

Preparing Graduates for Employment

By: Dr. Munir Shuib

Much has been said about graduate unemployment and the growing job mismatch of graduates and their qualifications. These issues are nothing new. What is worrying is the fact that at the heart of the conundrum lies the quality of the graduates themselves. This is one of the major findings of a study conducted by a team of researchers from Universiti Sains Malaysia recently.

Led by the Deputy Dean of Graduate Studies and Research of the School of Humanities, Professor Ambigapathy Pandian the study, entitled "University Curriculum: An evaluation on preparing graduates for employment" seeks to determine and help overcome the problems of graduate unemployment, particularly local graduates in arts and related fields. In addition, the study attempts to ascertain the types of personalities and skills required by employers and the extent to which the levels of personalities, skills and abilities of local graduates meet the requirements of employers. To achieve these, the team surveyed employers, undergraduates, graduates and university administrators.

According to Ambigapathy, the study reveals that graduates today lack personal qualities and communication skills and are not able to market themselves. Many of them are not dynamic enough and tend to shun non-academic activities which can help to enhance their soft skills.

In terms of communication skills, the study finds that employers give more emphasis to skills in English, compared to Bahasa Malaysia. In addition, employers expect their employees to possess 'people skills' such as the ability to persuade clients, the ability to negotiate and the ability to demonstrate friendliness and politeness in social settings.



Research Team "University Curriculum Study"

HIGHLIGHTS

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Internationalizing Higher Education

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Many nations are moving towards economic interdependency as the modus operandi to ensure its economic growth. The increase of transnational mergers is a testament. This fact, implies that a new kind of labour is required to function across nations and cultures. According to Tan (2003), "An emerging knowledge economy is dependent on nations that can provide the required labour force to meet the needs of an increasingly globalized economy." Changes that are taking place at universities and colleges worldwide are based on the belief that knowledge is important in enabling the training of workers towards generating economic productivity and wealth (Gregor, 2002). Consequently, institutions of higher learning will need to consider internationalizing their campuses in order to prepare future graduates to work in a globalized environment.

The meaning of internationalization has been commonly linked with international activities or initiatives and is often synonymously referred to as multicultural education, international education, international programmes, and study abroad. Researchers in the field of internationalization have defined it more broadly and comprehensively in order to define its meaning and importance to higher education. Knight (29:1997) defines internationalization as "the process of integrating an international dimension into the teaching/training, research, and service functions of a university or college or technical institute" (p.29). This definition describes internationalization as an effort to include an international perspective in some of the most fundamental roles performed by an institution of higher learning such as teaching, research, and service.

The aim of this article is to propose a model of an internationalization process for institutions of higher learning in Malaysia. The consideration for any attempt at internationalizing a campus requires careful and strategic planning in order to ensure that most precautionary steps are well defined. More importantly, the model outlines a process of internationalizing higher education. This is important because the internationalization of a campus is not primarily about putting in place certain components, such as the existence of an international office or the recruitment of international students to the university and or college. The two components mentioned are strands of internationalization but they do not reflect the full internationalization process. This particular model outlines the necessary steps for administrators of a campus to take into consideration, prior to establishing an internationalization course of action, the necessary and important components that make up the process and the benefits that will sustain the process. Internationalizing higher education needs to be considered as a process

that entails an overall change of higher education (Harari, 1992). Scholars who conduct research in international education often describe internationalization as a process.

Malaysia as a country that is exploring the possibility of becoming a hub for education may have to consider an internationalization plan for its campuses. It is important to give the accompanying process careful thought as globalization has placed a high value on knowledge economy. Malaysia as a country will have to deal with the transfer of knowledge between countries and the mobility of individuals who seek higher education. In addition, internationalizing the campus is an important facet of the development of higher education institutions. It helps to prepare its students for the challenges of globalization that are currently creating a high degree of interdependence among nations (American Council on Education, 1995). Malaysian graduates may be working in multinational companies that are located in this country. Any form of exposure to international issues at the undergraduate level is beneficial for future Malaysian graduates. It helps them understand the nature of the changing workforce, which is becoming more international. The internationalization of the curriculum incorporating liberal education will help students to develop global awareness and understanding about diverse cultures (Harari, 1992; Marden and Engerman, 1992).

