tr>
<td>Freight &amp; insurance</td>
<td>558</td>
</tr>
<tr>
<td>Other transportation</td>
<td>48</td>
</tr>
<tr>
<td>Travel and education</td>
<td>22</td>
</tr>
<tr>
<td>Investment income</td>
<td>170</td>
</tr>
<tr>
<td>Government transactions</td>
<td>262</td>
</tr>
<tr>
<td>Other services</td>
<td>50</td>
</tr>
<tr>
<td>Net Payments</td>
<td>899</td>
</tr>
<tr>
<td>Freight &amp; insurance</td>
<td>168</td>
</tr>
<tr>
<td>Other transportation</td>
<td>64</td>
</tr>
<tr>
<td>Travel and education</td>
<td>102</td>
</tr>
<tr>
<td>Investment income</td>
<td>425</td>
</tr>
<tr>
<td>Government transactions</td>
<td>37</td>
</tr>
<tr>
<td>Other services</td>
<td>103</td>
</tr>
<tr>
<td>Payments</td>
<td>341</td>
</tr>
<tr>
<td>Freight &amp; insurance</td>
<td>-162</td>
</tr>
<tr>
<td>Other transportation</td>
<td>-16</td>
</tr>
<tr>
<td>Travel and education</td>
<td>-80</td>
</tr>
<tr>
<td>Government transactions</td>
<td>225</td>
</tr>
<tr>
<td>Other</td>
<td>-53</td>
</tr>
</tbody>
</table>

Source: Department of Statistics, Annual Balance of Payments and Quarterly Balance of Payments, various issues.

Malaysia has traditionally been a net importer of services. Its role in services trade has been rather weak, leaving a perennial deficit in the services account of the balance of payments. The size of the deficit has also been on the rise, with the exception of a marginal decline in 1990, 1998 and 2001 (Table 5). The deficit in the balance of payments has declined following the introduction of several measures in the late 1990s to reduce the services deficit.

The deficit in the services account of the balance of payments has been large due to heavy import of shipping, freight and insurance services, the huge outflow of investment income from foreign direct investment, and debt servicing, royalties and consultancy fees paid abroad. However, until very recently, efforts to reduce its reliance on the import of services and to export Malaysian services have not been very successful. There are a few large service firms in Malaysia that could offer sophisticated services and compete internationally, but they are normally linked with foreign firms (Sieh Mei-Ling 1990). Many of the foreign linked firms provide accounting, legal and other business services to the local market.

Looking into the above economic trend, the nation should consolidate the services sector, as this sector has a lot more to offer to generate more economic returns as compared to many other sectors which are almost saturated market-wise. In order to sustain the services sector, one fundamental issue, among others, that has to be critically looked into by leaders is the augmentation of the organisational service culture.

Phase 1 of this project will focus on the deeds and demand of the areas of the economy in the services sector which requires further consolidation of their service culture to help promote them to generate improved productivity.
3 ORGANISATIONAL CULTURE (PS3-2)

Perceptions of service quality vary across cultural groups, as defined by each culture’s position on Hofstede’s dimensions (Ching Liu et al 2001). Research has explicitly mapped the relationship between service quality perceptions and cultural dimension positions and draws the implications for international service market segmentation. Research has also tested the hypotheses constituting their theoretical analysis. Cultural dimensions have been designed that could be used to segment international service markets and allocate resources across segments.

In the tourism industry, for instance, cultural differences have been examined between segments of tourists’ perceptions of relational quality service provided by guest-contact employees (Fu Tsang and John Ap, (2007). The quality of interpersonal relationships was a key factor in determining the Asian customers’ service-encounter evaluation, while Western customers placed emphasis on goal completion, efficiency, and time savings. The implications of the results on cultural training for tourism and hospitality industry employees in the country are equally significant.

Over the past few decades, cross-border business has experienced unparalleled growth. This growth is due to advances in communication and information technologies, privatisation and deregulation in emerging economies, and emergence of the global consumer (Ramaseshan, 2006). As the era of globalisation continues to manifest through the emergence of global companies, the importance of customer relationship management (CRM) and the inculcation of opposite service culture in business dealings in these companies has become increasingly significant. Global CRM (GCRM) is the strategic application of the processes and practices of CRM by firms operating in multiple countries or by firms serving customers who span multiple countries, which incorporates relevant differences in business practices, competition, regulatory characteristics, country characteristics, and consumer characteristics to CRM strategies to maximise customer value across the global customer portfolio of the firm (Ramaseshan, ibid).

Raajpoot (2004) has explored the domain of service encounter quality as it exists in a non-Western culture and proceeds to develop a culturally sensitive multiple-item scale, PAKSERV. He explains the variation in encounter quality evaluations and comes up with hypotheses on the impact of a personal value system, national culture orientation, and consumer context variables on how consumers assign the importance weights to the dimensions of encounter quality.

Besides that, in other social exchanges, cultural norms and values are likely to influence customers’ perceptions of fairness and satisfaction with the service recovery process. Mattila and Patterson (2004) have contrasted the impact of two recovery attributes (compensation and explanation) on customers’ post-recovery perceptions in a cross-cultural context. The study indicates that compensation seems to drive customers’ fairness perceptions in a cross-cultural context. This also implies that service culture is decisively significant and has to be factored in to settle on customers’ perceptions of services rendered.

Customer feedback – an impetus to generating better services - is an often-overlooked factor in explaining the relationship between service quality and customer satisfaction. Voss, et al (2004) compares the influence of service quality on customer satisfaction in the United Kingdom and the United States and considers the moderating effect of systematic customer feedback and complaint processes. Empirically, the research demonstrates that customer reaction to good service (culture) is similar, but U.K. and U.S. customers tend to respond differently to poor service encounters based on cultural norms. To illustrate customer evaluations and examine how construct relationships vary by sector and country, Luiss (2006) presented a factorial structural equations (FAC-SEM) on covariance matrices - though new to the literature, but can be easily implemented for research purposes on service culture.

Some recent studies, in fact, have shown that culture influences how consumers perceive service culture that attributes to quality. Others have shown the relationship between perceived service quality and behavioural intentions (Liu, et al. 2001)
Service culture is never scarce of research done on it. Numerous other important studies have been done to augment the literature: Quality of services (Martin et. el. 2006; Souza and Voss, 2006); service sabotage (Lloyd et. al. 2002); the measurement of communication and service quality and customer commitment (Christopher, 2006); the effect of service evaluations on behavioural intentions (Harrison, 2001) and the influence of inter-customer social support on customer voluntary performance (Rosenbaum and Massiah, 2007).

Research has also been prominent in the areas of service providers and their impact on customers (Gittell, 2002); the role of emotions in service (Mattilla and Enz, 2002); service perceptions and outcome behaviours (Brady and Cronin Jr., 2001) and customer-employee and service relationships (Gremler and Gwinner, 2000).

Service culture has triggered numerous other quantitative and qualitative studies within and without the services domain to signify its relevance. Phenomenological research findings are in most cases more popular among practitioners as they see tangible rewards to their business processes. They spend less, it is less time consuming, and in the realm of business and economy the bottom line is always dollars and cents. Nevertheless, there has to be reciprocity between theory and practice. The theories derived from these studies need to be synergised with the needs of the practitioners to generate a viable growth in the services sector economy.

3.1 The Implications

How does one go about building, influencing or changing an organisation's service culture to promote an economic synergism?

One of the primary responsibilities of strategic leaders is to create and maintain the organisational service characteristics that reward and encourage collective effort. Perhaps, the most fundamental of these is organisational service culture. But what do we really mean by organisational service culture? What influence does it have on an organisation?

Organisational culture is defined variably according to relevant disciplines: The definition from the business perspective represents the view that culture is an explicit social product arising from social interaction either as an intentional or unintentional consequence of behaviour. In other words, culture is comprised of distinct observable forms (e.g., language, use of symbols, ceremonies, customs, methods of problem solving, use of tools or technology, and design of work settings) that groups of people create through social interaction and use to confront the broader social environment. (Wuthnow and Witten, 1988).

Figure 4
The attributes of culture

<table>
<thead>
<tr>
<th>CULTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
</tr>
<tr>
<td>Use of symbols</td>
</tr>
<tr>
<td>Ceremonies</td>
</tr>
<tr>
<td>Customs</td>
</tr>
<tr>
<td>Methods of problem solving</td>
</tr>
<tr>
<td>Use of tools or technology</td>
</tr>
<tr>
<td>Design of work setting</td>
</tr>
</tbody>
</table>
This view of culture is most relevant to the analysis and evaluation of organisational culture and to cultural change strategies that leaders can employ to improve organisational performance. We would rather define service and culture, by tradition, as the value system of an organisation and its workforce, when adhered to could help increase efficiency, organisation-client rapport and productivity.

Culture develops to help cope with its environment (Schein, 1988). Understanding the culture of an organisation is important to develop an efficient service system for the clients. The success of an organisation depends greatly on the culture or values the people inherit. The world is too complex these days just to confine an organisation self to existing culture. To be more service oriented, the organisation has to look forward to embracing universal culture – the positive service culture shared by all and sundry.

It is when new leaders find it hard to analyse and evaluate the organisation culture will make them failures. The success of a business entity to a great extent depends on understanding organisation culture and subsequent to this work towards innovation.

Why is culture so important to an organisation? Schein (ibid), suggests that an organisation's culture develops to help it cope with its environment. Today, organisational leaders are confronted with many complex issues during their attempts to generate organisational achievement in VUCA environments. A leader's success in managing business will depend, to a great extent, upon understanding organisational culture.

New strategies to accomplish new vision will not succeed if the plans are not consistent with the organisational culture. A workforce that resist to changes will cause difficulties to an organisation. A workforce that is not prepared to transform by a new team of managers is often due to their existing culture that is entrenched and cannot be bent. An ambitious business leader will always find it a stumbling block if he cannot adhere to the culture of the workforce and vice versa. Why? Difficulties in service transformations arise from failures to analyse an existing culture of an organisation.

3.2 Levels of culture

(Schein, ibid) characterises culture as consisting of three levels. The most visible level is behaviour and artefacts. This is the observable level of culture, and consists of behaviour patterns and outward manifestations of culture: privileges provided to executives, dress codes, level of technology utilised, and the physical layout of work spaces. All may be visible indicators of culture, but they are difficult to interpret. Artefacts and behaviour also may tell us what a group is doing, but not why. With time the behaviour becomes innate and insentience as it has become part of the corporate culture. It is no more an artificial process but has become ingrained in the corporate system.
At the next level of culture are values. Values underlie and to a large extent determine behaviour, but they are not directly observable, as behaviours are. There may be a difference between stated and operating values. People will attribute their behaviour to stated values.

To really understand culture, we have to get to the deepest level, the level of assumptions and beliefs. Schein (ibid) contends that underlying assumptions grow out of values, until they become taken for granted and drop out of awareness. People may be unaware of or unable to articulate the beliefs and assumptions forming their deepest level of culture.

To understand culture, we must understand all three levels, a difficult task. One additional aspect complicates the study of culture: the group or cultural unit which "owns" the culture. An organisation may have many different cultures or subcultures, or even no discernible dominant culture at the organisational level. Recognising the cultural unit, however, is essential to identifying and understanding the culture.

Organisational cultures are created, maintained, or transformed by people (Schein, ibid). An organisation's culture is, in part, also created and maintained by the organisation's leadership. Leaders at the executive level are the principle source for the generation and re-infusion of an organisation's ideology, expression of core values and specification of norms. Organisational values express preferences for certain behaviours or certain outcomes. Organisational norms express behaviours accepted by others. They are culturally acceptable ways of pursuing goals. Leaders also establish the parameters for formal lines of communication and message content—the formal interaction rules for the organisation. Values and norms, once transmitted through the organisation, establish the durableness of the organisation's culture. To promote positive service culture is the re-invention of values in an organisation in order to promote increased productivity and better job satisfaction within the workforce and to retain and recruit more clientele.

Thus, Phase 2 of this road mapping scheme will seek in-depth research on the theory and practices of the organisational culture as it is contributory and significantly central to the services sector.

4 CONSULTATIONS, RESEARCH & TRAINING (PS3-3)

To reinforce the values of service culture, an organisation has to work towards re-conceptualising its role within a bigger business domain, re-identifying its goals and re-inventing strategies on how affiliates in the organisation could work together to achieve the goals.

More research can be done in Phase 3 of this project on how the service culture we adhere to can effectively operate with domestic and foreign companies in activities that can generate better economic returns to the country. Strategic leaders thus have an additional set of challenges. They have to create the means and the opportunities to permeate their employees with new ways of looking at themselves and their capabilities. Leaders’ new ideologies and values need to be communicated effectively, internalised by employees, and then translated into productive methods of thinking and working. The useful techniques for overcoming these challenges, in effect, fall within the domains of evaluating and transforming organisational cultures.

4.1 The synthesis of subcultures

Research can be focused on the service orientation of subcultures. Organisations consist of subgroups that have specific characteristics and a sense of identification. Within organisations, people can easily classify themselves and others into various social categories or groups based on identification with their primary work group, occupational or professional skills, union membership, or age cohort. (Ouchi 1980, Ashforth and Mael, 1989). Subgroups in organisations can and do create subcultures that comprise specific networks of meaning; yet, at the same time, they remain associated with the ideologies and values of the organisation’s leadership. For example, at a macro level the culture that is attributed to the
Ministry of Trade and Industry comprises the distinct cultures of the different departmental services of civil servants assigned to the Ministry. Thus, a closer examination of each service cluster could reveal still greater cultural differentiation among occupational specialties, specific units within the service, and between line and staff personnel. Yet, all of these subcultures can still hold fast to the core ideologies, values and norms of MITI.

Research can be focused on the formation and maintenance of service culture. Numerous studies of organisational culture have highlighted that the formation and maintenance of culture requires interpersonal interaction within subgroups. For example, research led by Meryl Louis (Louis, Posner, and Powell 1983) demonstrated the benefits of subgroup interaction to newcomers learning the ropes of the jobs. Survey respondents in their first job experience reported that the three most important socialisation aids were as found in Figure 5.

**Figure 6**
Formation of Service Culture

![Formation of Service Culture](image)

Interaction with peers on the job was viewed as most important in helping newcomers becoming effective employees. Interaction is important for the acculturation of newcomers. However, to get a grasp on how cultures are formed and promulgated we need to figure out the content of interpersonal interaction in work settings. This can be researched on.

Research conducted by John Van Maanan and Steven Barley (1984) provides some insight into this issue. They discovered that the content of the interaction is behavioural and cognitive in nature. During initial interactions with newcomers, the established occupational community transmits to new members those shared occupational practices (including norms and roles), values, vocabularies and identities-all examples of the overt social products that are indicative of culture in organisations. These findings were reinforced by Sackmann's (1992) research on subcultures in a medium sized conglomerate in the United States. She found that subcultures were found to form on the basis of functional domains; principally in their biased knowledge of events in the organisation, in their biased explanations of cause and effect relationships, and in their patterns of behaviour. The conglomerate's production division comprised three subcultures: electronics production, shop floor production, and product inspection. Sackmann (ibid) reported:

"Each subgroup was influenced by the nature of its particular work. This "local" orientation also differentiated each group from the others. All three groupings clearly distinguished between "we" and "them". This distinction was supported by my observations of them. They dressed differently, and they worked in distinctly different work spaces that were furnished differently. They took separate breaks during the day, and the tone in which they interacted varied it its degree of roughness. The electronics group talked about "job security," "a small company," and "health and dental insurance." The shop floor production group talked about "more work," "upgrade of assembly," and "being in control of the job." [Discussion] themes in the shop floor production group were oriented toward people, growth in the
division/company, and strategy. The inspection group mentioned an "expanded inspection department," "improvements in quality control," the "quality control system," or "partnership." Some [other discussion] themes in the group were growth of the division/company and orientation toward people."

Organisations do not, however, always have homogeneous subcultures. The overt social products produced by subcultures within organisations can be widely dissimilar and even result in countercultures. A service culture, in a way though, can be affected by the subcultures inherent in an organisation.

THE CASE OF GENERAL MOTORS

The existence of a subculture within an organisation is unavoidably a norm. Take the case of John Delorean’s tenure as division head of General Motors (Researchers: Joanne Martin and Caren Siehl, Stamford University, 1983).

<table>
<thead>
<tr>
<th>GM’S ORGANISATION’S CORE VALUES</th>
<th>JOHN DELOREAN’S DIVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty</td>
<td>Independence to loyalty</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>Discarded bureaucratic procedures for streamlined decision making processes</td>
</tr>
<tr>
<td>Conformity</td>
<td>Objective measures of conformity to subjective measures of conformity</td>
</tr>
<tr>
<td>Deferential respect for authority</td>
<td>Productivity to deference</td>
</tr>
<tr>
<td>Accept deferential treatment from subordinates</td>
<td>Deferential treatment is insignificant as long as there is productivity</td>
</tr>
<tr>
<td>Openly express loyalty to corporation with rituals of deference</td>
<td>Refused to participate in the ceremonies and rituals of deference that were widely practised in the corporation</td>
</tr>
<tr>
<td>Conservative in choice of wardrobe and office decoration</td>
<td>Dressed in contemporary styles, redecorated their officers in bright colours and modern furniture</td>
</tr>
</tbody>
</table>

Delorean took steps to create a counter culture that would try to force innovations when he could not get his ideas accepted by his superiors. These examples illustrate that countercultures can have both productive and unproductive outcomes. Perhaps the key to a counterculture’s success (i.e., the promulgation of its ideology, values and norms) is the group's ability to demonstrate how its idiosyncrasies are consonant with the core ideologies, values and norms of the dominant culture (Sackmann, ibid).

In other words, leaders have a better chance of creating or transforming an organisational culture if they accept and foster productive organisational subcultures and consistently communicate how employees must perform in order for the organisation to achieve its objectives. This attributes to a positive service culture.

Cultural change then relies on leaders’ communication techniques that cross subcultural boundaries and carry messages about ideologies, values and norms that can be internalised by all employees. Memos and vision statements cannot achieve all of these objectives. Leaders, however, have a variety of sophisticated cultural communication techniques at their disposal to link subcultures to overarching cultural objectives of their organisations - an area of focus for further research.
4.2 CRT in service culture within subcultures

FIGURE 7
Promoting a service culture in an organisation

Cultural forms function as the linking mechanism by which networks of understanding develop among employees (Trice, 1988). Cultural forms enable leaders to transmit messages about desirable culture to influence thinking and ways of behaving. Cultural forms also address the emotional aspects of organisations that are commonly referred to as pulling together or solidarity.

Organisational scholars Beyer and Trice (1984) elaborate on this point:

“Cultural forms not only aid sense making through the meanings they convey; they also aid the sense making process through the emotional reassurances they provide that help people persist in their coping efforts. Forms provide a concrete anchoring point, even if the meanings they carry are vague and only imperfectly transmitted....Also many cultural forms involve the expression of emotion and, by this venting of emotions, help people to cope with stress.”

Research (directions) thus can be effectively focused to detect desirable and undesirable characteristics of organisational service culture as shown in Figure 7).
The change in service culture can occur if the organisation’s existing service culture is evaluated against the cultural attributes needed to achieve strategic objectives. Business leaders need to possess a clear understanding of the strategic objectives of the organisation. They need to identify the actions needed to achieve these objectives. They then should conduct an analysis of the organisation’s existing ideologies, values and norms. They should not ignore the fact that they need to seek questions and explanations to cause and effect relationships, acceptable beliefs and behaviours applicable to the organisation’s achievement of strategic objectives. There is bound to be ambiguities in the process, hence they need to seek the ambiguities about the internal service structure and the external environment that can affect the performance and productivity of the organisation.

4.3 CRT in strategies for transforming service culture

To serve an organisation, there could be at least 5 components - of significance for further research - purposes in formulating strategies in transforming service cultures in an organisation to generate job satisfaction, clientele satisfaction and productivity.
Symbols = Any object, act, event, quality or relation that serves as a vehicle for conveying meaning, usually by representing another thing are the symbols of an organisation.

Physical = The people are surrounded by physical setting and provide them with sensory stimuli as they carry out culturally expressive activities.

Artefact = the material objects manufactured by people to facilitate culturally expressive activities.

Language = A particular form or manner in which members of a group use vocal sounds and written signs to convey meanings to each other.

Gestures = Movements of parts of the body used to express meanings.

Basic and applied research can delve into how these values can have an effect on service culture. These are highly complex factors that support and make possible collective effort in an organisation attributing to desired service culture. They are productive values and beliefs that have to be promulgated in service culture – towards new ways of acting and thinking to be internalised by organisational members. Though service culture is deep seated and difficult to change, business leaders can influence and manage an organisation’s culture have a fundamental understanding of the highly complex factors that support and make possible collective effort in an organisation. They must personally act in accord with productive values and beliefs, and they must teach others to do the same. They must promulgate the culture. The key method strategy leaders should follow to transform cultures is to teach symbolically. This type of strategy involves the artful crafting of new stories, new symbols, new traditions, and even new humour so that the ambiguities surrounding organisational life can be productively managed by all members of the organisation. Without collective understanding-shared networks of revised meaning, the new ways of acting and thinking cannot be internalised by organisational members.

Schein (1988) outlines some specific steps leaders can employ to enhance service culture and this can be further researched into:

4.3.1 CRT in form over substance

For instance viewgraphs used in a briefing, or a sleek presentation, is more recalled than the substance of the presentation. At times “eyewash”, just like advertisements, attracts people more than anything else. In other words, what is emphasised, measured and controlled over times can have an effect on an organisation’s service culture.

4.3.2. CRT in the misconception of service culture

Where do you think people will focus their effort once it becomes accepted that a slick presentation is what the leaders are looking for? How could you go about changing that aspect of the organisation’s culture? Consider cultural assumptions and beliefs underlying a “zero defects” organisational mentality. “You must always be perfect; mistakes aren’t allowed.” If this assumption reflects a dysfunctional aspect of an organisation’s culture, how would you go about changing that perception?

4.3.3. CRT in overcoming organisational crisis

A crisis not only brings a great deal of attention, it also generates a great deal of emotional involvement on the part of those associated with the organisation, particularly if the crisis threatens the organisation’s survival. This increases the potential for either reinforcing the existing culture, or leading to a change in the culture. Such a crisis can provide an opportunity for a leader to influence the organisation’s culture in either a positive or a negative way.
4.3.4. CRT in role modelling, teaching and coaching

Leaders have to walk the talk. The personal example of a strategic leader can send a powerful message to the members of an organisation, particularly if it is ethical and consistent. Reinforcing that example with teaching and coaching will help others to internalise the desired values.

4.3.5. CRT in reward criteria

The consequences of behaviour—what behaviour is rewarded and what is punished—can significantly influence culture. If the organisation reacts to new ideas by ridiculing the ideas and those who propose them, it won’t take long before people believe that new ideas are not welcomed or desired. One belief of perceived organisational culture is reflected in the statement: “Don’t raise questions or suggest improvements, because nothing will come of it and you will just get in trouble.” If you were in an organisation's strategic leader, what steps could you take to alter the reward system to change this aspect of the culture?

4.3.6. CRT in criteria for recruitment

Criteria for recruitment, selection, promotion, retirement and excommunication are fundamental in promoting a positive service culture. One of the powerful ways of changing an organisation’s culture is through the type of people brought into, retained, and advanced in the organisation. You should be able to establish a desired culture base in an organisation by bringing in and advancing individuals with the values you want, and eliminating those with undesired value bases. The problems experienced by the organisation result from a few “bad apples” and do not reflect systemic problems. However, if a strong culture bias exists, it may be too strong to be changed by selection alone.

4.3.7. CRT in service culture of mistrust

A culture of mistrust between the leaders and the members of an organisation may be aggravated if it discourages vertical communication. A service culture can simply put as that’s the way we do things around here. Routines or procedures can become so embedded that they become part of the culture, and changing the culture necessitates changing those routines. We can all think of organisations where a meeting takes on a life of its own, becomes more formalised, lengthy, and elaborate, and becomes the only way information moves within the organisation. Changing the culture to improve communication may only be possible by changing the meeting procedures or eliminating the meetings altogether. Our leaders have to shed the “class” mentality to be competitive. Let the organisation have a more open and participative culture. Leaders have to avoid the concept of having reserved parking spaces, top office floors, a special elevator and an executive dining room, for instance. It has to be a culture where the executive offices are not separated from the rest of the workforce. Thus the impact of the design of buildings and privileges allotted to different groups of workforce can affect the service culture of an organisation.

Documentation and formal statements of organisational philosophy, creeds, and charts are some of the ways the services sector promote itself. Tags such as Jangan Rasuah, Bersih dan Cekap, World Class and so forth may have little effect on the organisation’s culture. To promote such themes may not be cost effective. However, this is the way leaders most often try and influence their organisations, and encompasses the vision or mission statement and statements of the organisation’s (or the leader's) values and philosophy. By themselves, however, formal statements and documentations will have little effect on the organisation’s culture. They must be linked to actions to affect culture.

Service culture in the secularist economic model is not morally bound though there are man-made laws that prohibit immoral practices and promote business ethics. Morality and ethics are too subjective and are relatively capricious. For instance, bribery, incentives in the form of commission, smuggling, human trafficking, prostitution, drug trafficking, hoarding and capitalistic manipulation of monopolistic business, product fraud, “piratisation” of products and so forth have become part of accepted service culture in numerous countries. “That’s the way
we do things here’ is the simplest form of response those leaders conform to this service culture. This can be further researched, especially in the light of moral and religio-cultural influence and impact on organisational service culture these days.

**Figure 10**

Culture and Misconception

---

Schein (*ibid*) has five guiding principles for the leader on service culture. Do not oversimplify culture or confuse it with climate, values, or corporate philosophy. Culture underlies and largely determines these other variables. Trying to change values or climate without getting at the underlying culture will be a futile effort. Do not label culture as solely a human resources aspect of an organisation, affecting only its human side. The impact of culture goes far beyond the human side of the organisation to affect and influence its basic mission and goals. Do not assume that the leader can manipulate culture as he can control many other aspects of the organisation. Culture, because it is largely determined and controlled by the members of the organisation, not the leaders, is different. Culture may end up controlling the leader rather than being controlled by him or her. Do not assume that there is a “correct” culture, or that a strong culture is better than a weak one. It should be apparent that different cultures may fit different organisations and their environments, and that the desirability of a strong culture depends on how well it supports the organisation’s strategic goals and objectives. And lastly, do not assume that all aspects of an organisation’s culture are important, or will have a major impact on the functioning of the organisation. Some elements of an organisation’s culture may have little impact on its functioning, and the leader must distinguish which elements are important, and focus on those. The perception and misconception customers and organisations have on organisational or service culture is an important area to research on.

An understanding of culture, and how to transform it, is a crucial skill for leaders trying to achieve strategic outcomes. Strategic leaders have the best perspective, because of their position in the organisation, to see the dynamics of the culture, what should remain, and what needs transformation. This is the essence of strategic success.

The service culture is an accumulation of years of habits, customs, unwritten ground rules and vested interest. Service culture can be strong when it is consistent with an organisation’s strategies. Service culture has to adapt to changing economic and social environments, or else this can lead to an organisation’s impotence. A change effort should be there to accommodate for a variety of clients’ need.
5. RESEARCH FOCUS

Morrow (2000), discussed a few clusters of interest on service culture that can be further researched. In the approach to creating a customer service culture in any organisation, focus, research and implementation can take in the following:

5.1 Clusters relating to measurement of service quality

Management must make the measurement of service quality and feedback from the customer a basic part of everyone's work experience. This information must be available and understood by everyone, no matter what their level. The entire organisation must become obsessed with what the customer wants. A university has a tag saying, "Have we provided you with the best in terms of education? Ask our graduates." This tag serves as a constant reminder to everyone that customers are the ultimate judge of whether the service is what it should be, and that all employees must be constantly surveying customers for what and how they want it. The organisation regularly sends out questionnaires about the quality of their service and then posts these results for all to see.

When you survey your customers on the quality of service, make sure that everyone, from the top down, knows of the results and receives recognition for the things that are going well. Behavioural research has shown that you get more of the behaviour you reward. So don't make the mistake of mentioning only the area of poor performance; also mention and reward those who are doing well, and involve all employees in brainstorming ways to improve the things that are unsatisfactory.

5.2 Clusters relating to the delivery system

Be very clear about specifying the behaviour that employees are expected to deliver, both with external customers and their co-workers.

5.3 Clusters relating to awareness on customer service

Explaining why giving excellent customer service is important -- not only for the company, but for the world. What does your company do that makes life easier for everyone?
What does your product or service add? Be sure to include this in the reasons for achieving customer service excellence. A good example of this principle at work is in the field of health care. People are often drawn into this profession because they enjoy helping and caring for people. Smart health care organisations show how their desired customer service behaviours enable employees to help and care for the patients and their families. Reward people for their good service behaviours. Cash awards are nice, yes, but consider many other ways to appreciate the employees.

5.4 Clusters relating to communicating excellent examples of customer services

Creating ways to communicate excellent examples of customer service both within and outside the company seizing every opportunity to publicise the times when employees do it right and survey examples on how individual employees define customer service.

5.5 Clusters relating to training on service culture

Indoctrinating and training everyone in the culture as soon as they are hired. The orientation programme is a key part of the ultimate success of your customer service efforts. Make sure that it contains more than an explanation of benefits and a tour of the facilities. It can be an important element in planting the customer service culture of the company so it can flourish and grow.

5.6 Clusters relating to group performance

Encouraging the sense of responsibility for group performance. Research into how to help employees see how their performance affects others and emphasise the importance of internal customer service – how to have enough coverage to serve employees promptly.

5.7 Clusters relating to customer relations

Establishing policies that are customer friendly and that show concern for the customers. Look into all routine and rigid policies and guidelines to create a company that is easy to do business with – rules, ways to satisfy the customer and giving power to employees.

5.8 Clusters relating to work competence, job satisfaction and retrenchment

Measuring work competence, job satisfaction and criteria for retrenchment. Research into variables on how to create a totally customer-focused organisation - everyone, from the top down, must believe that they work for the customer. It is noteworthy area to do research on as a lot of literature is available on these dimensions.

6 RESEARCH FOCUS ON CRT

6.1 CRT in creating a service culture for customer

This is an area that can be further researched to enhance service culture. The services sector exists because of customers. Customers want to feel special and they want to be recognised as individuals with unique needs and desires. They want a relationship with their product provider, the brand or rank of a university for instance. Relationship marketing is not a new concept, it is being practiced universally. The services sector can further enhance relationship with clients.
In creating a service culture that is customer-centred, the following clusters can be focused on:

- Identifying customers. Identifying the best customers to the organisation.
- Differentiating customers based on individual characteristics and their value to the organisation.
- Building personal relationships with customers to gather information on their specific needs and desires.
- Customising products/services to individual customers.
- Creating a natural moment of truth for customers.
- Creating individual relationships with customers at the personal level through one-to-one movement.
- Improving on organisational performance through feedback from customers on satisfaction of service provided.
- Building a comprehensive customer service environment within the organisation.
- Creating tangible standards of performance and ways to identify and measure compliance with those standards.
- Determining standards as opposed to real things, i.e. those that are implemented.
- Compliance to accountability. Make a point of disseminating customer service performance information on a regular basis to all staff. Creating a customer service culture requires a sense of accountability.
- Recognising and rewarding in creating a customer service culture.
- Designing a task to align employee behaviour to the culture, rather than just standards.

6.2 CRT in linking standards of behaviour to employee performance

In addition to the above, leaders make a point of keeping employees informed of customer satisfaction statistics. The philosophy is that all information is shared. Share all
financial information with employees so they know the length of stay financials and the performance of the organisation. Share everything, both good and bad. To what extent is this practised in an organisation?

Positive and negative comments on individual units have to go out to the whole organisation at any time deemed suitable by the leader. All employees should have the desire to achieve their goals to meet the needs of customers. Are these being practise in an organisation?

6.3 CRT in internal customers

Not all customers come from outside the organisation, so relationship marketing experts recommend keeping a pulse on internal customer satisfaction, as well. Communication is the key to generating business from within the organisation, such as having a mailing list of all the office managers and getting something from time to time. This approach is to get all the office managers involved in the planning and management of the organisation. As a result, they would feel a sense of ownership for the organisation.

Good service may bring in the customers, but keeping them happy is the key to keeping them loyal. Prompt care is crucial. The faster an organisation can recover from a negative incident with a customer, the more chance they have of keeping that customer long-term. The service culture is basically to make unhappy customers happy and to keep customers. These variables can be researched into to identify the level of conformity to the best practices of service culture in an organisation.

Table 7

<table>
<thead>
<tr>
<th>Some research questions to consider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking to customers – interpersonal relations.</td>
</tr>
<tr>
<td>Hearing the truth about the organisation.</td>
</tr>
<tr>
<td>Learning from customers.</td>
</tr>
<tr>
<td>Customers’ preference.</td>
</tr>
<tr>
<td>Knowing about every customer.</td>
</tr>
<tr>
<td>Treading over the same ground.</td>
</tr>
<tr>
<td>Cutting transaction costs by making the system more efficient for organisation &amp; customer.</td>
</tr>
<tr>
<td>Taking advantage of technologies that allow organisation to amass and process data on individual customer preferences.</td>
</tr>
<tr>
<td>Collaborating with customers to develop programmes and improve existing ones.</td>
</tr>
<tr>
<td>Offering only enough choices to meet customer desires without overwhelming them.</td>
</tr>
<tr>
<td>How to be clear with employees about customer service expectations.</td>
</tr>
<tr>
<td>Creating measurable goals and standards of customer service.</td>
</tr>
<tr>
<td>Understanding the difference between customisation and variety.</td>
</tr>
<tr>
<td>Training personnel to interact effectively with customers.</td>
</tr>
<tr>
<td>Empowering staff to make “recovery” decisions at the moment of truth.</td>
</tr>
<tr>
<td>Managing customers who provide profits, not products.</td>
</tr>
<tr>
<td>Knowing how much business organisation has and comparing it to how much business is out there.</td>
</tr>
<tr>
<td>Finding out where and how the “other business” is going, and why.</td>
</tr>
<tr>
<td>Marketing one-to-one to others in the organisation.</td>
</tr>
<tr>
<td>Providing added value to customers.</td>
</tr>
<tr>
<td>Cross-marketing services across organisation.</td>
</tr>
<tr>
<td>Thinking about share of customer and share of household as opposed to just market share.</td>
</tr>
<tr>
<td>Tracking results – knowing what’s working and why in organisation.</td>
</tr>
<tr>
<td>Customer service as an investment towards creating satisfied customers.</td>
</tr>
<tr>
<td>Knowing how much organisation is spending towards customer service investment.</td>
</tr>
<tr>
<td>Knowing how much customer service contributes to the organisation’s financial performance.</td>
</tr>
</tbody>
</table>

Recomposed from Richard Ireland is president of The Ireland Corporation/The Snowmass Institute in Centennial, CO. 1999.
6.4 CRT in areas of negative behavioural aspect to service culture

THE CASE OF A TELEPHONIST

Figure 13

Negative traits in service culture

Apathy = Employee is bored and disgusted over his job. Lost sight that the reason for their job is to serve the needs of the customer.

Brush-off = Employee makes customer repeat many times. Call is transferred.

Coldness = Employee shows impatience and hostility towards caller

Aloof = Employee shows arrogance and makes communication unclear.

Robotism = Employee makes customer feels like an auto-machine with the same response many times.

Rule book = Employee makes all rules inflexible.

Runaround = Employee refusing to be responsible.

Tune Out = Employee fails to focus on the customer.
6.5 CRT in revigorating customer service culture

Figure 14
Revigorating customer service culture


An organisation has to constantly revitalise its customer service culture to keep up with stiff competitions with business rivalries (Moran, ibid). Continuous research can be done on better ways to keep customers through improving the service culture of the organisation. Even though the economy demands that we hold on to our customers, most businesses lose them every day because of bad service culture. Smart leaders know that customer service development is an on-going process, not just a training event. If your goal is research on an excellent customer service culture throughout the organisation the alignment to it can be with the following cases (Moran, ibid):

a) **Gain buy-in from the top.** One approach to capturing senior management’s attention for building the customer service skills of staff and management is to calculate the value of one lifetime customer to the organisation. When you present this figure, oftentimes six or seven figures, consider the number of customers who don’t return due to service issues. One executive calculated the return on investment for an organisation-wide training initiative in relationship to a real example of a saved customer. A typical customer for his company can bring in up to $140,000 in revenue per year. If the customer stays with the company for twenty years, which is not unusual, that would be a US$2.8 million customer. Statistically this customer will share his or her experience with ten others, who may bring business to this company. Therefore this customer’s positive experience could generate US$28 million in revenue. When compared to the cost of the organisation-wide training initiative, the return on investment turned out to be 933:1. In addition to the investment of resources, senior managers need to provide a clear vision of the organisation and articulate how excellent service fits into the long-term plan.

b) **Measure-first strategy.** Using data as a basis for understanding current service levels and where these levels can improve. Such data can come from surveys of staff and customers. One type of survey to document the impact of training is to ask employees the following questions before and after training:

The people I work with… · have an attitude that represents excellent customer service · practise effective listening skills to identify customer needs · practise body language that delivers a positive message to customers · take advantage of all opportunities to deliver...
excellent service · effectively resolve conflict with customers · go the extra mile to delight customers.