The Proposed Model: The Internationalizing Fabric

The model consists of three stages of internationalizing fabric: (a) Pre-Internationalizing, (b) Internationalizing, and (c) Sustaining Internationalizing (see Figure 1).

The first stage, Pre-Internationalizing, is the pre-departure point of an internationalization process. A university that would like to embark on an internationalization process should consider evaluating the current "international situation" on its campus. The existing international education programmes and activities should be identified in order to prevent a "reinventing the wheel" syndrome and to ensure that resources, especially the human resource of individuals who have international experiences and who are actively engaged in international activities, can be identified as significant individuals who can contribute to the internationalizing process. Similarly, international scholars and international students who are able to bring a different perspective to a subject matter is another human resource that can be tapped for the university's international programmes and activities. In addition, the existing curriculum has to be examined to determine if an international perspective needs to be included.

In addition, the Pre-*Internationalizing* stage includes the need to identify how its stakeholders such as faculty members and administrators perceive an internationalizing effort. Is internationalizing about enrolling more international students, increasing the participation of students in study abroad programmes, inviting more international scholars? Is internationalizing about encouraging faculty members and administrators to seriously consider expanding the university's involvement in international activities? Is internationalizing considered a process or is it more a content-based effort? These issues have to be taken into consideration because it would allow for its stakeholders to have a common understanding with regards to this stage of activities so that effective internationalizing can take place.

The second stage, *Internationalizing*, consists of three elements. These are the components that are needed to internationalize a campus, i.e. media, approaches of the internationalization process, and challenges that may hinder the process. If a university decides to embark on an internationalizing effort and make it its most important agenda, then challenges can be anticipated.

The media for internationalizing a campus includes creating and diversifying resources, curricular changes, and organizational changes. The effort to create and diversify

resources is crucial for institutions that either lack financial and human resources to promote internationalization or suffer from a severe budget cut. External funding may be sought to continue the internationalization process so that international activities may be continued. Curricular changes are crucial because students receive direct instruction in international issues through an internationalized curriculum. Organizational changes have to take place for internationalization to develop in an environment that realizes its importance.

Change in an organization, such as in an institution of higher learning, may not be well received by individuals who may not share the same value and enthusiasm for internationalizing a campus. Consequently, potential barriers such as a rationale for internationalizing the campus, the climate of the campus, students' background, the available resources, the level of language skills, and the influence of world events have to be anticipated.

Sustaining Internationalizing is the third stage of the model, which includes the importance of internationalizing the campus and its future developments. An internationalizing process has to be evaluated after it has been implemented to ascertain its success or failure and areas that may require more time and effort because the future of this process is dependent on it.