One hospital asked its employees, as part of an employee survey, “...would you bring your family here?” This type of question can solicit valuable data about the need to improve customer service in the organisation. In addition, customer letters, complaints, and casual feedback are invaluable tools for learning where the opportunities are for improvement.

c) Making service-skill building a part of strategic plan. If customer service is a key part of the organisation’s vision and data says it needs to improve, goals related to customer service need to be a component of every department's plan. Dealing with naysayer in the organisation becomes much less of a barrier when everyone is accountable for excellent service. As an example, the leaders of one organisation believed the organisation needed to be grounded in a basic set of principles to guide its decision-making. They identified six core values to provide this type of guidance. One of these core values is “customer focused.” Since these values are the basis for on-going decision-making, customer service is continually embedded in what and how things get done.

d) Structure accountability and training at the management level. Too often training, OD, and HR professionals are expected to change the customer service culture without the managers’ involvement in the process. Managers play a critical role in the service challenge and are responsible for creating a service environment for all staff. Such an environment is not only inspiring, but it is also composed of systems and procedures that work for the customer and the employee. In addition, managers are responsible for reinforcing skills developed in training.

e) Finding the right training solution. A quality customer service training programme designed to improve the service culture includes:

- Behaviour-changing activities · Service standards customized for the organisation · Skill building for both internal and external customer service · Linkage of standards to performance management · Relevant case studies specific to the service provided · An interactive and enjoyable experience for participants · Application to all levels of the organisation · Specific modules for managers, which include leadership behaviours, managing feedback, measuring service, writing service standards, and recognition · Capacity for delivery by internal resources

f) Planning the launch. A well thought-out project plan and someone responsible for its execution will ensure a great programme. Planning may include the structuring of sessions to work well within business operational needs, measurement, programme evaluation, communication, training space allocation, attendance tracking, management participation, ordering of supplies, and follow up.

g) Making it a big deal. This is an opportunity to excite the organisation. Set up a promotional campaign that touches everyone via newsletters, press releases, flyers, banners, meetings, and bulletin boards. Make re-focusing on the customer a celebration. One organisation posted signs a few weeks prior to the training saying “Service Excellence?” This type of communication generated a great deal of curiosity and discussion about the organisation-wide customer service initiative. When senior management addresses the initiative with excitement and perseverance, the organisation will follow.

h) Delivering quality training. All elements noted in step five contribute to quality. Another key factor is the selection of facilitators. For larger organisations, you may select internal managers and staff members to be trained to deliver the training to the organisation. The profile for great customer service training facilitators may include:

- Dynamic facilitation skills · Animated, enthusiastic behaviour style · Leadership skills · A passion for excellent service and the organisation’s vision

You may be surprised at the hidden talent buried in the rank and file of an organisation. This unusual opportunity for the staff to be facilitators of the training creates professional and personal growth for them. In addition, this format may generate a higher level of buy-in and believability among the participants.
i) **Identifying barriers to excellent service in the training.** When staff and management go through a training process on the topic of customer service, a great deal of participation and discussion can be expected -- everyone can relate to the topic. You can expect issues to come up that will not be resolved in the training. Yet these issues make up the most valuable and comprehensive internal feedback to the organisation you can ever imagine. Consider this feedback “gold.” One way to capture the feedback is for the facilitators to keep a flip chart visible in the room and name it “parking lot.” The “parking lot” issues are those that are important yet cannot be addressed in the training session. The most important factor in the success of the “parking lot” feedback tool is the commitment of senior and middle management to address the issues. Even if the issues cannot be resolved to the satisfaction of staff members, it is critical that management consider the issues and communicate their decision. When this happens, staff members will feel listened to and trust will improve in the organisation. A lack of response and communication will have an opposite effect and weaken trust in the organisation.

j) **Re-measuring results.** To do so, go back to the baseline measurement data collected before the training process. If a pre-survey was conducted, administer it again as a post-survey. Re-measuring is best done three to six months after the training. The passing of time will give a true reading of the application of improved internal and external customer service skills in the day-to-day workplace.

k) **Starting process improvement teams as a result of the training.** Many of the difficult barriers identified in the training may include cross-departmental processes. A natural follow-up to customer service training is assigning process issues to teams who can go to work on them. After all, no one knows how to fix broken processes better than those who deal with them every day.

l) **Building customer service training into new employee orientation.** Don’t short change new hires on the customer service skills and attitudes that are expected during their employment. Standard of service should be clear at the onset and new staff members should know they will be held accountable to deliver excellent service through the performance management system.

An organisation-wide customer service initiative can garner measurable benefits to your organisation. A new commitment to service from the top of the organisation will spearhead customer-oriented behaviours from the staff. The refreshed staff will be inspired to deliver excellent service. Learning internal customer service skills will create positive energy and foster teamwork between departments. And ultimately, the re-focused energy on the customer will keep your customer coming back.

### 6.6 CRT in communication skills

**Figure 15**

<table>
<thead>
<tr>
<th>INTERACTIVE SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSINESS COMMUNICATION</td>
</tr>
<tr>
<td>DELIVERING BAD NEWS</td>
</tr>
<tr>
<td>INTERPERSONAL COMMUNICATION</td>
</tr>
<tr>
<td>LISTENING</td>
</tr>
<tr>
<td>NON-VERBAL SKILLS</td>
</tr>
<tr>
<td>ITS SKILLS</td>
</tr>
</tbody>
</table>
A vibrant service culture can be attained when the organisation emphasise on excellent communication skills among the workforce as well as the leaders within. A convincing skill, it contributes to better negotiation skills in business. The delivery system in the services sector depends very much on communication. This is fundamental in the recruitment, selling and training sectors of an organisation. This cluster involves consultancy, research and training.

6.7 CRT in *business communication*

Training modules to improve ability to communicate on paper, one-on-one and in groups within a business context. Poor business communication skills should not let a business down. Communicators have provided a powerful set of distinctions to help us notice and adjust for our human tendency to interpret, distort or delete, generalize, and make assumptions. Communication, like driving in traffic, is a cooperative system. Kathy can produce an instant reaction in the other person with just a glance. Isn't it amazing that we have such power to influence others?

Contrary to what you might expect, the person who has the most flexibility in a communication situation will generally have the most control over that situation. How flexible are you? If there's a behaviour you cannot generate — for whatever reason — there's probably a response you won't be able to elicit from that other person. And if the meaning of your communication is the response you get, that behaviour might be exactly the one you need to produce.

6.8 CRT in *delivering bad news* / *using positive language*

Training modules to learn techniques on how to be tactful and diplomatic when having to turn down requests, reject proposals and offers and deliver bad news. Develop the ability to use tact and sensitivity in tough communication situations so as not to lose customers. The meaning of our communication is not what we think it means. It is based on the response we get from the other person. It is pointless to insist on a meaning that is lost on the listener, especially when the response you get is entirely separate from your intent.

6.9 CRT in *interpersonal communication*

Training modules for the services sector to develop interpersonal communication skills and pave the way for better relationships, and less conflict at work and in relationships with customer. Training into learning more languages and customs of people, such as Mandarin and Japanese to penetrate the Chinese and Japanese markets. To maintain an open channel of communication with another person is to align with them, match them, and meet them where they are. This doesn’t mean you agree with them, necessarily, but rather that you are open and willing to accept their point of view and you let them know you’re there with them. Take rapport-building one step further: defining the meaning of your communication, and show how behavioural flexibility strengthens your power to influence and persuade others. In business, rapport is needed to coordinate action and exchange information. Rapport is at the foundation of all our relationships. Ironically, most business decisions are based on rapport, not on technical merit or the best idea. Rapport makes or breaks most aspects of getting what you want. Negative language conveys a poor image to customers, and those around us. Sometimes it causes conflict and confrontation where none is necessary or desired.

6.10 CRT in *listening* behaviour

Training modules for the services sector to develop the ability to listen and prove to the other person that you are effectively listening. This is critical to building effective work and personal relationships. Improving listening skills would help leaders understand people better. If we are aware of what other people might be facing, we can adjust our communication to head off potential misunderstandings. By fully attending to the other person's "map" (how they represent their world, their history, expectations, fears, and concerns), you can more easily detect and correct for information that you may be adding.
6.11 CRT in non-verbal communication

Further research and the creation of training modules on learning non-verbal communication (voice tone, proxemics, gestures, etc) alter the communication process. Learning how to make sense of non-verbals. Can you imagine yourself matching their basic mood, posture, body language, energy level, tempo, and world view? How would you look and sound if you were like them? Try this next time you are in a conversation with this person.

6.12. CRT in it skills

Research and the creation of training modules for leaders to be IT literate are imperative. Its skills are becoming increasingly important in business interacts. This has to be an important component of our service culture.

7 CONCLUSION

The services sector is central to the national strategy to re-engineer the economy to focus on domestic sources of growth. There are several compelling reasons for Malaysia to develop its services sector. Firstly, the demand for services increases as the income level rises and as the population ages. Secondly, as the economy matures, there is greater de-integration of service activities of goods and services firms. Thirdly, many service-related activities are typically skill-based and not investment intensive. As such, they are ideal sources of growth for countries with scarce capital and an increasingly educated workforce. The service culture thus offered need to sustain these activities and help the growth of the services sector.

It is at the micro level that academics and successful practitioners can contribute towards generating a better economic growth for the country through this sector. Academics play a significant role in research, consultancy and training of manpower that enable business players to enhance their service culture. The practitioners who have proven themselves in the service industries are an asset to the emerging service industries, as they can share their experiences with the latter.

At the educational level reform has to be generative in nature and needs to look into graduates’ proficiency in live skills, critical thinking, key competencies and specialisation. The service industries need to create links with education providers for the latter to help them to generate a workforce that practise integrity, have a positive service culture and good governance. Ethical behaviour and practices are crucial in service culture as an organisation desires the trust of customers. The principled conduct, maturity and wisdom, and moral judgement that are dependable would promote a better service culture. At the end of the day, customers look at honesty and equity for a long-term business plan to be sustainable. These are the research clusters that need to be addressed by academics, trainers and practitioners.

Looking at the macro level, Malaysia’s services sector has undergone far-reaching structural and policy changes to meet the nation’s growing demand for more and better quality services, and it is now well-poised to be the principal engine of future growth.

The government has given recognition to the importance of services sector development despite the limited financial and human resources and its domestic market size. It should therefore concentrate on a narrow range of market segments in which it has already built up some competitive advantages inter alia education, construction, banking and financing, healthcare, transportation and consultancy are some of the country’s niche areas in the services sector. This has shown promising prospects for further development as engines of growth and export earnings. However, in order to harness the growth potential of these industries, Malaysia needs to ensure adequate supply of skilled personnel and to implement quality assurance to meet international standards and promote a better service culture to be competitively doable.
The economy will see about 70 percent of the role in generating productivity for the country by 2020. This will contribute significantly to the eradication of poverty and care for the socially disadvantaged. The country will see a more equitable wealth distribution.

There will be a better education opportunity for more Malaysians and a pool of quality workforce with a better work culture. To attract investments in all areas of the economy, it has to be supported by factors such as a well-developed infrastructure, pro-business policies and the availability of a skilled workforce.

Building a service culture requires the optimisation of local talents. Leaders need to go for brain gain and practise equal opportunity to enable the workforce to be happy with their jobs and associate themselves sincerely with the management and in turn bring more profit to the organisation.

The country will be internationally involved with new growth of the service industries. Our leaders will be globally competitive as they have to be aware of global affairs. The services sector needs to be creative and innovative as well and dare to face challenges to discard old and non-productive values to achieve excellence in competencies. They need to move with other emerging growth industries and develop a service growth and orientation that is culturally universal.

A service culture of excellence needs to be generated by employing the most qualified person for the job and there has to be a succession plan to sustain this culture of excellence. Sustaining an excellent service culture in the services sector necessitates a hunt for the best talent, the optimisation of human capital and training. As Saxby (ibid) puts it

“It turns out that it's the values, not the value. It's not just the value that you're offering the customer; it's the values of the store, reflected in the way the store does business. What people told us was, "We want to do business with people who are fair and honest. We want to do business with people who respect us as individuals. Don't give us phony discounts. Don't give us a fake smile. Don't have a greeter at the door who's there like a zombie, pretending to welcome us, but who's really checking for shoplifters."

“The message from consumers is this: In a world where people think that the government is corrupt, that the church is corrupt, that the schools are corrupt, show us a business that isn't corrupt, and we'll do business with you for life.”

REFERENCES


La culture organisationnelle: aspects théoriques, pratiques et méthodologiques, Éditions Gaétan Morin, Canada.


Liu, O. Furrer, and D. Sudharshan *The Relationships between Culture and Behavioural*


Morrow, Peggy Morrow 2000. Customer Service. The key to your competitive edge, a common-sense guide to establishing a customer service programme.


November 1. 9(2): 195 - 207.
The institutions of the KLE University have always laid emphasis on collaborative research with international and national agencies and offered paid, as well as, free consultancy to different stake-holders in health sciences and technical filed. Keeping in view the perceptions variance that exists between an academic institution and an industry, KLE University and other institutions of KLE Society have adopted a strategic approach to ensure that collaborative research and consultancy becomes an important tool for human resource development and financial management of the institutions. Different dissimilarities or perceptions variances that are usually associated with R&D activities in the university and an industry can be systematically tabulated as follows:

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Characteristic</th>
<th>University</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Objective</td>
<td>Excellence in academic activities</td>
<td>Customer satisfaction profit</td>
</tr>
<tr>
<td>2</td>
<td>Activity</td>
<td>Generation and dissemination of knowledge</td>
<td>Application of knowledge for economic growth</td>
</tr>
<tr>
<td>3</td>
<td>Horizon</td>
<td>Long term</td>
<td>Short term</td>
</tr>
<tr>
<td>4</td>
<td>Role</td>
<td>Academic philosophy requires keeping up with theory and applications</td>
<td>Corporate philosophy involves new design and manufacturing processes &amp; innovations</td>
</tr>
<tr>
<td>5</td>
<td>Motivation for Learning</td>
<td>Continuous learning to upgrade knowledge</td>
<td>Need-based learning</td>
</tr>
<tr>
<td>6</td>
<td>Conduct</td>
<td>Mostly carried out by research scholars under guidance of faculty supervisors with objective of fulfilling degree requirements</td>
<td>Carried out by professional personnel with objective of satisfying customer needs.</td>
</tr>
<tr>
<td>7</td>
<td>Continuity</td>
<td>Maintaining continuity is more difficult</td>
<td>Continuity is maintained in proportion to industry goals</td>
</tr>
<tr>
<td>8</td>
<td>Openness</td>
<td>Keen to publish results</td>
<td>Keen to keep know how secret</td>
</tr>
<tr>
<td>9</td>
<td>Scope</td>
<td>Scope is more deep and detailed</td>
<td>Scope of solution determined by the extent of need</td>
</tr>
<tr>
<td>10</td>
<td>Values</td>
<td>Altruistic, Scientific</td>
<td>Business, Commercial</td>
</tr>
<tr>
<td>11</td>
<td>Out Put</td>
<td>Academic degrees publications &amp; patents</td>
<td>Cost effective quality products &amp; processes</td>
</tr>
</tbody>
</table>
Our Hon. Chancellor Dr. Prabhkar Kore, Member of Parliament who is also the Chairman of the sponsoring Society- KLE Society has always encouraged us to move forward in the direction of professional excellence and to achieve the goals and objectives that have been outlined in our VISION-2020 Document.

The KLE Society was established in 1916 by seven committed teachers-fondly remembered as “Saptarshis”. The Society runs more than 200 educational institutions in different parts of the country, of which around sixty are in the area of higher education. The KLE University established on 13th April, 2006 is an off-shoot of KLE Society comprising of Jawaharlal Nehru Medical College, Institute of Dental Sciences, Multispeciality Hospital with 1820 beds under one roof, 3 Pharmacy Colleges, an Ayurvedic, a Physiotherapy and a Nursing College. The KLE Society also runs 4 Engineering Colleges, 2 Management Schools, 6 Law Schools besides several Colleges in the disciplines of Arts, Science, Commerce and Social Sciences. The wings of KLE Institutions involved in R & D and consultancy are as follows:

1. University Research Foundation  
2. Human Reproduction Research Collaboration Centre with ICMR  
3. Institute of Clinical Research  
4. University Department of Education for Health Professionals (UDEHP)  
5. Institute of Public Health  
6. Medical Research Centre of Hospital  
7. Scientific Society of JNMC  
9. Ayurvedic Research Centre  
10. Centre of Pharmaceutical Technology

**RESEARCH COLLABORATIONS**

The University has established strong linkages for research collaborations with several international and national agencies, industries, universities and institutions. The research and consultancy pertaining to Phase II and Phase III clinical trials of the drugs; drug development; field trials in Paediatrics; Obstetrics and Gynaecology; herbal formulations; entrepreneurship development, etc. are the major activities undertaken by us at KLE.

The following is the list of funding agencies, industries, universities and research institutes with whom KLE institutes have established linkages.

**FUNDING AGENCIES**

- 1. World Health Organization, Geneva, Switzerland  
- 2. National Institute of Health and Human Development, National Institutes of Health, Bethesda, MD, USA.  
- 3. National Institute of Neurological Diseases and Stroke, National Institutes of Health, Bethesda, MD, USA.  
- 4. Fogarty International Centre, Bethesda, MD, USA  
- 5. National Cancer Institute, National Institutes of Health, Bethesda, MD, USA  
- 6. International Atomic Energy, Vienna, Austria  
- 7. Indian Council of Medical Research, New Delhi, India  
- 8. All India Council For Technical Education, New Delhi, India
INDUSTRIES

- Serum Institute of India Ltd. Pune, India
- Sanofi Pasteur Ltd. Pune, India
- Zandu Pharmaceuticals, Mumbai, India
- Deshpande Foundation, U.S.
- Infosys Ltd. Bangalore, India
- Aarya Vaidya Nilayam, Madurai, Tamilnadu, India
- Bioviel Ltd. Bangalore, India
- Divis Laboratories, Hyderabad, India
- Kopran Pvt. Ltd. Mumbai, India
- Amrut Pharmaceuticals, Belgaum, India

UNIVERSITIES AND RESEARCH INSTITUTES

1. Christiana Care, Wilmington, DE, USA
2. University of Alabama at Birmingham, Birmingham, AL USA
3. University of Colorado Health Sciences Centre, Denver, CO, USA
4. Vanderbilt University, Nashville, TN USA
5. University of Illinois at Chicago, Chicago, IL, USA
6. University of Michigan, Ann Arbor, USA
7. University of Missouri at Kansas City, Kansas City, MO, USA
8. National AIDS Research Institute, ICMR, Pune, India
9. Regional Medical Research Centre, ICMR, Belgaum, India
10. AYUSH, Govt. of India
11. University of Missouri at Columbia, USA
12. National Institute of Oceanography, Goa, India

The resource mobilization since 2000 by the KLE institutions from different international and national agencies/industries was to the tune of approx. US $ 5.1 Million. The break-up for the same is as follows:
TOTAL RESEARCH AND DEVELOPMENT FUNDING
( RESOURCE MOBILIZATION SINCE 2000 )

<table>
<thead>
<tr>
<th>SL. No.</th>
<th>Category</th>
<th>Approximate</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Clinical Studies and Field Trails(International Agencies)</td>
<td>US $</td>
<td>2.6 Million</td>
</tr>
<tr>
<td>2</td>
<td>Clinical Trails (Pharmaceutical Companies and National Agencies)</td>
<td>US $</td>
<td>0.5 Million</td>
</tr>
<tr>
<td>3</td>
<td>Human Resource Development in Pharmacy, Medicine and Dentistry</td>
<td>US $</td>
<td>0.3 Million</td>
</tr>
<tr>
<td>4</td>
<td>Entrepreneurship Cell for Engineering &amp; Technology</td>
<td>US $</td>
<td>0.7 Million</td>
</tr>
<tr>
<td>5</td>
<td>Infrastructure Strengthening in Engineering and Technology</td>
<td>US $</td>
<td>0.8 Million</td>
</tr>
<tr>
<td>6</td>
<td>Herbal Formulations (Govt. and Private partnership)</td>
<td>US $</td>
<td>0.2 Million</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>US $</td>
<td>5.1 Million</td>
</tr>
</tbody>
</table>

The JNMC of the University was identified by World Health Organization and the Ministry of Health, Govt. of India as Nodal Centre for training Medical Officers and Auxiliary Nurse Midwives working at 24 x 7 Primary Health Centres. We participated in Multi Site Survey of Tobacco Use among Pregnant woman and we are also part of Global Network for FIRST BREATH TRIAL: Community Based Training and Intervention in Neonatal Resuscitation, Global Network for Evaluation of an Emergency Obstetric and Newborn Care Intervention Package in Resource Poor Settings (The EMONC Trial), and HIV Cervical Cancer Prevention Research Project.