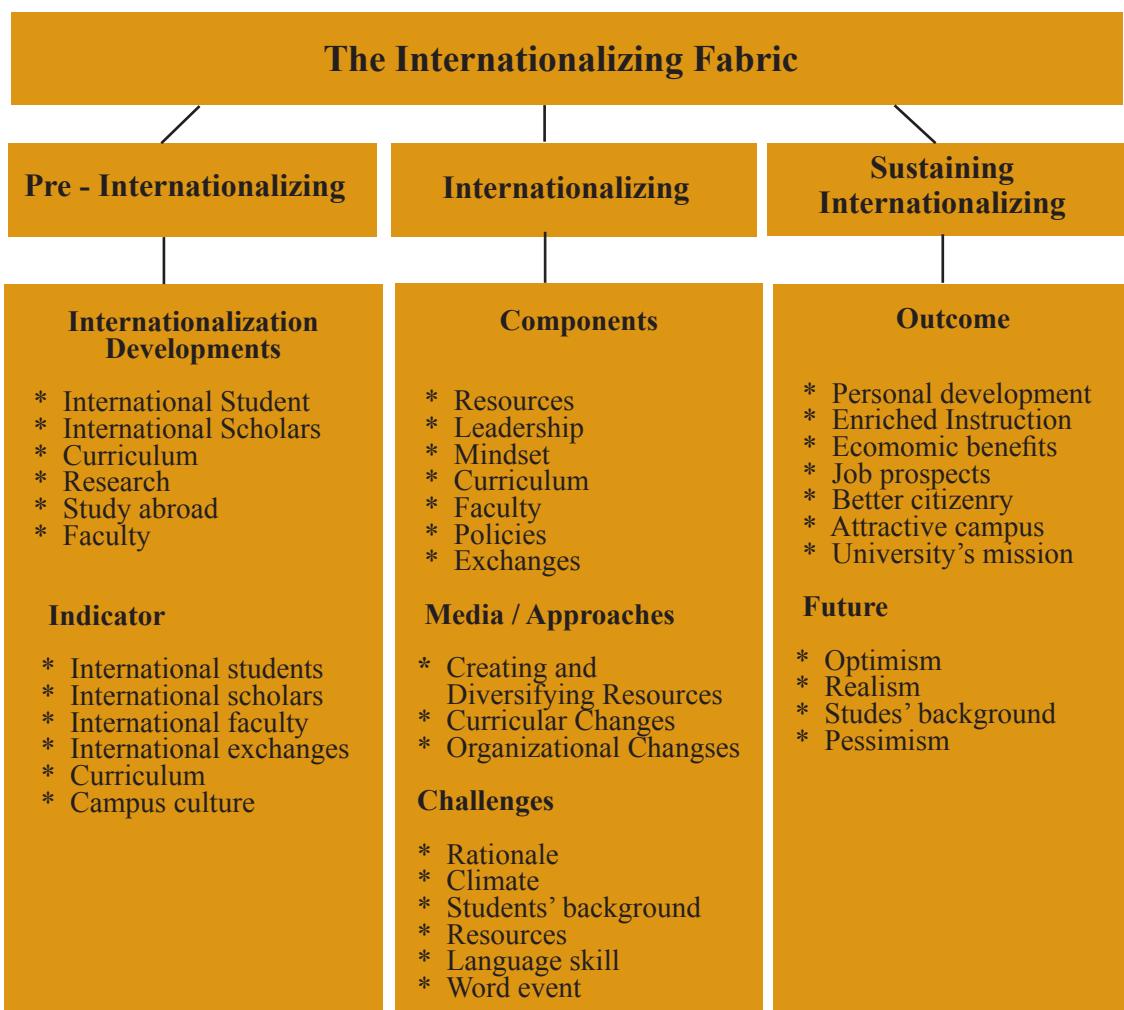


Figure 1. The Internationalizing Fabric

Conclusions

The above model describes a phase-like internationalization process for internationalizing higher education. The pre-internationalizing phase requires higher education administrators who would like to internationalize their campuses to identify existing internationalization components so that redundancy of projects will not take place. In addition, this exercise will allow the administration to bring together individuals who are already involved in international education to pool their talents to accelerate this process. The internationalizing phase identifies the components that are required to internationalize a campus, the approaches to achieve it, and the challenges that may be faced. The last phase, sustaining internationalizing, identifies the benefits or outcomes of the internationalization process and its future possibilities.

Any university or college in Malaysia that is considering internationalizing its campus may find that this model facilitates the understanding that internationalization is a process and not only an effort that has to focus only on content. It helps administrators to identify the related components and approaches that are required to initiate the process as well as the challenges that may exist. The benefits stated serve as possible rationales for any internationalization effort.

The internationalization of higher education is important to any institution of higher learning that seeks to provide its graduates with the knowledge and skills to face this increasingly globalized world. This process is taking place on numerous campuses around the world and Malaysian campuses will need to explore this process in order to determine its importance and utility.

REFERENCES

- American Council on Education. (1995). Educating Americans for a world in flux: Ground rules for internationalizing higher education. Washington, DC: American Council on Education. (ERIC Document Reproduction Service No. ED 388 165)
- Arnone, R. F. (1999). Reframing comparative education: The dialectic of the global and the local. In R. F. Arnone & C. A. Torres (Eds.), Comparative education: The dialectic of the global and local (pp. 1-24). Lanham, MD: Rowman & Littlefield.
- Eisner, E. W. (1998). The enlightened eye: Qualitative inquiry and the enhancement of educational practices. Upper Saddle, NJ: Prentice-Hall, Inc.
- Ellingboe, B. J. (1998). Divisional strategies to internationalize a campus portrait: Results, resistance, and recommendations from a case study at a U.S. university. In J. A. Mestenhauser & B. J. Ellingboe (Eds.), Reforming the higher education curriculum (pp. 198-228). Phoenix, AZ: The Oryx Press.
- Gregor, A. D. (2002). Globalization, trade, liberalization, and higher education: Research areas and questions. Centre for Higher Education Research and Development: The University of Manitoba. (ERIC Document Reproduction Service ED 468 374).
- Harari, M. (1992). The internationalization of the curriculum. In C. B. Klasek (Ed.), Bridges to the future: Strategies for internationalizing higher education (pp. 52-79). Carbondale, IL: Association of International Education Administrators.
- Kanet, R. E. (1996). Internationalization, constrained budgets, and the role of international education consortia. International Education Forum, 16(1), 59-70.
- Knight, J. (1997). A shared vision? Stakeholders' perspectives on the internationalization of higher education in Canada. Journal of Studies in International Education, 1(1), 27-44.
- Lambert, R. D. (1989). International studies and the undergraduate. Washington, DC: American Council on Education.
- Marden, P. G., & Engerman, D. C. (1992, Spring). In the international interest: Liberal arts colleges take the high road. Educational Record, 42-46.
- Mayan, M. J. (2002). An introduction to qualitative methods: A module for students and professionals. Edmonton, Alberta: International Institute for Qualitative Methodology.
- Merriam, S. B. (1998). Qualitative research and case study applications in education (2nd ed.). San Francisco: Jossey-Bass.
- Merriam, S. B. (2001). Qualitative research and case study applications in education (Rev. ed.). San Francisco: Jossey-Bass.
- Patton, M. Q. (1990). Qualitative evaluation methods. Thousand Oaks, CA: Sage Publications.
- Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: Sage Publications.
- Tan, I. (2003). Internationalizing higher education: A case study of a Midwest comprehensive university. Unpublished doctoral dissertation, University of Northern Iowa.
- Yin, R. K. (1994). Case study research: Design and methods (2nd ed.). Thousand Oaks, CA: Sage Publications.

Enriching Educational Products: Islamic Private Institutions of Higher Learning in Malaysia

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Islamic Private Institutions of Higher Learning (IPIHLS) are a new type of educational institution in Malaysia. Together with other institutions of higher learning, IPIHLS aim to establish Malaysia as an international hub for higher education. However, unlike other institutions of higher learning in the Malaysian educational system, IPIHLS have very definite and different philosophy, objectives and modus operandi. Based on a previous research, this article attempts to provide an overview of the philosophy, objectives, modus operandi and the current context of IPIHLS in Malaysia.¹

Defining IPIHLS

IPIHLS are administered and monitored by the Ministry of Higher Education under the same administration and regulation which oversee other private institutions of higher learning. However to date an official definition has yet to be formulated. Information gathered throughout the study reveals that IPIHLS can be differentiated from other private institutions of higher learning based on the following IPIHLS:-

- i Are owned solely or jointly by, individual Muslims, Muslim's organizations state foundations and state government subsidiaries.
 - ii Have names that project some elements of Islamic image.
 - iii Offer at least one course on Islam other than Islamic and Asian Civilizations (Tmadun Islam dan Tamadun Asia).
 - iv Have campuses which project the educational and social environment compatible to Islamic teaching and spirit.
 - v Uphold Islamic inspired philosophy and objectives.
 - vi Are registered with the Private Education Department, Ministry of Education, Malaysia.
 - vii Are recognized by the National Accreditation Board, Malaysia.
- The above are the criteria that must be met for an institution to be identified as an IPIHL.