We at KLE Belief in the philosophy of Swami Vivekananda, the great son and a social reformer of India -

- “Wisdom Lies Not In The Quantum Of Knowledge Acquired But In The Degree Of Its Application”
Enhancing Graduate Employability through University-Industry Partnerships

Dr Stefanie Pillai
Director
Centre for Industrial Training and Relations
University of Malaya
50603 Kuala Lumpur
Email: stefanie@um.edu.my
Tel: 603-79673374, Fax: 603-79673377

ABSTRACT

The issue of graduate employability is one of great concern to institutes of higher learning (IHLs), particularly in the face of the current global financial crisis. Faced with a contracting and fiercely competitive job market, IHLs are under increasing pressure to ensure that their graduates are employable. One of the challenges in producing such graduates is to ensure that they have the relevant knowledge, skills and attributes required by industry. Complaints from industry about graduates not being ready for the workplace is a global phenomenon, and one of the best ways to bridge the gap between class and work is to engage with industry. In Malaysia, there has been a push towards university-industry collaboration and the need for such collaboration is reiterated in Malaysia’s National Higher Education Action Plan and the setting up of industry linkage centres on campus. At the University of Malaya (UM), industry’s input and collaboration are ever present in teaching and learning (e.g. on curriculum advisory boards, as guest or visiting lecturers), research and innovation (e.g. joint research projects, consultancy, commercialisation of research output), and the training of staff and students.

This paper focuses on UM-Industry collaboration in the training of undergraduate students via the preparatory programme for industrial training and the student industrial training programme. In each academic session, approximately 2314 students at UM undergo industry-specific training for a period of six weeks to six months. The aim of this programme is to provide students with relevant on-the-job training, thus enhancing their employability. Prior to embarking on their training either in Malaysia or abroad, the students attend preparatory programmes comprising corporate seminars and soft skills workshops conducted by industry specialists, aimed at exposing them to the needs and expectations of the world of work, and preparing them to make the transition from campus to the workplace. This paper will describe the forms of collaboration and the manner in which industry’s input and expertise are used in these programmes. It will also present findings related to industry and students’ feedback on the programme based on questionnaires given to them to ascertain how the various forms of collaboration with industry can enhance graduate employability.

Keywords: university-industry collaboration; graduate employability; industrial training; preparatory programme; University of Malaya

1. INTRODUCTION

The term 'employability' in itself is open to interpretation and has been widely debated (see Aamodt & Havnes, 2008; Harvey, 2001). However, in the context of Institutes of Higher Learning or IHLs, this term tends to be linked to the ability of graduates to obtain and stay in employment (Lees, 2002), and is generally measured by statistics on graduate employment. Based on such measurements, judgements are made about an IHL’s ability to produce graduates with a high level of employability, thus making graduate employability a critical agenda in many IHLs (Yorke, 2006). This issue of graduate employability has become even more pressing in the face of the current global financial crisis. Confronted with a contracting...
and fiercely competitive job market (Hamid, 2009), IHLs face increasing pressure to ensure that their graduates are employable. One of the challenges in producing such graduates is to ensure that they have the relevant knowledge, skills and attitudes required by industry.

Grouses from industry about graduates not being ready for the workplace is not unique to Malaysia (e.g. Hii, 2007; Report of the Industry Dialogue, 2008; Sirat, et al, 2008; “Subra: Graduates Lack Dynamism and Edge”, 2009), but is in fact a global phenomenon (see Teichler, 1998; West, Noden & Gosling, 2000), and one of the ways to bridge the gap between the classroom and the workplace is to engage with industry (Teichler, 1998; Malaysia and the Knowledge Economy, 2007). In Malaysia, there has been a push towards university-industry collaboration, and the need for such collaboration is reiterated in Malaysia’s National Higher Education Action Plan 2007-2010 (Ministry of Higher Education [MOHE], 2007), and the setting up of one-stop industry linkage centres on campus.

At the University of Malaya (UM), industry’s input and collaboration is ever present in teaching and learning (e.g. on curriculum advisory boards, as guest or visiting lecturers), research and innovation (e.g. joint research projects, consultancy, commercialisation of research output), and the training of staff and students. This paper focuses on UM-Industry partnerships in the training of undergraduate students via the preparatory programme for industrial training and the student industrial training programme. This paper will describe the forms of collaboration and the manner in which industry’s input and expertise are used in these programmes. It will also present findings related to feedback from industry and student trainees on the programme based on questionnaires given to them with a focus on how the various forms of collaboration with industry can enhance graduate employability.

2. THE STUDENT INDUSTRIAL TRAINING PROGRAMME

At UM, industrial training refers to a programme, which provides supervised practical training within a specified timeframe. This training can be carried out either in government or private organisations both locally and abroad. The main aim of the Student Industrial Training Program is to produce graduates who are equipped with theoretical knowledge and practical job-skills. The programme provides an opportunity for undergraduates to enter the world of work, exposing them to industry-relevant knowledge and skills, and making them more aware of the expectations and requirements of industry. It also gives the trainees direct contact with industry personnel, which could help them secure employment upon graduation.

Each academic session (July to June the following year), an average of 2314 undergraduate students (approximately 13% of the undergraduate population) at UM undergo industry-specific training for a period of six weeks to six months depending on their degree programme (see Table 1). The aim of this programme is to provide students with relevant on-the-job training, thus enhancing their employability. In general, some form of industry-related training is compulsory for students pursuing professional courses such as accountancy, built environment, engineering and law, but of late, more degree programmes have incorporated industrial training as a compulsory component of the programme in line with UM’s focus on enhancing the employability of its graduates. UM currently boasts an impressive figure of 97% of its graduates being in permanent employment within six months of graduation (QS Top Universities, 2008).
Table 1
UM - Figures for Undergraduate Industrial Training from 2004/5 to 2007/8 Academic Sessions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Academy of Islamic Studies</td>
<td>25</td>
<td>21</td>
<td>83</td>
<td>171</td>
</tr>
<tr>
<td>Academy of Malay Studies</td>
<td>136</td>
<td>92</td>
<td>54</td>
<td>18</td>
</tr>
<tr>
<td>Cultural Centre</td>
<td>10</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Faculty of Arts &amp; Social Sciences</td>
<td>119</td>
<td>94</td>
<td>92</td>
<td>69</td>
</tr>
<tr>
<td>Faculty of Built Environment</td>
<td>174</td>
<td>208</td>
<td>170</td>
<td>125</td>
</tr>
<tr>
<td>Faculty of Business &amp; Accountancy</td>
<td>369</td>
<td>408</td>
<td>377</td>
<td>421</td>
</tr>
<tr>
<td>Faculty of Computer Science &amp; Information Technology</td>
<td>13</td>
<td>164</td>
<td>296</td>
<td>465</td>
</tr>
<tr>
<td>Faculty of Economics &amp; Administration</td>
<td>231</td>
<td>260</td>
<td>162</td>
<td>10</td>
</tr>
<tr>
<td>Faculty of Education</td>
<td>104</td>
<td>98</td>
<td>68</td>
<td>85</td>
</tr>
<tr>
<td>Faculty of Engineering</td>
<td>561</td>
<td>565</td>
<td>269</td>
<td>356</td>
</tr>
<tr>
<td>Faculty of Law</td>
<td>75</td>
<td>81</td>
<td>-*</td>
<td>-*</td>
</tr>
<tr>
<td>Faculty of Science</td>
<td>606</td>
<td>208</td>
<td>409</td>
<td>691</td>
</tr>
<tr>
<td>Sports Centre</td>
<td>91</td>
<td>59</td>
<td>44</td>
<td>45</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2514</strong></td>
<td><strong>2261</strong></td>
<td><strong>2024</strong></td>
<td><strong>2456</strong></td>
</tr>
</tbody>
</table>

Note: * Figures unavailable

2.1 INDUSTRY’S INVOLVEMENT IN THE STUDENT INDUSTRIAL TRAINING PROGRAMME

Approximately 1433 organisations are involved in providing training at the workplace for UM undergraduates each academic session. These organisations include government departments and agencies (55%), government-linked companies (5%), public and private educational institutions (16%) and the private sector, including multinationals (24%)\(^{16}\). The involvement of industry typically includes providing supervised training for the trainees, and evaluating their performance during their tenure. Many organisations also provide monetary allowance for the trainees. To enhance the industrial training programme, the University of Malaya’s Centre for Industrial Training and Relations (CITRA) has forged partnerships with industry, aimed at

- a more continuous form of training,
- reaching out to a larger pool of industry, and
- obtaining overseas industrial training placements.

\(^{16}\) Figures based on 2008 data
2.1.1 Continuous Training

Since most students participate in industrial training in the penultimate year of their degree programme, industry often laments the fact that they are not able to have a more sustained relationship with the trainees who could be potential employees. To maintain continuous contact with industry, UM has collaborated with organisations to develop a long term and structured form of job training for students, thus providing students with more industry relevant experience, and industry with an opportunity to identify, train and retain potential employees. Such collaboration is beneficial as students are introduced to participating organisations early in their degree programme through career talks, site visits and vacation training (see Figure 1). Students undergo programmes with ongoing training, which not only enhance their practical and technical skills, but also enable them to better link textbook knowledge with the real world. Further, increased industry exposure gives students an extra competitive edge in the job market, and helps them make career choices based on their workplace experience, which is not confined to their industrial training period but extends throughout their degree programme. On industry's part, there is less of a feeling that time, money and effort have been wasted training students as this programme enables them to select and earmark potential human resource right from the time students enter into a degree programme, rather than in their final year.

![Year One/Two*](image)

- Career Talks/Site visits
- Industry Attachment during the long vacation

![Year Two/Three*](image)

- Industrial Training (as part of students' degree programme)

End of final year

- Management Training Programme
- Job Placement

*Depending on whether the degree programme is a three or four year programme

**FIGURE 1: The Structured Industrial Training Placement Programme**

2.1.2 Reaching out to a Larger Pool of Companies

The Industrial Training Programme at UM has also benefited from UM's active involvement in several Chambers of Commerce, such as the American Malaysian Chamber of Commerce (AMCHAM), the British Malaysian Chamber of Commerce (BMCC), and the European Union-Malaysia Chamber of Commerce and Industry (EUMCCI). Membership of these chambers enables UM to have an easier access to a larger pool of organisations, and is an excellent platform for networking and forming partnerships not just for industrial training placements but other forms of collaborations, such as faculty attachment in industry and vice versa. For example, EUMCCI, through its education sub-committee, helps to match students and staff with member companies. The sub-committee, which comprises representatives from institutions of higher learning and industry, meets regularly to discuss issues and concerns relating to academia and industry with a particular focus on bridging the gap between the two parties.

UM and BMCC are also in partnership with the University of Loughborough (UL) to facilitate the placement of UL students in BMCC member companies. Through the tripartite partnership, UL obtained the Prime Minister's Initiative 2 (PMI2) Connect: International Mobility of UK Students award, which will enable UL students to do their industrial training in Malaysia. UM's partnership with BMCC and UL will also provide opportunities for reciprocal visits by UM students to the UK.
2.1.3 **Industrial Training Abroad**

In line with UM’s student mobility programme, students are encouraged to do their industrial training abroad. UM is on an aggressive campaign to provide global exposure for at least 25% of its undergraduate students each year. Such exposure provides students with an enhanced learning experience and increases their awareness of other societies and culture, an important trait to have in today's increasingly borderless world. In relation to industrial training, in the 2008/9 academic session, thus far a total of 14 students are currently doing their training outside Malaysia - in Italy, Taiwan and Singapore - with several more students scheduled to go to the UK, Dubai and Indonesia in May 2009. Many of these industrial training placement opportunities have been made possible through partnerships with industry. For example, the placements in Italy and Taiwan were facilitated by the Malaysian offices of the multinational companies involved. In the case of the placements in Italy, the partnership with the Malaysian subsidiary of APS Engineering Company Roma enabled seven undergraduates from the Faculty of Engineering to undergo a structured industrial training programme, which comprises classroom training by senior engineers and supervised attachments to particular departments in the company for a period of six months.

2.2 **FEEDBACK FROM INDUSTRY ON STUDENTS’ PERFORMANCE**

The partnership with industry in the industrial training programme provides valuable feedback on the work-readiness of UM students. Such feedback can then be used to gauge the employability factor of UM graduates and enhance current teaching and learning programmes. Feedback from 279 industry respondents in the 2007/8 academic session indicates that the students who did their training in these companies possessed the necessary skills and qualities that employers seek, with 94% of the respondents rating the overall performance of student trainees as being *good* and *excellent* (Pillai, Khan, Hassan, & Raphael, 2009). The quality of students undergoing industrial training was measured by 15 items in the survey questionnaire, which required evaluators from the industry to rate trainees in terms of the Foundation Skills required to function productively and efficiently in the work environment (Jones, 1996). These Foundation Skills can be categorized into five areas: **basic skills** (communication in English and Malay, and presentation in English); **people skills** (leadership, teamwork and interpersonal skills), **ICT skills**, **personal qualities and attributes** (self-confidence, self-motivation, time management, ability to work independently and self-presentation), and **thinking skills** (creativity and innovation, problem-solving and analytical skills). The majority of the respondents rated the trainees as *excellent* and *good* in these items (see Figure 2), which suggests that UM students do possess the much talked about *soft skills* required for a person to be considered employable (West, Noden & Gosling, 2000). However, the disparity between *excellent* and *good* rating for all of these skills, except for communicating in Malay and teamwork, needs to be addressed for UM to move towards a higher percentage of its trainees being rated as *excellent*, in line with its focus on producing high quality graduates.
Industry's commitment to the industrial training programme can be evidenced from the fact that feedback from a total of 1032 trainees from the 2007/8 cohort showed that 95% of them were supervised by industry personnel. Sustained supervision by an industry mentor is bound to have a positive impact of a student, increasing opportunities for the acquisition of industry specific and broad based knowledge and skills.

3. PREPARATORY PROGRAMME FOR INDUSTRIAL TRAINING

Prior to embarking on their training either in Malaysia or abroad, UM students are required to attend preparatory programmes comprising corporate seminars and soft skills workshops conducted by industry specialists. These programmes are aimed at providing students with insights into the needs and expectations of the world of work as well as preparing them to make the transition from campus to the workplace. For the 2008/9 academic session, one major corporate seminar, and more than 72 workshops were organised by CITRA. Several other faculty or department-initiated workshops and seminars were also held. The seminar was aimed at exposing students to the needs and expectations of employers, how to make the most of their internship, and internship opportunities abroad, while the workshops focused on four main areas: self-presentation (e.g. grooming, marketing oneself through resumes and at interviews), communicating at the workplace (e.g. English at the workplace, interpersonal skills), attitudes and attributes (e.g. motivation, dealing with work stress, time management, teamwork, leadership skills) and thinking skills (e.g. problem solving, thinking out of the box).

3.1 INDUSTRY PARTICIPATION IN THE PREPARATORY PROGRAMME

To ensure that students get the best possible pre-industrial training input, partnership with industry is necessary to obtain a large base of speakers and workshop facilitators from industry who are willing to share industry’s needs and expectations, and their expertise and experience with the students. The speakers and facilitators comprise Human Resource personnel, managers, entrepreneurs, and actual trainers. Partnership with AMCHAM, for example, saw the CEOs of two multinational companies presenting talks on leadership. The hands-on training and talks by industry offer students a preview into the world of work, and help prepare them for their industrial training. This training supports the existing curriculum, where soft-skills are embedded and evaluated in undergraduate courses at UM, and also enhances the language and entrepreneurial courses that students have to take. UM also runs a pre-employment programme for graduating students to further increase their chances of obtaining employment upon graduation. This programme consists of a one-month intensive English language course coupled with ICT and soft skills training followed by a three-month
job training with a local bank. The latter is another instance of a successful partnership with industry towards increasing the employability of UM graduates.

Based on feedback from the 1767 students who attended the 2008 Corporate Seminar and the participants of the workshops held throughout the 2008/9 academic session, over 85% of them agreed that the programmes are worthwhile and relevant to them. They also agreed that the speakers and facilitators were well prepared and well-organised, and that the examples used helped them to better understand particular concepts.

Participating in such preparatory programmes enables students to acquire useful knowledge and skills, inadvertently leading them to embark on their industrial training programme in a more confident and positive manner, especially since they would have already obtained some input on what to expect and how to perform during training.

4. CONCLUDING REMARKS

This paper described how UM embarks on partnerships with industry to strengthen two of its programmes: The Student Industrial Training Programme and the Preparatory Programme for Industrial Training. For the former, partnership with industry is sought to find placements for students. In addition, partnerships with industry also enable UM to enhance the industrial training programme by developing alternative models for industrial training, reaching out to a large database of companies through its membership in Chambers of Commerce; and securing industrial training placements abroad. Such partnerships provide much needed on-the-job training for undergraduates, which in turn makes them more employment ready (Collins, 2001), and “career-savvy” ("ICT – The Next Step", 2007), and enhances the competencies that employers look for including “interpersonal skills such as integrating with people forming culturally diverse backgrounds, thinking skills, problem-solving skills, ICT and positive personal qualities like responsibility and integrity” (“Industries and Educators Should Forge Partnership”, 2008). Having such skills is an essential tool to obtain and maintain employment (Cruez, 2003; “Many Graduates Lack Soft Skills”, 2008; West, Noden & Gosling, 2000). To ensure that the skills or competencies are aligned with the needs of industry, a close working relationship with industry is imperative. As Koo, Pang and Mansur (2008) point out, “[current] discourse in employability looks at it in terms of strategic partnerships and collaborations across institutions, organizations and sector involving knowledge transfer” (p. 2).

Industry's participation is also sought to prepare students for industrial training to prevent them from embarking on it without prior knowledge of what to expect and how to project themselves in a work environment. Exposure to industry personnel through the seminar and workshops also helps to build students’ confidence in communicating with various personnel at the workplace during their industrial training. More importantly, these preparatory courses supplement those embedded in the degree programmes, and enhance the soft skills and job competencies of the students, and undoubtedly, no one would be in a better position to conduct these courses than industry itself.

Partnership with industry in both the Industrial Training and Preparatory programmes provides industry with the opportunity to realign some of the mismatches between products of IHLs and industry's needs and expectations of graduates. Such partnership is a move away from academia-industry playing the blame game to a win-win situation for both parties who eventually need to take concerted efforts in the development of human capital of the nation.

REFERENCES


University-Industry Partnerships: The Universiti Putra Malaysia’s Experiences

Tai Shzee Yew, Turiman Suandi, Zaharah Omar, Siti Raba’ah Hamzah and Ludinata Misnun

Universiti Putra Malaysia
43400 UPM, Serdang
Selangor,
Malaysia.

ABSTRACT

University-industry partnerships are indispensable for universities and industry. Universities benefit from their interactions with industry, particularly for staff and students. Industry benefits through findings of the research and development efforts by the university researchers. These partnerships have led to effective physical and human resource development efforts through a wide array of methods by attracting new initiatives and new ventures, thus giving both the university and the industry new opportunities for advancement.

Being a research university, UPM is putting greater emphasis on the establishment of strong ties with the industry. This paper discusses the various types of university-industry partnerships between UPM and the industry such as: research, innovations consultancy, education internship programme, professional services, and attachment programme. This paper also discusses the modus operandi and ramifications of the partnerships.

Keywords: university-industry partnership, research, innovations, consultancy, education internship, and professional services

Introduction

Institutions of higher learning and industries are two critical pillars that contribute tremendously to the growth and development of nations, including Malaysia. Traditionally, the main function of industries in the national economy is to create and increase production, output and material wealth in order to fulfill the needs of the people and the nation. Institutions of higher learning, on the other hand, function to nurture and develop high quality intellectual human capital, conducting basic researches, tackling key technological difficulties and developing knowledge innovations. However in recent decades, with the advent of globalization and increased economic competition throughout the globe, cooperation between universities and industries has been a subject of increasing interest (Link and Tassev, 1989) and is regarded as essential and vital in order to increase national competitiveness (Wu, 2000).

In a general sense the rationale behind University-Industry partnerships (UIP) is to share and transfer knowledge between the parties. Therefore, the nature of the knowledge that is being shared and transferred is very important. Knowledge can be explicit and tacit. Explicit knowledge can be transferred without the presence of people. This type of knowledge flows between university and industry can exist in the form of patents, scientific articles, books, et cetera. Tacit knowledge on the other hand, is embodied in people and cannot be transferred without them. It is the knowledge that people acquire by actually doing their job and conducting research and it cannot (yet) be transferred by writings or drawings (Nonaka and Takeuchi 1995). The transfer of tacit knowledge is often considered to be a very important element of knowledge transfer (David and Foray 1995) and can be effectively done through UIP.

Forms and Activities of UIP

UIP encompasses a wide range of activities, structures, and concepts. However there has not been a universally accepted classification on this wide range of activities (Wu, 2000).
In general, they involve exchange of resources, ideas, or influence between some unit within a university and the industry (Anderson, 2002). Table 1 shows the forms and activities commonly undertaken in UIP. Lee (2000) suggests several reasons universities and industries collaborate with each other. For the university, the university-industry linkages help to supplement funds for its own academic research. Through these linkages, universities can test the practical applications of research and theories and gain insights in a particular area of research. Besides, these linkages also help university to further its outreach mission, expand business opportunity, and create student internships and job placement opportunities (Lee, 2000). Meanwhile, industries may want to collaborate with universities in order to solve specific technical or design problems, develop new products and processes, conduct research leading to new patents, improve product quality, and reorient its R&D agenda. Furthermore, these partnerships open the opportunity for industries to have access to new research frontiers, facilitate ongoing relationships and networks with the universities as well as recruit new graduates. (Lee, 2000). In addition, through these partnerships, organizations may gain competitive advantage through cost-savings and increased revenues and enhance business growth and also their reputation (Mead, Beckman, Lawrence, O'Mary, Parish, Unpinco & Walker, 1999).

<table>
<thead>
<tr>
<th>Table 1: Different forms and activities of University-Industry Partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Publications</strong></td>
</tr>
<tr>
<td>Scientific publications</td>
</tr>
<tr>
<td>Co-publications</td>
</tr>
<tr>
<td>Consulting of publications</td>
</tr>
<tr>
<td><strong>2. Participation in conference, professional networks &amp; boards</strong></td>
</tr>
<tr>
<td>Participation in conferences</td>
</tr>
<tr>
<td>Participation in fairs</td>
</tr>
<tr>
<td>Exchange in professional organizations</td>
</tr>
<tr>
<td>Participation in boards of knowledge institutions</td>
</tr>
<tr>
<td>Participation in governmental organizations</td>
</tr>
<tr>
<td><strong>3. Mobility of people</strong></td>
</tr>
<tr>
<td>Graduates</td>
</tr>
<tr>
<td>Mobility from public knowledge institutes to industry</td>
</tr>
<tr>
<td>Mobility from industry to public knowledge institutes</td>
</tr>
<tr>
<td>Trainees</td>
</tr>
<tr>
<td>Double appointments</td>
</tr>
<tr>
<td>Temporarily exchange of personnel</td>
</tr>
<tr>
<td><strong>4. Other informal contacts/networks</strong></td>
</tr>
<tr>
<td>Networks based on friendship</td>
</tr>
<tr>
<td>Alumni societies</td>
</tr>
<tr>
<td>Other boards</td>
</tr>
<tr>
<td><strong>5. Cooperation in R&amp;D</strong></td>
</tr>
<tr>
<td>Joint R&amp;D projects</td>
</tr>
<tr>
<td>Presentation of research</td>
</tr>
<tr>
<td>Supervision of a trainee or Ph.D. student</td>
</tr>
<tr>
<td>Financing of Ph.D. research</td>
</tr>
<tr>
<td>Sponsoring of research</td>
</tr>
<tr>
<td><strong>6. Sharing of facilities</strong></td>
</tr>
<tr>
<td>Shared laboratories</td>
</tr>
<tr>
<td>Common use of machines</td>
</tr>
<tr>
<td>Common location or building (Science parks)</td>
</tr>
<tr>
<td>Purchase of prototypes</td>
</tr>
<tr>
<td><strong>7. Cooperation in education</strong></td>
</tr>
<tr>
<td>Contract education or training</td>
</tr>
<tr>
<td>Retraining of employees</td>
</tr>
<tr>
<td>Working students</td>
</tr>
<tr>
<td>Influencing curriculum of university programs</td>
</tr>
<tr>
<td>Providing scholarships</td>
</tr>
<tr>
<td>Sponsoring of education</td>
</tr>
<tr>
<td><strong>8. Contract research and advisement</strong></td>
</tr>
<tr>
<td>Contract-based research</td>
</tr>
<tr>
<td>Contract-based consultancy</td>
</tr>
<tr>
<td><strong>9. IPR</strong></td>
</tr>
<tr>
<td>Patent texts</td>
</tr>
<tr>
<td>Co-patenting</td>
</tr>
<tr>
<td>Licenses of university-held patents</td>
</tr>
<tr>
<td>Copyright and other forms of intellectual property</td>
</tr>
<tr>
<td><strong>10. Spin-offs and entrepreneurship</strong></td>
</tr>
<tr>
<td>Spin-offs</td>
</tr>
<tr>
<td>Start ups</td>
</tr>
<tr>
<td>Incubators at universities</td>
</tr>
<tr>
<td>Stimulating entrepreneurship</td>
</tr>
</tbody>
</table>

Adapted from Bongers et al. 2003 as cited in Brennenraedts et al. 2006
The power of partnerships between university and industry is the synergy of the combined resources in supporting knowledge creation and sharing to address the needs of the primary stakeholders of both parties. This paper discusses areas of university-industry partnerships at UPM through its various entities. It also discusses the modus operandi and ramifications of the partnerships; as well as some issues in promoting strong and harmonious partnerships.

**UIP at Universiti Putra Malaysia**

University Putra Malaysia (UPM) was established in 1971 (formerly known as Universiti Pertanian Malaysia) and was focusing primarily on serving the public to attain their first degrees, research activities in agriculture and in other related fields. In the early 80's, however, UPM widened its academic programmes to include the field of Science and Technology. In 1997, it took a bold strategic move to change its name from Universiti Pertanian Malaysia to Universiti Putra Malaysia and this change has elevated UPM's to be a Public Institute of Higher Education that offers a plethora of academic programme to the public. In 2006, UPM was given the recognition as one of Malaysia's first Research Universities (RU) under the 9th Malaysia Plan. The vision of UPM is to become a university of international repute while its mission is to be a leading centre of learning and research, contributing not only towards the creation of wealth and nation building but also towards universal human advancement and discovery of knowledge.

The University-Industry partnership is a vital mechanism to ensure the sustainability and the survival of both the university and the industry and UPM places great emphasis on strengthening this partnership. At UPM, the partnership started way back in the 1970s, with the government joining the initiative by supporting local outreach extension programmes. The focus was not only for extension work in agriculture, but also in home economics, youth and gender development, community development and training development. Today, the partnership has expanded to include other stakeholders, particularly private industries.

In order to ensure constructive engagements with external stakeholders and to coordinate and strengthen UIP, the office of the Deputy Vice Chancellor of Industry and Community Relations was established in UPM recently. The office acts as the point of first contact for industries and other external stakeholders and liaise them with departments and entities within UPM as shown in Figure 1. These linkages are formalized through Memoranda of Understanding (MoU) and Memoranda of Agreement (MoA) and they provide extensive benefits for parties involved in promoting smart partnerships, such as enhancement of knowledge and research, and capacity building. In addition, strategic linkages with external stakeholders are also being established through initial contacts of individual staff members and students.
At UPM, the UIPs were established to address the three core activities of the University, namely, teaching, research and professional and community services. These partnership activities will impact directly and indirectly the employability of UPM’s graduates. For examples:

- The design, revision, improvement and accreditation of high quality and relevant curricula will strengthen the technical and hard skills of graduates and the involvement of students in co-curriculum and community service activities will enhance their communication, socialization and soft skills. All these will have direct impact on graduate employability; and

- Engagement of UPM in high quality research, innovation and commercialization of research products as well as in community and social activities will create and boost the positive image and reputation of UPM. These will indirectly impact on graduate employability.

The modus operandi and ramifications of the partnerships between UPM and industries are described in the sections below.
JOINT EDUCATION AND TRAINING

To a great extent the quality of university’s graduates depends on the quality of the curriculum and training these graduates undertook. High quality graduates will definitely enhance graduate employability. The percentage of UPM’s graduates employed within six months after graduation was 56.7 percent in 2007 and the percentage is projected to increase to 70% by 2010 (Universiti Putra Malaysia, 2007) with continuous revision and improvement in the curriculum as well as increasing the requirement and intensity of industrial training.

Various external stakeholders contribute to UPM’s design and delivery of curriculum and co-curriculum. These stakeholders include the Ministry of Higher Education Malaysia (MoHE), government agencies, employers, alumni, academic experts, statutory bodies and industry representatives. The links with them take various forms as follows:

- The MoHE specifies the general requirements of academic programmes and acts as the approving agency for new and revised programmes.
- Academic experts, industry and professional body representatives, government agencies and statutory bodies often function as members of a faculty’s academic programme committees or Faculty Advisory Committee. This committee is required to provide inputs in the design and development of new programmes, to assess and evaluate existing ones for the purpose of curriculum improvement. Its contributions may include assistance with placement of students for industrial training and internship.
- Through tracer studies, the alumni provide feedback regarding the relevancy of academic programmes.
- Industrial training provided by industries is an important component of many programmes at UPM. The reports on student performance submitted by industry supervisors are used for programme improvement and delivery.
- Industries also accept UPM staff for industrial attachment. This allows effective sharing of expertise in teaching, research, human resources and facilities.
- UPM has also established linkages with other universities and institutions of higher education to create new curricula via jointly awarded degree programmes and split programmes.

As an example of UIP in joint education, UPM has collaborated with the Golden Hope Academy of the Sime Darby Plantation Group, a major plantation player in Malaysia to jointly provide a Diploma Programme in Land Management since 2005. Successful candidates will undergo a 2 years structured development programme with on-the-job exposure. Participants meeting the expected standards and competency levels will be offered full employment as Cadet Planters at the end of the programme and will be based at Sime Darby estates in Malaysia and Indonesia. The programme features practical and experiential learning which encompass both theoretical and practical aspects of plantation agriculture business and management.

Another important UIP at UPM is through the industrial training undertaken by UPM’s undergraduate students at various industries. Depending on the discipline, industrial training at UPM appears in many forms such as practicum training, student teachers training, internship, clinical practicum, and housemanship. According to Ryan, Toohey and Hunges (1996) practicum training is an important means for higher education institutions to prepare their graduates for the working world. Industrial training plays a vital role to expose students to real working situation and to equip them with the necessary skills and abilities so that they would be job-ready when they graduate. Through this, companies are able to tap and benefit from the talents of the undergraduates. Furthermore, through the industrial training, companies are able to recruit potential employees (Yarrow, 1992). Internship training help companies and individuals to have early assessment to see whether they fit one another before any longer-term commitment is made. Research on internship outcomes suggest that internships may help students acquire job relevant skills (Garavan and Murphy, 2001) and also help the student to socialize and acculturate (Tovey, 2001). To date there are about 80% of all the programmes offered by UPM require students to undergo industrial training or internship with industries (Universiti Putra Malaysia, 2009).
The quality of education and training at UPM is enhanced by appointing external educational experts, including alumni, as external programme assessors, external examiners, research fellows, visiting and adjunct professors, and contract lecturers. Apart from teaching, they may also be involved in research collaboration.

RESEARCH, INNOVATION and COMMERCIALIZATION

UPM was founded in 1971 as an agricultural-based university. To date, UPM has become a comprehensive university with academic disciplines spanning from engineering, medical sciences, pure sciences, economics, management, education, languages, communication and other fields. UPM has also established 6 research clusters encompassing a number of faculties and research institutions concordant with the current needs for multidisciplinary research approaches. The clusters are agriculture, food, forestry and environment, engineering and technology, health, science, and social science.

At UPM, the Research Management Center (RMC) and the Innovation and Commercialization Center (ICC) under the office of the Deputy Vice Chancellor of Research and Innovation are given the responsibility to manage matters relating to research, innovation and commercialization of research products. The RMC, and ICC have recently been certified under the MS ISO9000:2008 in order to ensure excellence in the management of research and commercialization of its research products.

The RMC was officially established in May 2000 to replace the former University Research Unit formed in 1992, is responsible to manage research funding and enhance the overall impact of research by expanding alliances and reinforce partnerships with the external stakeholders including world-class research universities. In order to ensure successful and sustainable university-industry partnerships, the RMC is responsible to enhance and strengthen the current research management system by intensifying R&D efforts in order to improve productivity and efficiency, so as to produce quality research findings and outputs. RMC's role is also to increase collaborative R&D efforts between public R&D agencies and the private sector to facilitate commercialization of research findings.

UPM received research grants from three main sources, namely, the government, private sector and international grants. The government is by far the most important source of research funding for UPM. In 2007, the total amount of government research grants approved increased by 82% to RM 135.5 million compared to the amount of RM 74.4 million received by UPM in 2006. The number of projects and the amount of research funds from the private sector and international source are still small as shown in Figures 2 and 3.

Figure 2: Sources of Fund for R&C Activities

Source: Universiti Putra Malaysia, 2009
The ICC, on the other hand is responsible to implement strategies for the protection and management of patents and intellectual property (IP), to promote and enhance commercialization of products, expertise and technologies through smart partnership amongst researchers and entrepreneurs, and generate awareness and opportunities for IP creation amongst researchers. In order to achieve this mission, the ICC conducts market research and feasibility studies on R&D findings at pre and post commercialization phases. In addition, ICC also actively establishes business-matchmaking amongst researchers and entrepreneurs to form smart partnership to ensure sustainable technology transfer, IP evaluation and protection and to promote the formation of spin off companies.

Contract-based research conducted by UPM’s researchers is managed by the ICC office to ensure the protection of IP. The university-industry research cooperation may take place in two forms namely, (i) a company makes an offer sponsored research directly to the researcher; or (ii) ICC receives an offer from a company requesting for collaboration of a company-sponsored research project with a UPM’s researcher; ICC will then forward the company’s offer to the identified researcher. ICC will provide assistance to the researcher in discussion and negotiation of the research contracts with the company to ensure that the rights and interests of the researcher and UPM are being protected. ICC will monitor the progress of the implementation of all contract research projects.

To date, 20 patented products developed by UPM researchers for industrial use have been successfully commercialized while 27 patents that have been granted applications pending approval and another 157 products are waiting to be patented. Three spin-off companies are formed to support the commercialization of research products. UPM has also participated in many research exhibitions, both at the local and international levels. In 2008 alone, UPM won 28 awards from participation in 25 international exhibitions, whereas at the national level, UPM succeeded in clinching 47 awards from 54 outings (Universiti Putra Malaysia, 2009).

PROFESSIONAL SERVICES

Realizing the importance of UPM-community relations, UPM has established entities that focus on providing its expert services to the communities at large as part of its corporate social responsibilities. UPM’s professional services comprise extension services and consultancies. Extension services are coordinated by the Extension, Entrepreneurship & Professional Advancement Centre (APEEC) and University Agriculture Park (UAP) and are supported by internal funding. Consultancy services on the other hand are handled by the University Business Development Centre (UBC) and are self-funded and actually generating income for the university.

![Figure 3: Total Project Fund Approved by Funding Sources, 2007 (%)](chart.png)
Extension, Entrepreneurship and Professional Advancement Centre (APEC)

APEC was established in 2007 with the merger of Agricultural Extension Institute, Centre for Agro-Entrepreneur Development and Centre for Professional Advancement. APEC inspier to become a renowned entity that translates research findings and output into sustainable community and nation building through extension and consultation. APEC is actively involved in technology transfer in agriculture and other related fields by developing and conducting various entrepreneurship programmes and course modules, trainings and workshops to enhance professionalism in public agencies, non-governmental organizations and agro-entrepreneurs. In addition, APEC has also become a consultation and referral centre for agricultural extension, entrepreneurship and lifelong learning at national and international levels.

UPM's academic staffs are encouraged to contribute their services to the community by being members or office bearers and participating in the activities of NGOs such as the Red Crescent Society, Parent-Teacher Associations, World-Wide Fund, CUEPACS, MERCY, ALIRAN, MAKNA etc. In addition, students' involvement in voluntary community activities through their respective associations is inculcated in order to generate added value in the enrichment of their soft skills and at the same time to instill their sense of social responsibility. In 2007, about 25 voluntary activities were conducted by various student associations compared to only 11 activities in 2006 (Universiti Putra Malaysia, 2007).

University Agriculture Park

The University Agriculture Park (UAP) was originally established as the Farm Division, UPM in 1971 with its function then was to provide students with agriculture practical training and to give services to the campus community. In 1998, Farm Division was restructured to become University Research Park, in order to facilitate agricultural research and services. The University Research Park was renamed again to University Agriculture Park in order to give emphasis to agriculture in line with the goals of the national development plan and the UPM's vision and mission. UAP aspires to become the best supporting entity in teaching, research and services in agriculture for students and staffs in UPM as well as for the community at large. UAP's research facilities include research plots, state-of-the-art equipments and materials, and farm structures. The Park offers services such as rental of vehicles and agriculture machineries, conducting agricultural courses, agriculture consultation, and sale of agriculture products. UAP also help to maintain the 18-hole golf course in UPM for the use and enjoyment of UPM's staffs, students, and community at large.

University Business Development Centre (UBC)

UBC is the ‘business arm’ of UPM. The consultancy unit of UBC is responsible for managing all consultancy projects with industries and helps to market UPM's professional expertise through its various consultancy activities. To date, there have been numerous consultancy services rendered by UPM to various industries locally and internationally. In 2007, UBC managed and coordinated 77 consultancy projects worth more than RM 14 million with smart partnership between UPM's staffs and local industries and government agencies (Universiti Putra Malaysia, 2007). This figure represents a 147% increased as compared to the value of 35 consultancy projects worth RM 6.1 million in 2006.