IPIHLS in Context

• The Development

Private education in this country began sometime in the 60s with vocational and technical skill courses offered to secondary school leavers who were unable to pursue further studies in public institutions. However by 1996, with the advent and the enforcement of Private Higher Educational Institution Act 1996 (Act 555), which allows private institutions of higher learning to independently offer degree programmes to the public, the number of private institutions of higher learning has been increasing drastically. The 1996 Act has affected the development of IPIHLS significantly. Prior to the Act, the number of IPIHLS in this country amounted only to eight institutions. This number has increased significantly after the stipulation of the Act. By 2001 Malaysia has 23 IPIHLS. It is believed that the number of IPIHLS is continuously increasing. Over the same period, the government has also increased the number of public institutions of higher learning. However these public institutions are still unable to accommodate the growing demand for tertiary education in this country. It has been argued that private institutions of higher learning in Malaysia is a mechanism for the private sector to capitalize on the very high demand for places in higher education in the country.

• Objectives

The immediate objective of IPIHLS is to provide school leavers, particularly from religious schools, with choices for furthering their studies at higher levels and incidentally upgrading the standard of religious education in this country. However, as a long term goal, IPIHLS seek to

realize the Islamic concept of education and to produce highly able graduates, both in Islamic studies as well as in other professional courses. It is hoped that these graduates can contribute significantly towards spreading the message of Islam and at the same time providing the highly accomplished work force vital for sustainable development of the country.

• Ownership Status

IPIHLs are either fully or jointly owned by state governments, or state Islamic religious department, state foundations, private companies, political parties and individuals. From twenty three IPIHLs surveyed in the research, eleven are owned by state governments, four by private companies, four by individuals, three by political parties and one by a state religious department.

• Curriculum

The academic programmes that are being offered by most of the IPIHLs can be divided into three categories, namely pure Islamic Studies programme, double major programmes that are combinations of professional programmes with Islamic studies programme, and pure professional programme such as law, accounting, pure sciences, business and engineering.

The combination of courses on Islamic studies, incorporating other fields of knowledge, as offered by IPIHLs, could be considered as unconventional. However many would argue that this is an important move towards bridging the gap between Islamic studies and contemporary disciplines of knowledge and sciences. This has been advocated for so long by many Muslim thinkers and educationists, past and present. If conducted properly, programmes with such combinations could produce "encyclopedic intellects" -'ulama' who are well-versed in religious doctrine and who are equally competent in fulfilling the demand of this challenging world with sound religious knowledge and has spiritual stability and strength. The double major programmes, as offered by some IPIHLs, appear to be opportune moves in meeting present-day demands as well as addressing perceived needs of the targeted school leavers. A study by IPPTN₂ in 2001 shows that 78.7 percent of students in Islamic religious schools prefer this type of programmes and 82.5 percent of the employers prefer to employ graduates of such programmes.

Some IPIHLs, which do not offer double major programmes, make it compulsory for their students who major in non-Islamic area of studies to take and pass a few Islamic studies subjects. Even though these students will not have sufficient training and qualification to qualify as 'ulama', they will have sufficient knowledge of the basic principles of Islamic teaching to guide them in their careers for the

rest of their lives.

Islamic teaching and norms are also inculcated through co-curriculum activities and is also embedded, subtly and explicitly, in the students' social environment within the campus. These include activities such as daily congregational prayers, short religious talks, Qur'an recitations conducted every night after prayers, observing Islamic dress code and socializing mores, and similar Islamic cultural practices.

It is clear that IPIHLs have some peculiarities that may not be shared by other conventional private institutions of higher learning. In terms of the objectives, there are some specific motives that have been stipulated by IPIHLs that make them different from other private institutions of higher learning. Their paramount objective is to produce good and highly capable Muslim intellectuals and scholars ('ulama') who will consequently become 'integrated' into and competent mainstream workforce. This means that IPIHLs, from the very beginning, have been striving to realize the national educational philosophy towards preparing outstanding individuals, not only in terms of intellectual and mental capabilities, but also in terms of spiritual and emotional stability. This aim is most likely inspired by the Islamic world view on the status of human beings in this world as the servants and vicegerents of Allah.

In IPIHLs, the whole curriculum and the process of teaching and learning have been specifically designed to reflect the above philosophy. To achieve this, the students must not only be trained and taught professional subjects, but also subjects that make them understand the Islamic world view on human beings and this world at the same time seriously inculcating in them good values as enshrined in Islamic teaching. The survey conducted shows that although this objective has not been fully materialized, as it is not an easy task, particularly as the environment outside the campus is not similarly supportive, at least attempts have been made to find solutions for the acute problem of spiritual-vacuum among present-day educated workers. The IPIHLs philosophy towards education is still considered a new mode of higher learning within Malaysian education system.

Another important contribution of IPIHLs is their ability to supply places for a large number of school leavers from religious schools. The tendency among Muslim parents to enroll their children in religious oriented schools have been growing drastically, the availability of places for these school leavers for further studies in public institutions of higher learning has not grown correspondently. IPPTN's study in 2001 shows that although students from religious oriented schools constitute more than 13.5 percent of the total STPM (Sijil Tinggi Peperiksaan Malaysia) candidates

in 1996, 1997 and 1998, only 3.7 percent obtained admissions into public institutions of higher learning. The small percentage of admissions does not mean that candidates from religious schools were not sufficiently qualified. The truth of the matter is that places for them in such institutions are very limited. Therefore, the fact that there are IPIHLS is opportune.

Conclusion

With the economic boom in the early part of the second-half of 90s', the demand for higher education was very encouraging. The drastic increase in the number of places in higher education offered by the private sector is not inevitable but equally opportune. The establishment of IPIHLS is also in the wave of the increase in the number of private higher education institutions. At present most of those surveyed are still operating effectively. Some are facing a variety of problems, not least that of securing recognition for their programmes from Lembaga Akreditasi Negara (LAN). That may be so in some instances, however these IPIHLS together with other products of institutions of higher learning in this country, are believed to be continuously blossoming and must be strongly supported. IPIHLS have offered another product to our education system and arguably contribute significantly towards our quest in becoming an international center of excellence in education.

(Endnotes)

This article derives from a study entitled "Islamic Private Higher Learning Institutions and the Supply of 'Integrated' Manpower" conducted under Intensification of Research in Priority Areas (IRPA). Besides the present author, other researchers involved in this study are Assoc. Professor Mohd Radzi Othman (project leader), Professor Muhammad Syukri Salleh, Professor Shukery Muhamed, Assoc. Professor Norizan Md. Nor, and Assoc. Professor Ismail Omar. It should be noted though that a substantial part of this article is based on the part of the above mentioned research report written by the present author himself.

This refers to a consultation report entitled "Kajian Kemasukan Pelajar-Pelajar Aliran Agama ke Institusi Pengajian Tinggi Awam Malaysia" prepared by National Higher Education Research Institute in 2001. This report was based on a research conducted by Professor Muhammad Syukri Salleh, Professor Dato' Abdullah Muhammad Zin, Assoc. Professor Fadhil Hj. Othman, Dr. Nailul Murad Mohd. Nor and Ku Halim Ku Ariffin.

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Personal qualities deemed highly important by employers are having self-confidence, being dedicated and committed as well as being responsible, reliable and trustworthy.

Ambigapathy points out that interviews with university lecturers and employers reveal that the abovementioned-sought-after skills are greatly lacking among local graduates. The fact that they do not have these skills may well have contributed to the difficulties faced by graduates in obtaining employment. The study demonstrates, in selecting applicants, employers gave more weight to soft skills and less weight to paper qualifications.

Ambigapathy believes that currently there is insufficient emphasis in the university curriculum on soft skills and that more needs to be done to help graduates become marketable and competitive.

The government's recent proposal to aid fresh graduates in finding jobs by making available special vocational training in vocational institutes and encouraging them into internship programmes are consistent with the results of the study. The study indicates that practical training is important. In fact, it reveals that graduates of foreign universities, who have worked whilst studying, have good work related knowledge. Similarly, local graduates, who have worked part time, also have the right work-related attitude.