Foundation

The UPM alumni have established the Park Rashid Foundation through which they contribute financial support to needy by excellent students. Both the Alumi Centre and UPM alumni association work in tandem to nurture the tradition of giving back to the University and to maintain close ties with the alma mater through various activities organized on and off campus such as the Alumni Mentorship Programme. The programme provides the platform for alumni to assist students in strengthening their soft skills and to guide them along their career pathways before they leave the campus.
In addition, industries and corporations also allocate funds in the form of professorial chairs and scholarships to UPM worth RM 5 million (Universiti Putra Malaysia, 2009). Funds for professorial chairs are for the appointment of external professors in specific fields of study where the professors contribute in high impact research and teaching activities. On the other hand, the scholarship funds are for the financial support of needy and academically excellent students.

**SUMMARY and CONCLUSION**

UIPs are indispensable for UPM and industry. UPM benefits from their interactions with industry, particularly for its staff and students, and industry benefits from having access to well-trained graduates, knowledgeable faculty members, professional expertise and solutions to specific problems.

Though the missions of UPM and its industry partners are fundamentally distinct and occasionally opposed, the most successful collaborations contribute to the missions of each party. Below are some specific examples of how each partner may contribute to the mission as well as the objectives of the other party:

**UPM Contribution to the Industry Mission:**

- Acting as a filter to distill, from the general public knowledge base, a subset of that knowledge particularly applicable to industry’s product needs (knowledge transfer);
- Advancing the state of the art in a particular field;
- Contributing to the general knowledge base for public benefit (publication);
- Fostering economic development that expands markets;
- Licensing inventions and developments (Intellectual Property) for commercial purposes, including revenue generation (technology transfer);
- Objectively testing, evaluating and reporting on new technology;
- Performance of specific research on behalf of industry (sponsored research and consultancy);
- Providing access to university-owned equipment, materials, facilities and specialized resources;
- Supplying well-trained human resource through excellent and relevant curricula;
- Reducing the costs of pre-job training and shortening training period in recruiting workers (students who have undertook industry internship training); and
- Training of future and current industry workforce (students) through undergraduate and advanced degrees (retention of trained work force) and entrepreneurship programmes.

**Industry Contribution to the UPM Mission:**

- Bringing UPM’s contributions to the awareness of the public in the form of goods and services (technology transfer) and thus improving the image of the university;
- Contributing to general knowledge base (publication);
- Financial support in the form of scholarships and funds for professorial chairs, research and facilities;
- Contributing time and knowledge through involvement in activities such as assisting in student projects, delivering guest lectures, providing services on thesis committees and curricular advisory boards;
- Providing employment for students and graduates;
• Enabling access to industry-owned equipment, materials, facilities and specialized resources;

• Providing placement or/and funding for student internships and faculty sabbaticals;

• Providing financial and/or in-kind support for specific research activities of interest to the industry partner (sponsored research and consultancies);

• Providing leading-edge research directions; and

• Paying technology licensing fees and royalties, which support ongoing research and educational programmes.

Awareness of these benefits by the stakeholders will enable them to identify opportunities, which will in turn help the partnership to flourish. It is widely accepted that the partnership is a useful strategy for integrating scientific knowledge into the productive sectors of the economy. As such, it offers a lot of opportunities, for social and economic empowerment, not only to the stakeholders but also to society at large. It also offers UPM’s staff an additional avenue for generating income through the sale of their inventions or the commercial exploitation of their technologies. UPM can also exploit the opportunity offered by the partnership to enable its staff and students to obtain valuable practical experience, get job satisfaction and understand the needs of industry. The partnership, if it results in useful products and technologies can also enhance the profile of the scientists and the reputation of UPM. Under the partnership arrangement opportunities may arise for UPM’s research to be hosted and possibly financed by industries.

Industry can also envisage from the partnership an opportunity to use UPM’s staff as consultants in the execution of technical assignments. This should lead to improvement in quality of products and increase in productivity.

The above paragraph presents the potential benefits that strong university-industry partnership can offer to society and the stakeholders. Certain circumstances and developments of the stakeholders can present opportunities for the UIP to flourish. For instance, currently there is pressure on public universities in general and UPM in particular to decrease their financial dependence on the government. Thus efforts are being made to identify alternative sources of generating revenues and incomes. This is an opportunity which can be exploited by the UIP to promote the cooperation as an income generating activity. Under such circumstances, UPM may need to be quick to provide the necessary support for the creation and sustenance of the partnerships.

It can be concluded that university-industry partnership is a very logical strategy for knowledge creation, for building technological capacity, for generating high quality workforce and for promoting economic development. The partnership brings together those who generate knowledge (universities and research institutions) and those who utilize knowledge for economic development. Therefore it is a useful mechanism for utilizing national scientific and technological capacity for development. In addition to the general advantage to the society at large, the partnership offers opportunities to all stakeholders. For the university and the scientist, it is an opportunity to generate funds, enhance their graduate employability and strengthen their capacities. It also enables them to serve their communities and enhance their profile in society. Industry also benefits in many ways including access to scientific resources available in the universities, improvements in their technologies and operating performance and recruitment of well-trained graduates as their staffs which may arise from the partnership.

Even though it is recognized that the benefits generated by UIPs in the long run are tremendous, the levels of involvement of industries in certain collaborative activities such as funding for research and commercialization of research products, scholarships, internship training however, are still required to be stepped up. It should be recognized that the issues and relationships between industry and universities are becoming increasingly contentious and complex over time, and the urgency of addressing these concerns is paramount. The sustainability of UIP will require continuing effort because external circumstances affecting these collaborations will change over time. It is helpful to acknowledge that partnership arrangements do not have a one-size-fits-all solution, and there is a need to face them as a continuous work in process that addresses and respects the various parties’ motivations and
priorities. With the increase in global competitiveness, industry is facing intense pressure to increase innovation, contribution, economic development, and profitability. Within these perspectives, both UPM and industry need to support each other and plan for increasing the intensity and the success rate of UIPs.

References


Tovey, J. (2001). Building connections between industry and university: Implementing an internship programme at a regional university. Technical Communication Quarterly, 10 (2), 225-239.


Industry Partnership Program
A Comparative Study of FEU’s Current Program and Future Directions

Albert III R. Cabasada
Far Eastern University
Sampaloc, Manila
Philippines

Abstract

Far Eastern University began revising its vision and mission in SY2006-2007. Due to the snowballing effect of globalization, the university wants to position itself as among the best not only in the Philippines or South East Asia, but throughout Asia. One area we have identified as an area for improvement and further development is Industry Partnership.

The past few years made it very clear that the academe cannot exist isolated from the world. With the advent of new technologies resulting to new requisite competencies and skills, universities would have to allow more flexibility and change to ensure the preparedness of its graduates to meet these new challenges.

In 2006, the university created the Admissions and External Relations Office to take care of admitting qualified students and ensure opportunities for these students when they graduate. The key issue the External Relations office wanted to address is whether our graduates were primed enough to meet the challenges of the world of work.

This first part of this paper would deal with the experience of the External Relations Office as it attempts to establish a partnership program with related industries to ensure, first and foremost, that FEU's graduates have the necessary competencies and to provide them with a professional environment for internship. It would also provide details of other additional partnerships with industry for mutual benefit of both FEU and industry partners.

The second part will be a comparative analysis of existing industry-academe models successfully launched in other universities. It is important for FEU to benchmark with other universities in order to finely tune its program for its specific needs.

Finally, as a result of this comparison, we hope to provide future directions for industry partnership for FEU and possibly for universities with similar conditions and environments.

Introduction

There has been a growing consensus that stronger ties between industry and academe is necessary to fuel national development. Before SY2006-2007, FEU's industry partnership was left to individual college units. Since most of the degree programs offered in FEU requires an On-the-Job Training (OJT) component, each college or institute was left in charge of identifying companies and offices the students can go to accomplish this requirement. For an 81 year-old university with an average enrollment of 23,000 students in six Institutes/ Colleges, making this a more efficient and innovative program for the benefit of its students is doubly important.

In practice, the students were made to sign individual agreements with offices which accommodated them as OJT’s or interns. This means that there was no formal agreement between the university and industry. Obviously, this presented several challenges.
First, monitoring the companies and the nature of tasks assigned to students was difficult. Though all degree programs had an established Student Apprentice Program, the evaluation done by the individual office supervisors and heads cannot be concretely verified. Students were scattered in many offices, and faculty members assigned to monitor these students can only ideally visit the students twice in one semester. Another problem is that, since there is no concrete agreement, the uniformity of the students’ experience and exposure varied from company to company. It was definitely hard to establish whether students performed real and relevant tasks.

Second, we were concerned whether the students were getting relevant exposure in a real professional environment. If the students were left on their own to choose companies, there is always a chance that they are accommodated in companies with less than professional standards. This may negatively affect and influence the students’ perception of the professional environment.

Third, we wanted to use the evaluation form as data to establish whether curricular interventions done to enhance student learning had any real concrete effect in students’ skills and competence. Since there is quite a degree of doubt on the evaluation done by some companies students went to, information from these evaluation forms may be skewed. This can now be a cycle that can negatively feed any further curricular enhancement.

Fourth, relations with good companies cannot be maximized. We have realized that in order to make FEU attain its vision of being a university of choice in Asia, producing graduates who are competent to participate in nation building and also competitive in the global market, it would be necessary to attune the curriculum to the global needs of industry. Inputs we can have from industry partners, can play a significant part to help FEU fine tune its curriculum and be more proactive in terms of needed changes and interventions.

Fifth, competition in terms of employment is increasing. We needed our students to be in a better position to secure viable employment after graduation. Standards of many companies in hiring are shifting to meet global demand in terms of skills and competencies. It would be more strategic to partner with companies whose manpower requirements would be readily addressed by our graduating students. It also makes more sense for companies to hire former interns who have already been exposed to the company’s culture and environment than to allocate additional resources for training of newly hired personnel.

Sixth, having no direct relations with companies puts FEU at a disadvantage. Aside from internship and employment programs, there are also several other programs that can be done with industry partners such as joint research, faculty immersion, training, and community services which we observed were already being done in universities in the Philippines and established in international universities.

The Challenge from Industry

Aside from these immediate concerns, based on our initial contacts with industry representatives, we realize that there was a growing consensus among key industry stakeholders that current graduates lack certain competencies and skills in the emerging professional environment. In various forums and conferences, industry stakeholders emphasized some very important factors.

Industry stakeholders identified a changing outlook in the work force to raise the level of competitiveness in the global scene. They have identified several areas where there are seeming gaps in terms of skills and competence among the current work force:

- Communication Skills
- Organizational Skills/ Team work
- Critical Thinking
- Initiative
- Flexibility/ Adaptability
In short, the products of universities in the Philippines were perceived to lack these needed skills. Since industry was moving in a faster rate than the academe, there is now a mismatch in terms of what the industry needs and what the education system in the Philippines produces.

It should be noted that curriculum in universities and colleges is prescribed by the Commission on Higher Education. However, due to the rapid changes that have taken place, we do admit that in certain areas industry has moved faster than the academe. As a result, industry now is calling for a synergy between industry, the academe and the government to address this growing gap.

It would take a strong political will to immediately address this situation in the Philippines. This will take a lot of time. FEU, on the other hand, does not want to idly wait for government to act. As will be mentioned in the latter part of this paper, we realized that other universities have already developed industry partnership initiatives well suited for their specific needs. We realized that it was time for FEU to act and provide this service to its constituents, mainly the students and the alumni.

**Establishment of an External Relations Unit**

In order to address these challenges, in August of 2005 the FEU management decided to establish the Admissions & External Relations Office whose main objectives are the following:

a. Establish links with industry.
b. Assist graduates secure employment.
c. Create an information dissemination system for job opportunities.
d. Conduct university Job Fairs.
e. Coordinate other related activities with other offices like the Colleges/ Institutes/ Departments, Alumni Office, University Counseling and Career Office, and the Office of Student Affairs and Community Services.
f. Coordinate with local and international institutions in promoting FEU to international students.
g. Establish relevant relations with international universities and institutions.

Although individual colleges/ institutes were doing some linkages on a limited level, the establishment of the office signified a uniform thrust with common general objectives across all programs of the university.

For the purpose of this paper, only the first five objectives will be discussed as they relate to industry-academe partnership.

**Industry Partnership Program**

The Industry Partnership Program of FEU was launched in March of 2006. Some thirty companies were invited in a simple gathering held at the FEU Technology Building. The
main objective of the event was to encourage these companies to have a partnership with the university.

We had a simple message to impart to these companies. Synergy between academe and industry was important in achieving developmental goals. We recognize that industry is the end user of our graduates and it is our responsibility to ensure that these graduates are up to the challenge. This synergy will ultimately be mutually beneficial to both academe and industry.

For the academe, inputs from industry can help generate curricular interventions to enhance student competency. For the industry, sourcing manpower direct from the academe is a cost efficient way of identifying new blood and talent. In the Philippines, many companies outsource their human resource needs to specialized recruitment agencies. Sourcing direct from the schools which produce the kind of graduates they need would considerably reduce their costs. This is a win-win proposition we at FEU advocate.

Furthermore, we would also like to maximize our relations with companies, especially companies that are among the top in the Philippines. We have prepared a menu for different kinds of partnership we would like to engage in. These are the following:

- **OJT/ Internship Partnership** – This is the initial phase of any relationship with any company. We identify two types of companies:
  a. It should be a top 500 Philippine company.
  b. It should be a company with a history of being open to FEU interns.

  We have prepared templates for a Memorandum of Understanding (MOU) and Memorandum of Agreement (MOA) to formalize the relationship. This is also in accordance to existing Commission on Higher Education policies for accreditation. The most important provision of the MOA is the assurance that the students would have relevant exposure and the evaluation will be based on criteria provided jointly by FEU and the partner. This will ensure that monitoring of student performance will be accurate and can be used as basis for any future curricular intervention. It also emphasizes that both FEU and the company are committed to the student's real learning.

- **Employment** – This phase is actually the main objective of the OJT/Internship partnership. Since students have already been exposed to the company's values and system, performing interns will have a good chance of being absorbed by companies with vacancies.

- **Training and Faculty Immersion** – We also want to take advantage of exposing both students and faculty members to current industry practices and professional environment. Under our Center for Continuing Education, we would like to tie up with companies to offer short courses, seminars and training programs on specific fields.

- **Scholarship** – We also intend to partner with companies for possible scholarship for their employees whom they would want to sponsor for higher studies. Aside from this, many companies in the Philippines have foundations that support underprivileged youths. We are opening the doors of FEU to these kinds of arrangements.

- **Community Service** – Corporate social responsibility is a concern now for many big companies and government agencies in the Philippines. We intend to partner with companies who have similar advocacies with FEU, mainly community development, environmental preservation and development and urban development.

- **Research** - Tie ups with established companies on research projects can be mutually beneficial to both academe and industry. For the academe, it is fulfilling its role as a source of new and relevant knowledge. For companies, it is a cost efficient way of gathering information. This can possibly open up
other venues for generating additional revenues for both the school and the company.

We have had limited success in attracting company partnerships. Below is the current statistical data we have.

<table>
<thead>
<tr>
<th>Status of MOA</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOA signed by both parties</td>
<td>40</td>
</tr>
<tr>
<td>MOA scheduled for signing</td>
<td>15</td>
</tr>
<tr>
<td>MOA undergoing revisions</td>
<td>0</td>
</tr>
<tr>
<td>Total Companies</td>
<td>45</td>
</tr>
</tbody>
</table>

In 2006, FEU did not have a single MOA with any company for any institutional partnership for its students. We observed that there is a reciprocal interest from many companies to partner with FEU and other universities for that matter. As we made sure that MOA’s were only for companies belonging to the top 500 companies in the Philippines, we were moderately delighted with the interest our efforts generated.

Aside from the MOA’s, we also offered several add on services to cater to the needs of the companies to recruit our students for possible vacancies.

- **Job Fairs** – We have institutionalized the university-wide job fair. This generated participation from an average of a 100 top companies every year beginning in the year 2005. We are currently conducting a tracer study to find out the effect of the job fairs on our graduates’ employment prospects. Just this year, we have also invited government agencies like the Social Security Service, National Statistics Office, Bureau of Internal Revenue and National Bureau of Investigation to help our students secure employment documents and clearances from these offices.

- **Career Seminars** – The University Counseling and Career Office also conducted career seminars to our graduating students by inviting industry experts and professionals.

- **In-house Testing and Recruitment** – We also allow companies direct access to our graduating students by scheduling in-house interview and application.

- **Placement CD** – We also produced a CD containing contact information about our graduates. The program includes a picture of each graduate and a search engine suitable for human resource personnel of companies to search qualified graduates for vacant positions in their companies.

- **Career Site** – We also introduced a career site in our website to enable companies to post possible job opportunities for both our graduates and alumni.

- **Email Blast** – Aside from the career site, we also send email blasts to our alumni regarding the most recent job opportunities from our partner companies.

- **Dinner with Partners** – We also have hosted a dinner with our industry partners. We try to do this annually if budget permits. This is to solidify our linkage and report gains made during a year of linkage. We also utilize the event to attract more companies to partner with FEU.
We have had moderate success in the initial phases of our program for industry linkage. However, we are aware that we are just starting to increase our efforts and make our initial successes more sustainable. There were also several obstacles that we encountered along the way. These are the following:

- **MOA’s took time to be signed** – Due to the sensitive nature of the MOA, finalizing MOA’s with different companies took some time. Each company had their own distinct provisions and both legal departments made sure that the documents to be signed were thoroughly vetted and evaluated.

- **Coordination with other offices demanded a lot of manpower** – Since the office assigned to handle external relations is the same office that handled admissions, some tasks were being done by staff members also tied with other tasks. This made coordination taxing work for staff members.

- **The new policies required that everybody adjusts to new ways of doing things** – Any change needs time for adjustment of all concerned. Taking people away from their comfort zones implies some resistance at certain points. Articulating the advantages of such a program is necessary for all to be in the same boat.

- **Required hours for OJT is not attractive to companies** – Although most degree programs in FEU have OJT required courses, the required number of hours was minimal. Some degree programs only required 120-150 hours, something companies were not too keen on accepting.

Currently, we are in the process of benchmarking with other schools. We are interested to find out best practices that resulted in successful and sustainable industry academe partnership. We realize that many schools in the Philippines have embarked on an aggressive industry partnership years before FEU decided to follow suit in this direction. Also, we are aware that international universities have long been employing this approach. We have looked at several of these schools and we feel that there is much we can learn.

**University of the Philippines Model**

The University of the Philippines is considered as the leading university in the Philippines. In the year 2000, the university embarked on a concerted effort to dynamically link with industry. Drawing from the success of international universities such as Stanford University’s Silicon Valley, Massachusetts Institute of Technology’s Route 128, Tsukuba University’s Science City and the Indian Institute of Science, Information Technology and Management’s Bangalore, the university intends to utilize industry-academe partnership to maximize resource and wealth generation and bolster academic and research programs.

The partnership involved an establishment of a Science and Technology Park (STP) in the university's idle lands. The partnership was formed with the Ayala Foundation, a leading conglomerate in the Philippines with assets in the billions of dollars.

There were several objectives for this big collaboration:

- Students will be exposed both to technical and market realities.
- Faculty members will likewise be exposed to technical and market realities.
- It provides a collaborative venue between industry and academe to test research proposals and directly benefit from this.
- The fusion of academe’s technical expertise and the entrepreneur’s market knowledge will result in innovative, dynamic products directly addressing consumer demands.
- New knowledge will enrich and enhance academic offerings.
- Make UP a leader in technology-based businesses.
Currently, construction of the technology park is almost complete with several buildings already leased out to companies like IBM, HSBC and Manulife.

One thing that we should note is that, although UP is regarded as a leading institution of higher learning, it has realized that industry-academe linkage is indeed very important. We note that the objectives to enhance student learning and competence, increase knowledge through collaborative research, enhance academic offerings mirror FEU’s objectives. However, setting up collaborations to enhance resource and wealth generation is something that FEU should include in its industry-academe linkage future plans.

FEU may be years away from being in a position to implement something similar, but it would pay dividends to keep this vision in FEU’s horizon.

Technological University of the Philippines Experience

The Technological University of the Philippines (TUP) is also one of the universities known for producing quality graduates in technological fields. Being a technical school offering vocational, technical, industrial, professional and technological courses, TUP’s industry-academe objectives is a good example of how a university has clearly evaluated its position and based on this has set up a clear road map of industry linkage specifically suited to its needs. They have implemented clear objectives which are the following:

- To introduce students to the world of work.
- To match the needs of industries for qualified manpower.
- Adapt curricula to the needs of industry.
- Gain access to industry’s equipment, tools and upgrade faculty exposure and competence.
- Collaborate with industry in the conduct of research and extension activities.

To achieve its objectives, TUP has identified key areas of cooperation:

- Curriculum Development
- Education and Training
- Financing
- Resource Sharing
- Research

Focus on hands on training, which they call Supervised Industrial Training, for its courses that are technical in nature is genuinely supported by TUP’s areas of cooperation. It has reported partnerships with Petron and Bederi for its technical and engineering courses. It has also successfully addressed its objective for financial support partnerships with the Central Bank of the Philippines and Motorola donating computers, Toyota Philippines donating automotive equipment, and partner companies providing stipends to TUP students who go on training in their companies. It should be noted that many students who study in TUP are under privileged but deserving and qualified students receiving government support. These initiatives truly help address the objective of providing these students the best possible industry exposure.

It should also be noted that TUP has identified resource sharing as an alternative option for partnership. They have identified sharing both human and material resources in their efforts to enhance cost efficiency. For a university that relies mostly on government allocation for its budget, partnerships such as these truly maximize TUP’s potential in serving the interests of both its students and the university as a whole.

FEU Eastasia College

FEU Eastasia College is FEU’s sister school mainly offering Engineering and Information Technology degree programs. It is a Center for Development in IT education...
recognized by the Commission on Higher Education. It runs on a trimester (three terms) school calendar, the calendar preferred by most Engineering and IT schools in the Philippines. Though still a relatively young college, FEU Eastasia has made major strides in industry partnership.

To date, it has more than 200 industry partners including top IT and Engineering firms in the country, stemming from its aggressive approach in marketing its program to prospective partners. Its tagline “Where Academe and Industry Meet” emphasizes how Eastasia College values industry partnership. It practically designed its curriculum to accommodate stronger tie ups with industry.

Since Engineering and IT requires students to know the latest trends, making industry exposure and training one of the most important objectives of curricular development is a must. Eastasia College requires its students to undergo a 6-8 month OJT/ Internship as an academic requirement for graduation. The college provides all its students possible companies from its long roster of industry partners.

This presents important benefits for the student interns. For one, a 6 month internship will truly expose the students to the corporate environment or the world of work. Another is that since the student intern has spent so much time in the company, he stands to have a very good chance of being absorbed in the company after graduation. It also is more convenient for students and the college is assured that students are in good company environments.

**Future Directions**

The three Philippine schools we have identified have made progress in industry partnership in areas that directly benefit their objectives. These areas too are areas that we feel that a school which is quite new to this direction of industry-academe linkage should take into consideration. We have not identified international schools as we feel that benchmarking with Philippine schools would be a more manageable task for an office which is just three years old.

Though we have made significant gains, we feel that the gains we made still lack a concrete impetus that would propel us to have more significant and relevant partnerships in the future. Benchmarking with schools in the Philippines has given us valuable lessons in our quest to leverage industry partnership for the benefit of our students. One thing that we failed to identify in any of the schools is a system of measuring and evaluating success and progress. Success in a partnership cannot be measured in terms of the number of signed agreements but on how the primary objectives were addressed and met. A system of evaluation can also help both industry and academe determine if such a partnership is sustainable and mutually beneficial. Without such a system, developing and fine tuning future agreements will be more difficult and less directed.

In terms of student exposure, we have proposed that each college/ institute in FEU take a look at increasing the number of OJT hours required for each student. In this regard, FEU Eastasia College has been very successful. They have pushed for more OJT hours for each degree program and thus has made them an attractive partner to big IT and Engineering firms.

Curricular changes of this nature may be difficult to implement. FEU would need to weigh the impact in terms of assigning additional unit requirements for courses under OJT. This will have a financial repercussion on students. Aside from this, the curriculum schedule would also need to be revised, especially if additional hours will be added to the curriculum. However, the clear advantages of additional OJT hours may be a long term benefit for students specifically for their employment prospects.

In terms of resource-sharing, TUP’s experience is also another area where FEU can look into. During these times of economic difficulty, industry and academe can truly make cost-effective partnerships. Currently, FEU has limited partnerships regarding English training with ePLDT and eTelecare. Both companies are planning to set up computer laboratories in FEU with both parties sharing costs. This has not been implemented yet. Similar programs
are being pursued with other companies as a strategic means of allocating resources. This will save cost for both industry and partner schools.

Lastly, the direction towards resource and wealth generation hinged on research and training currently implemented by UP is something that any school would like to accomplish. The long term benefits of the Science and Technology Park of UP has not yet been realized, but the current benefits sum up the more important areas of any linkage. It has provided us with a vision of how industry and academe can partner not only to provide benefits for students. It has shown us that a symbiotic relationship between industry and academe can be a tool for resource and wealth generation not only for industry and the school but the country as well. It can be a stimulus for economic development, something that a developing nation like the Philippines is in dire need of. In addition, the knowledge generated from extended and sustainable research and invaluable experience gained from student and faculty exposure is sure to reap positive rewards in the future.

*****

References:


Mabalot , Rosalinda N. "The University-Industry Partnership: The TUP Experience." In the 22nd ASAIHL General Conference and Seminar on University-Industry Partnership in Economic Development in Singapore, December 6-8, 1996.


Supporting the Development of Student-teachers’ Professional Competence through the ‘Whole School Mentoring Support Approach’ : A Demonstration of University-Industry Partnership

Dr. Tammy Kwan,
Faculty of Education,
The University of Hong Kong

Abstract

Student-teachers studying the initial teacher education programmes from the Faculty of Education at The University of Hong Kong have to undertake a core component of ‘Teaching Practice’ before they can be recognised as a qualified novice professional. The common current practicum arrangement depends on the good will of schools to offer limited practicum places to one or two student-teachers usually on an annual consideration. Each student-teacher is supposedly placed under the mentoring care of an experienced teacher to form a dyad endeavour throughout the practicum. Under this current but uncoordinated approach, positive professional development of the student-teacher through meaningful interaction with the mentor-teacher could not be guaranteed.

Beginning in September 2007, the Faculty trialed an innovative approach with one practicum school. This approach involved the whole school. The principal and teachers committed to a large-scale mentoring programme in which a large number of teachers became mentors. Altogether 11 student-teachers of six different subjects were placed to do their teaching practicum at the school. Positive learning and mentoring experiences were recorded. These experiences were disseminated to other schools in the annual School-University Partnership Forum in June 2008. Following the forum six more schools adopted this ‘Whole School Mentoring Support’ (WSMS) approach. This led to the formation of a community of Professional Partnership Schools (PPS).

This paper will first briefly describe the characteristics of the WSMS approach and the partnership principles underpinning the PPS. It is followed by a report on the professional learning experiences of nine graduating student-teachers who did their practicum in the first PPS in 2007. The report also explores how such practicum experiences obtained from the WSMS approach could be transformed into their first year of becoming a novice professional teacher in seven aspects, namely:

1. Preparation
2. Teaching
3. Relationship with and understanding of your pupils
4. Collaborative relationship with and understanding of your colleagues
5. Taking up school administrative duties
6. Perceived role and position in the school
7. Overall professional competence and attitude

The paper concludes by addressing the critical importance of close collaboration in adopting the ‘whole school mentoring support’ approach between committed Professional Partnership Schools and the Faculty of Education. Such School-University Partnership will endeavor to prepare student-teachers to be more compatible and competent in facing the great challenges of joining the teaching profession in the era of educational reform.

Keywords: School-University Partnership, Whole School Mentoring Support Approach, Professional Partnership Schools, Professional Development of Education Graduates and Mentor Teachers.
Context of teacher education in Hong Kong

1. Lifelong Teacher Professional Development has been a major topic of discussion in the broader education profession scenario. This is particularly the case when ‘Towards a Learning Profession’ was published by the Advisory Committee of Teacher Education and Qualifications (ACTEQ) in November 2003.

2. There are three stages of Professional Development identified for teachers, namely: Stage 1 - initial teacher education (ITE) with student teachers; Stage 2 - induction or internship for novice teachers; and Stage 3 - continuous professional development (CPD) for experienced teachers.

3. Teacher Education Institutes (TEIs) are commonly seen as the key site of pedagogical teaching and training while schools are site of practicum to actualize and practice what is learned from the TEIs.

4. While schools are the prime site to induct novice teachers and encourage experienced teachers to equip themselves for continuous professional development, TEIs are charged with the prime responsibility to prepare student-teachers to join the teaching profession.

Concerns of offering professional support to teachers of different stages of professional development, in particular Stage 1 of Initial Teacher Education:

1. Much discussion has been initiated by ACTEQ on Stages 2 and 3 with piloting small case studies (such as the internship and induction period); resource support (such as ‘Experimental Induction Tool Kit’); policy framework recommendation (such as ‘Teachers Continual Professional Development’); and clear guideline proposals (such as 150 CPD hours in a 3-year cycle).

2. However, there has not been any clear specification or suggested guidelines on professional development of student-teachers working towards their initial teacher education qualification.

3. For TEIs to fully achieve the mission of initial teacher development, they need to find sites of educational practice for student-teachers to develop their initial teaching competence.

Issues / Problems arising from such concerns:

1. Despite there are four major TEIs (e.g. University of Hong Kong, Chinese University of Hong Kong, Baptist University and Hong Kong Institute of Education) to take care of the Hong Kong ITE programmes, not all schools are required or are willing to offer practicum places to the TEIs. The situation can become very critical when TEIs are competing for limited practicum places if not all schools are prepared to work with TEIs to commit into practicum placement.

2. Despite partnership collaboration having been much encouraged in the last decade since the announcement of Hong Kong Education Reform in 2000, there is often the tendency for one party (usually the TEIs) to take a more dominant or imposing role during collaboration with the other party (usually the schools) when dealing with how practicum is conducted and supervised and assessed.

3. The problem mentioned above generates the reluctant attitude of schools to commit into ‘School-University Partnership’ especially when schools are also confronted with different initiatives related to Educational Reform. Even if a partnership link is established, it is often built on loose foundation with superficial commitment to bring the dyad (student-teacher and mentor-teacher) together. It is doubtful to guarantee to any extent of professional learning to the two parties concerned such as the student-teachers and the mentor-teachers, the school and the university.

4. The new expectations from the Educational Reform apply pressure to schools and teachers. Schools may have the impression that they are ‘persuaded’ or ‘forced’ to offer practicum places because of the persistent request by TEIs to offer places. Not all teachers consider
themselves fit to take up a mentoring role. Hence, when assigned by the school authority to become a mentor, some teachers may not perform the role to the full extent to bring about professional benefits to the student-teachers and to themselves as well.

5. On the other hand, there are also reservations from experienced teachers who reluctantly commit themselves into mentoring student-teachers sent by TEIs because they consider the real time input to mentoring does not reflect in their professional development of CPD hours.

To ensure a win-win situation between schools and TEIs to form quality ‘School-University Partnership’, the following three principles are assumed:

1. All teaching professionals in Schools, TEIs and Government have the professional responsibility and obligation to help nurture student-teachers as new blood to join the teaching profession.

2. Genuine partnership between schools and TEIs (University) will bring benefit to all stakeholders, namely pupils and mentor-teachers in schools, student-teachers and university tutors in TEIs.

3. Efforts and contributions from different parties have to be recognized professionally and formally to provide incentives to strive for improvement.

Proactive action taken by the Faculty of Education, The University of Hong Kong to develop and strengthen ‘School-University Partnership’:

1. Offering of the Initial Teacher Education programmes (PGDE, BEd and BA&BEd)


3. Formation of ‘Professional Partnership Schools’ as a Community of Practice.

Initial Teacher Education Programmes

1. Three ITE programmes are offered to prepare student-teachers to join the teaching profession. They are Postgraduate Diploma in Education (PGDE), Bachelor of Education (BEd) and Bachelor of Arts and Bachelor of Education (BA&BEd).

2. The rationale of the ITE programmes are to:
   - empower each student-teacher to become an effective and committed teacher.
   - help student-teachers achieve the means to plan, implement and evaluate their teaching practice with a clear and critical professional vision in the context of wider educational, social and political debates.

3. The structure of the ITE programmes is to:
   - integrate and articulate various components of the programme coherently and holistically; and
   - strives linking schools and the university by working together to reduce the theory-practice divide.

4. The graduate student-teachers are expected to bear the following characteristics or features:
   - Possession of a passion for and subject expertise in learning and teaching;
   - Development of an understanding of education expectations in Hong Kong system;
   - Understanding of the teaching-learning process as knowledge construction rather than information provision and strengthening the quality of their work in classrooms or other educational settings;
   - Proficiency in language and communication skills.
• Becoming reflective practitioners in the pursuance of spirit of enquiry, sharing ideas, exploring different approaches, taking risks, and willingness to adopt problem-solving strategies in teaching;

• Fostering teachers with love, care and respect for their pupils, committing to whole-person development, appreciating diversity and special educational needs, believing that every pupil can learn and is able to achieve;

• Commitment to continuing professional development and life-long learning, and seeing schools as learning communities.

5. The teaching practicum component of the ITE programmes:

• One-Year Full Time PGDE programme
  There are three kinds of practical teaching experience:
  o School Attachment Scheme (SAS) – one day per week outside SE and MTP to do school familiarization and lesson observation (two to four SAS days)
  o School Experience (SE) – (4 weeks)
  o Main Teaching Practice (MTP) – (8 weeks)
  (A total of about 12-13 weeks in school)

• Four-Year BEd and BA&BEd programmes
  The focus of teaching skills during the 4-year practicum components are
  o Year 1 : three school visits to do observation
  o Year 2 : 3 weeks in school to focus on classroom management and lesson planning
  o Year 3 : 8 weeks in school to focus on pedagogical development
  o Year 4 : 8 weeks in school to focus on curriculum planning and leadership
  (A total of 19 weeks in three different schools across the three blocks of teaching practice in Years 2, 3 & 4 to prepare student-teachers to become confident and competent graduates.)

The Employment Statistics of the Education Graduates

Employment Situation of the PGDE and BEd Graduates in 2006 and 2007

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No* %</td>
<td>No %</td>
<td>No %</td>
<td>No %</td>
<td>No %</td>
<td>No %</td>
<td>No %</td>
<td>No %</td>
</tr>
<tr>
<td>No of respondents</td>
<td>197</td>
<td>100</td>
<td>232</td>
<td>100</td>
<td>357</td>
<td>100</td>
<td>754</td>
<td>100</td>
</tr>
<tr>
<td>Employed</td>
<td>183</td>
<td>93</td>
<td>229</td>
<td>99</td>
<td>328</td>
<td>92</td>
<td>681</td>
<td>90</td>
</tr>
<tr>
<td>Unemployed (seeking FT position)</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0.6</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Further Studies</td>
<td>14</td>
<td>3.9</td>
<td>46</td>
<td>6</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Emigrated / returned to home country</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0.6</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Not seeking FT Job</td>
<td>8</td>
<td>4.1</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>3.1</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>4.1</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>3.1</td>
<td>12</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: CEDARS, HKU (2007)
* Of the 277 graduates from the PGDE programme in 2007, 197 responded to the survey. Of the 30 BEd graduates in 2007, 28 responded to the survey.

Education graduates usually have much higher employment rate when compared to the overall HKU graduate figures.

**Time taken to secure a teaching position by the Education Graduates in 2006 & 2007**

<table>
<thead>
<tr>
<th>By the end of</th>
<th>PGDE %</th>
<th>BEd %</th>
</tr>
</thead>
<tbody>
<tr>
<td>May or before</td>
<td>31</td>
<td>64</td>
</tr>
<tr>
<td>June</td>
<td>42</td>
<td>72</td>
</tr>
<tr>
<td>July</td>
<td>48.5</td>
<td>70</td>
</tr>
<tr>
<td>August</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>September</td>
<td>95.5</td>
<td>100</td>
</tr>
<tr>
<td>October</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>November</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>December</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: CEDARS, HKU (2007)

Since the academic year of Hong Kong schools begins in September, nearly all of the Education Graduates have secured a teaching position before September. Many of them have confirmed a teaching employment almost immediately upon the completion of the programme of study in May.

**Employment Sectors**

In 2007, the majority of the education graduates (95% and 85.5% of PGDE and BEd respectively) were employed in Educational Institutions while a relatively smaller percentage found employment in community, social and personal services, commerce and industry and the civil service.

**Employment Implications**

Since the Education Graduates are targeted to prepare themselves to become qualified teachers, it is obvious that nearly all of them get a teaching position soon after their graduation. Hence in terms of quantity and statistics-wise, Education Graduates are doing very well in terms of the graduate employment. However, due to the great challenges and high expectations upon teachers (both novice and experienced) in this era of Education Reform, it is the quality of the Education Graduates that has drawn our attention and concern.

It is of great confidence to say that all the Education Graduates are doing well in the programme of study to learn educational theories and various pedagogies to enhance meaningful learning. However, it is the practicum course that they have to endure which will pose great influence upon their confidence and competence in their initial teaching. As mentioned earlier, it is very much depending on the kind of practicum arrangement and mentoring support that our student-teachers get from their mentors in the practicum school. Hence to the Faculty of Education, our concern is more on the quality preparation and readiness of our graduates to join the teaching profession that we wish to address. This implication will lead us to look at the critical importance and quality significance of School-University Partnership.
Strengthening School-University Partnership through ‘Whole School Mentoring Support’ Approach

The major aim of School-University Partnership is to achieve and consolidate in-depth collaboration between schools and the Faculty of Education of HKU to enhance the continuous professional development of schools and teachers, and the successful preparation of student-teachers of initial teacher education. To achieve this aim, ‘whole school mentoring support’ (WSMS) approach is promoted (Lick, 2000).

What is a WSMS approach?

WSMS is a new advocated mentoring approach to school change which has the potential to enhance professional learning of different parties (mentor-teachers, student-teachers, university tutors and school pupils) and to increase school effectiveness.

However, a whole school mentoring approach is not only just a process, but also a philosophy, of professional development through mentoring. It is characterized by:

i) a commitment on the part of a school that all its staff members should, at one time or another, be engaged in mentoring student-teachers (ST) and/or beginning teachers;

ii) a belief that mentoring is not just a pair-wise endeavour (dyad between mentor and mentee) but is a process that is most effectively achieved through collaboration and sharing of experiences between all parties; and

iii) a commitment on the part of a university that its university-tutors (UT) should be actively engaged in the mentoring process through the support of, and as partners with, the school’s mentor-teachers (MT).