The study highlights the role of universities in preparing graduates for employment. The findings indicate that the universities and industry must play their respective roles if graduates are to be prepared for employment. According to Ambigapathy, "It is the duty of the universities to generate general knowledge and knowledge related to the field of specialization, but it is the duty of the industry to provide practical training. This is because requirements for new skills are constantly and rapidly changing. The onus therefore lies with the industry to ensure that their employees are equipped with the required skills. The universities should not be seen like a supermarket churning out products as demanded."

While the public in general have vehemently accused the universities for producing 'learned' local graduates who lack the necessary soft skills for employment, it is clear from Ambigapathy's thoughts and his team's curriculum study that the role of preparing graduates for employment does not and should not rest solely on the universities. The problem of graduate unemployment is multifaceted and addressing it objectively and successfully requires the active involvement of various "interested" agencies. Perhaps only through mutual understanding and, concerted and appropriate positive approaches by the different agencies, that the central issue of local graduates' inability to obtain employment in the present economic climate could be successfully addressed and consequently resolved.

Women and Education in Malaysia

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The five Year Malaysia Plans that serve as the blueprint for development in our country emphasise the importance of education for sustained economic growth. It is also recognised that gender equality in access to education is necessary if more women are to contribute towards social and economic development. This article describes the education status of Malaysian women and how this relates to their employment prospects.

Enrolment in Schools and Institutions of Higher Learning

The expansion of educational opportunities since Independence in 1957 and the growing awareness of the need for education to attain a better standard of living have led to increased female enrolment in schools as shown in the Educational Statistics reports of the Ministry of Education. At the primary level the number of female students increased more than three-fold from a total of about 390,000 in 1957 to 1.43 million students in 2001. The female-male ratio in primary school enrolment improved notably from 41:59 in 1957 to 49:51 at the turn of the millennium.

The Government focused on secondary education after achieving satisfactory progress in the area of primary education. Prior to the 1970s, the number of students in secondary schools was low but it grew steadily over time for both gender groups. The number of students increased from 53,974 males and 27,068 females in 1957 to 1,000,296 males and 1,037,262 females in 2001. The percentage of females in secondary school enrolment improved tremendously from 33 percent in 1957 to slightly

over 50 percent since the 1990s.

For tertiary education opportunities were scarce in the early post-independence era. However, after 1970s more universities and colleges were established and today we have numerous institutions of higher education throughout the country. Male students consistently outnumbered female students until 1995 but there was a reversal in this trend after 1995. For instance, the student enrolment in Malaysian universities and colleges comprised 10,791 males and 4,596 females in 1970 as compared to 150,984 males and 185,730 females in 2001 and the female-male student ratio climbed from 30:70 in 1970 to 55:45 in 2001.

student enrolment at all education levels.

Gender Differences in Schools and Institutions of Higher Learning

Let us now look beyond aggregate enrolment figures for males and females, respectively and unravel prevailing gender differences in secondary and tertiary level courses. Universally, girls lag behind boys in the area of science or technical/vocational subjects. Azizan Baharuddin's (2003) study showed that more than half of the secondary students in Malaysia who qualified for the science stream at the Form 4 level in the 1990s comprised females. However, in 1993 and 1994 only 47 percent of girls who qualified to do science at the Form 4 level chose to do so as compared to 62 percent in the case of males. The lower percentage of girls who opt for science reflects the preference girls have for home economics and commerce. At the Form 6 level about the same percentage of girls and boys take up science but girls in the science stream prefer biology and chemistry while boys generally prefer science subjects such as mathematics and physics that emphasise the application of formulae.

Universally, girls lag behind boys in the area of science or technical/vocational subjects.

The above figures map the progress made by females at each level of education. There is a marked increase in female enrolment in absolute terms and a convergence in the male and female student enrolment over the years, indicating that Malaysia has achieved gender parity in aggregate

Next, we turn to the situation in technical and vocational schools. The enrolment in these schools has increased in tandem with the growing demand for skilled and trained manpower. The