This approach contains salient features of change management principles, collaborative lesson planning, mentoring and co-mentoring, open class observation and sharing, and synergy and team work. The outcomes involve changes towards a collaborative culture, synergistic relations with one another, and the formation of professional communities of practice (Mullen and Lick, 1999).

What makes the WSMS approach different?

Below we contrast the current common practice with the WSMS approach:

a) Current Common Dyad-Endeavour Practice of Mentoring Support by many schools

- Usually a school offers practicum places to one or two STs to pair up with the MTs to form a dyad in one or two subjects;
- Throughout the practicum period, the UT will visit the ST through a small number of three supervisory and assessment visits;
- Among the three visits, there may be an occasional three-way tripartite conference between ST, MT and UT;
- As a result, the ‘collaboration’ often confines to the pairs [dyad] within the same subject and can rarely be able to extend to teachers of other subjects within the school.

b) WSMS approach between School and the Faculty of Education HKU

It is used as a professional tool and philosophy for teachers’ (STs & MTs & UTs) professional development and change in institutional settings (schools and the Faculty) to bring about a genuinely collaborative culture.
<table>
<thead>
<tr>
<th>Learning</th>
<th>Players</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>STs</td>
<td>Developing the teaching competence of STs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enhancing the professional development of MTs.</td>
</tr>
<tr>
<td></td>
<td>MTs</td>
<td>Establishing a collaborative team of MTs and UTs.</td>
</tr>
<tr>
<td></td>
<td>UTs</td>
<td>Providing support for the school through UTs expertise.</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td>Involving, if possible, all the core subjects and key learning areas.</td>
</tr>
<tr>
<td></td>
<td>pupils</td>
<td>Ultimately, improving the teaching and learning environments of the school pupils.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Formation of a professional school</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Co-ordinator to oversee the creation of a nurturing whole school environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular meetings of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i) MTs of different subject areas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii) STs of different subject areas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii) MTs and STs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv) MTs and UTs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular Tripartite Conferences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>School input to School-University Partnership Committees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Incentive Schemes. (see below)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change towards a collaborative culture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Synergistic relations with one another</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Professional communities of practice</td>
</tr>
</tbody>
</table>

**Incentives to encourage schools to adopt WSMS Approach**

- Recognize the school professional status - emphasis on the committed collaborative link between the school and the Faculty.
- Collation of mentoring evidence to form a portfolio – mentor-teachers can use the portfolio as database to do assignment or project in MEd programme (if the mentor-teacher chooses to do a MEd Programme with HKU).
- Eligible mentors may have the opportunity to provide formative advisory supervision to the student-teachers of the three different ITE programmes as part-time university supervisors for HKU.
- Mentoring workshops for first time mentors and professional development workshops for experienced mentor teachers.
- Contribution to the School-University Partnership Committees.
- Encourage schools to consider formal recognition of continuous professional development hours for the mentor-teachers.
- HKU library reading card for each key partnership school.
- Visit to HKU Main Campus and Faculty of Education for the school pupils.

**Formation of Professional Partnership Schools**

Through the adoption of this WSMS approach, it is hoped that in-depth collaborations between local schools and the Faculty could be actualized and strengthened. Such collaboration will lead to the formation of a professional school with quality professional development for practicing teachers and student-teachers, as well as the substantial enhancement of the success of initial teacher education.
The Professional Partnership Schools are schools committed to the idea of adopting ‘Whole School Mentoring Support’ approach. The signing of the ‘Memorandum of Partnership Collaboration’ between the principals of the Professional Partnership Schools and the Dean of the Faculty indicates the joint common understanding and devotion to:

- engage in School-University Partnership;
- commit to a ‘Whole School Mentoring Support’ approach;
- provide sustained support to the Teaching Practicum of initial teacher education programmes;
- nurture the professional development of student-teachers pursuing a professional qualification through initial teacher education;
- support continuous professional development for mentor teachers; and
- uphold the professional status of Professional Partnership Schools and the Faculty of Education of HKU.

**List of seven Professional Partnership Schools in 2008-2009**

- Carmel Bunnan Tong Memorial Secondary School
- Church of Christ in China Kei Long College
- HKCCCU Logos Academy (primary and secondary)
- Lock Tao Secondary School (first PPS since September 2007)
- SKH St Mary's Church Mok Hing Yiu College
- SMKMCF Ma Ko Pan Memorial College
- Tak Sun Secondary School

**Voices of student-teachers doing practicum in the first PPS in 2007-2008**

**Reflection of student-teachers upon completion of the teaching practicum**

**Grace (English Language)**

“It's lucky to be one of the student-teachers in LTSS. I really appreciate the school to be so open-minded and that it is willing to take in so many student-teachers. They let us know the operation of the school and let us try out different teaching methods in the classroom. We have the privilege to observe different subject teachers doing their actual teachings in the classrooms. It's a great learning opportunity for all of us. I would like to say thank you to the Principal, the Teaching Practice Coordinator, and all the mentors who have involved in helping us to develop as a teacher. I think this experience is really enjoyable. I really like the approach in which we can try to learn from different teachers and discuss different issues with them. Also, the pupils are very nice and are very willing to learn. I would like to thank all the parties involved in this scheme.”

**Emil (English Language)**

“I am a student-teacher of an English class in Form 3. As Grace has said, the whole school helps us in whatever ways it can. I really appreciate this ‘Whole School Mentoring Support Approach’, which is the practicing mentorship programme here in LTSS. I don’t just get to know my mentor Teresa, but also all other teachers who are all ready to offer help in any way they can. Some of them have observed my lessons. They have given me constructive feedbacks on aspects like teaching methodologies and classroom management. They have even taught me how to do scaffolding for pupils who are weaker in completing difficult tasks. I really love being here because I get to know the real life of being an English teacher. I designed lessons, conducted lessons and also marked...
composition scripts and listening tests, etc. The most memorable thing to me is that, my mentor has asked me to design a major quiz for all the Form 3 pupils. I really appreciate my mentor. I also have to thank all other teachers who have offered their help to me, as well as the school management, for providing this opportunity to us.”

**Derrick (English Language)**

“I teach one of the Form 6 classes in the Science stream. It has been great for me. The pupils are really active and energetic. They participate actively in class. Besides, our Principal Mr Chung, the school practicum co-ordinator Mr Wan, my mentors Sunshine and Judy, and other teachers like Doreen and Celine and all other staff members have been very supportive and always ask how we are doing. They are very active in taking care of us which makes us feel like we are actually part of the family of LTSS. My sincere thank to every single one of you, and special thanks to my pupils. You all make coming to school is really fun everyday.”

**Kelly (Chinese Language)**

“The two-month practicum has just finished. During our practicum, we have developed a strong sense of belonging here. On the first day of our practicum, the school has already arranged our seats in their staff room and given us personal lockers for our use.

“Fly and I would like to take this opportunity to thank Mr Chung, Principal of Lock Tao Secondary School; our mentors, Mr Chan, Miss Tse, Ms Ngai and Ms Wong. During these two months, they have taught me a lot. I would like to thank all other teachers, as well as the administrative staff, technicians and the supporting staff in LTSS. They have taken care of us as if we were part of the school family, though we might have bothered them a lot during our practicum here.

**Fly (Chinese Language)**

“Kelly and I have got the opportunity to attend staff meetings with the teaching staff here. We also have the chance to play the role as invigilators in the examinations. These are some of the experiences which other practicum schools might not be able to provide to student-teachers. We came to Lock Tao as a group of eleven student-teachers. This had actually increased the workload of the staff here. Yet the school has engaged in initial teacher education whole-heartedly and this may not be very common among other secondary schools in Hong Kong. I wish we can also learn to become good mentors and persuade our schools to provide a cradle for initial teacher education when we become the practicing teachers in the future.

**Shuen (Mathematics)**

“I am very happy that I could do my practicum at LTSS. Apart from gaining teaching experience here, I also had the chance to participate in the Hong Kong Inter-School (Primary) Mathematics Competition. I learnt the skills of setting good questions during the process of preparing for the competition. Besides, there was a ‘seek-and-find’ game in the competition from which I could learn how to use activities to teach children arithmetic. I regard this as a very precious opportunity and a very valuable experience for me.”

**Jason (Mathematics)**

“We are lucky to get to know the use of an innovative teaching approach – ‘Assessment for Learning’ in LTSS. Apart from learning what this approach was, we also helped by putting it into practice. Besides, we learnt how to assess pupils’ performance, such as doing online assessment by adopting the “Tracking for Success” approach. We also learnt how we can enhance the pupils’ learning process by assisting them in setting learning goals. It was a very fruitful experience for all of us indeed.”
Vincent (Liberal Studies)

“Throughout this year in LTSS, I was able to participate in various subject panel meetings and lesson observations in different classes. I was really lucky that I could have the opportunity to assist the Panel of Liberal Studies to design two sets of teaching materials. It was a very fruitful experience. Besides, from this very genuine observation, I have learnt about the proper mentality that a teacher should have and what would be the actual job duties of a teacher. I have also realized that a teacher actually has to deal with many different matters, apart from the teaching task. I have learnt much about the real teaching life.”

“The adoption of WSMS by LTSS has enhanced the communications between student-teachers of different Major Methods. Hence, we were able to support and encourage each other and this in term also enhanced the professional growth of all of us together. Thus, I consider this ‘Whole School Mentoring Support Approach’ a marvelous scheme.”

“Finally, I would like to thank all the mentors, particularly Mr Ko. During my practicum, he has taught me a lot of things, but I believe I have bothered him so much. Thus, I would like to thank him once again.”

Yvonne (Liberal Studies)

“It is very happy to be in LTSS. The Principal, the Teaching Practice Coordinator and our mentors all gave us a lot of opportunities to develop ourselves. Through actual teaching, we learnt how to get along with pupils. Our mentors also gave us advice on classroom management. They were very open-minded in offering us the opportunities to observe their lessons and they were willing to conduct post-lesson discussions with us, in order to enable us in understanding how to conduct a good lesson and what kinds of teaching approaches we could use. I am glad that my mentor has involved me in participating in the “Life-Wide Learning” scheme through which I learnt that teaching could be conducted outside classrooms. She taught me a lot of skills in stimulating pupils’ learning. Here I would like to thank HKU for offering us the opportunity to do our practicum in LTSS in preparing us to become a teacher.”

Fanz (Geography)

“I would like to take this opportunity to thank my practicum school which has provided such an excellent opportunity to all of us. The school has put its trust in us and offered us the opportunity to teach different class levels. For example, I am responsible for teaching both Form 4’s and Form 6’s Geography classes. Teaching two different levels is a great attempt and challenge for me. My mentors have given me constructive advice and under their guidance, my learning and teaching effectiveness has been enhanced substantially. I have learnt how to strike a balance between teaching and learning. I have also learnt a lot from the outside-classroom activities such as leading a field trip. Besides I also learnt a new application programme, ‘JAS’, in the Geography curriculum of LTSS. I have learnt so much in the whole teaching practicum.”

Ivy (Economics)

“I am very happy to have LTSS as my placement school. I would like to thank the school and our Faculty for offering this opportunity to us. I want to thank particularly my mentors, Mr Choy and Ms Kwok, who have given me a lot of advice on improving my teaching methods. For instance, Mr Choy taught me the skills of getting along with pupils and solving their disciplinary problems. It was very kind for the school to invite us to take up those responsibilities of the practicing school teachers, and let us have the opportunity to participate in various school functions and staff meetings. Through this experience, we get to know what the real life of a secondary school teacher would be. We also learnt some innovative teaching approaches, such as ‘Tracking for Success’. Through this we
could have a more in-depth understanding on new teaching approaches and on school
development.”

**The implied salient characteristics and impact of WSMS upon the student-teachers**

**The mentor-teachers**

Each student-teacher has more than one mentor-teacher assigned, very often there are
two or even three teachers involved. They co-plan and discuss with their mentor-teachers
often. In return, the mentor-teachers are always ready to offer constructive advice and
suggestions to the student-teachers. They are willing to encourage and involve the
student-teachers to try out different teaching approaches and methods. While observing
the student-teachers teaching, the mentor-teachers are able to reflect upon their own
teaching and hence mentoring student-teachers become a professional development
process and experience to them.

**The other teachers in the PPS**

The other teachers in the school though do not playing a direct mentor role, they are
willing to open up their own classroom to the student-teachers. Being able to observe
lessons taught by different subject teachers, student-teachers are able to broaden their
exposure to see how teachers of different subjects and different teaching styles teach
pupils of different learning characteristics. The teachers are also willing to engage with
student-teachers to conduct post-lesson discussion which will help these teachers to
reflect purposely on their own teaching.

**The student-teachers**

The student-teachers are never alone. There are great support, sharing and learning
among the student-teachers teaching the same subject and also with all the other
student-teachers placed to the practicum school. The peer support and interaction have
lifted up learning spirit and momentum. Student-teachers are exposed to the valuable
opportunity to learn to teach in a team collaborative environment.

**The principal and the practicum co-ordinator**

They are committed to make the school inviting to the student-teachers. They prepare
well in advance the logistic arrangement and the school atmosphere to accommodate the
student-teachers. They involve them in many school functions and administrative duties
such as school and subject panel meetings. They also involve the student-teachers to do
other related subject and extra-curricula activities to broaden their exposure and
experience.

As a result, the student-teachers are able to:

- gain teaching confidence and competence through the open and collaborative school
  and classroom culture;
- feel like a member of the school family of the practicum school;
- enjoy and have fun going to school with positive attitude; and
- learn not just becoming a subject teacher but a teacher who knows how to position
  and function him/herself professionally in the school.
**WSMS experiences transformed into the first year of teaching of the graduates**

Upon graduation and becoming a qualified professional teacher, the ex-student-teachers were asked to consider if their WSMS experiences from the PPS were able to keep making impact upon their teaching career. They are presented below in seven aspects.

**Preparation**

The PPS has provided them adequate space and time to co-work, co-plan, discuss and critically reflect with the mentor-teachers together. When they become a full time qualified teacher, they obviously have less time to do the very detail and thorough preparation for every lesson. However, the training that they have acquired during the practicum has made them well equipped. The framework and protocol that they have gone through in the PPS enable them to prepare quality planning of the lessons faster.

**Teaching**

The open classroom lesson observation culture of the PPS has offered great opportunity for them to observe lessons taught by their mentors and other teachers demonstrating different styles of teaching and different modes of learning. Such valuable enrichment of lesson observation plus the useful post-lesson discussion enable the new beginning teachers easier to establish their own teaching style that fits well with their personality which apparently can help them to develop greater teaching ‘efficiency, confidence and competence’.

**Relationship with and understanding of pupils**

The WSMS approach does not just better equip their teaching, but also prepare them developing a mentality to appreciate pupils in the positive way, i.e. to recognize what pupils can do and to remember what pupils are good at, rather than to dwell on what they cannot do and what mistakes they have made. Hence, they are all able to take greater initiative to communicate with pupils and get better understanding of them.

**Collaborative relationship with and understanding of colleagues**

The WSMS approach allowed them the valuable opportunity to communicate and work with many teachers in the PPS. This gives them the understanding that every teacher is unique with distinctive personal belief and principle to uphold. Although it is common to have divergence of views and opinions, they are able to compromise the differences and work towards greater commonalities in a respectful manner through open genuine discussion without jeopardizing the sentiment and collegial relationship. This is particularly the case that teachers nowadays can no longer be expected to teach alone. Instead team work and group collaboration are important attributes they need to uphold. Hence, the valuable experience that they had developed with their mentor-teachers goes with them to try out with their new colleagues in their first teaching school.

**Taking up school administrative duties**

Although they have been given lots of opportunity to observe and even take part in school administrative duties in their PPS, they find the actual assigned responsibility can be quite unique in every school. Hence they have to adapt and learn on the spot. Having said that, they think they are more ready and prepared to take part as they have already known what every teacher is expected to do apart from their subject teaching.

**Perceived role and position in the school**
They felt that they have gained virtual experience in seeing the role of a teacher in the PPS. But now, when they become a qualified registered teacher in their first teaching school, it becomes different in a sense that they feel they are vested with the trust and expectations to do a real job which is more than a mere observer but becoming a real ‘player’ in the school.

**Overall professional competence and attitude**

Though they all agree they have learned a lot from the PPS, they also have built the awareness to keep learning and making improvement which fits well with the ACTEQ expectations that they need to grow from Stage 1 of student-teacher to Stage 2 of a novice teacher and finally to Stage 3 of an experienced teacher.

**An overall summary by a graduate from the PPS**

I find my practicum experience has given me more understanding of the current curriculum and built up my confidence in learning how to deal with different kinds of students. Through lesson observation of my mentors and other teachers in the practicum school, I’ve got more ideas with how to prepare lessons and manage my classes. Those are very valuable experiences to help me deal with different kinds of students.

Since there was a big team of student-teachers from different discipline in my practicum, exchanging ideas & experiences with different student-teachers did help me to see different issues from a broader view and mingling with both the student-teachers and the mentor-teachers did help me learn how to interact with different colleagues in my current school. In retrospect, I found my practicum experience very helpful in preparing me for the current post because it gave me chances to join staff meetings, panel meetings and different whole-school activities and let me understand more about the big picture, administration and concerns of the school management. I find it easier to adjust to my new post. Of course, there are still a lot of things that I can only understand and learn in my new post - some class teacher and administrative duties are very distinct that I only learn in the current school e.g. as a class teacher, I need to lead cell group for my class, which I have never done before. I do think schools vary a lot in their school culture and their expectations of teachers and students. You really have to work inside to fully understand the system. The practicum school may be very different from my current school but the practicum experience is no doubt very good preparation to make me aware of how to adapt to different school cultures and interact with different kinds of colleagues.

**Conclusion: WSMS is a way to move forward to enhance education graduates’ quality employment**

All education student-teaches need to go through teaching practicum before they graduate to become qualified beginning teachers. The current dyad-endavour traditional practicum placement (mainly based on the good will of the schools) did not guarantee a quality co-ordinated all-round practicum experience to the student-teachers. But statistics show that nearly full employment rate is found among the education graduates. It becomes a matter of looking for quality teaching employment and engagement upon graduation rather than a mere quantity of getting a teaching position. The purpose is to ensure student-teachers to go through meaningful practicum experience in order to prepare and equip them to take up the challenging teaching positions that are now available in schools in order to sail through the Education Reform.

The Professional Partnership Schools and the Faculty of Education, committed to use the ‘Whole School Mentoring Support’ approach to actualize the meaningful implementation of School-University Partnership to share responsibility in initial teacher education and school reform, are able to bring about quality improvement to:

- student-teachers to become adaptable education graduates meeting baseline competence and confidence when entering their first year of teaching as qualified professional novice teachers;
• mentor-teachers and other teachers to become professional reflective teachers during the process of mentoring the student-teachers;
• university tutors to gain better understanding and capture research opportunity of the professional partnership schools in fostering professional development of an open collaborative culture and synergistic relationship among all parties between the schools and the Faculty.

The formation of Professional Partnership Schools with the Faculty of Education brings about valuable environment to nurture ‘School-University Partnership’ which in term helps to prepare Education Graduates to embark on their competent first time professional engagement in teaching.

References: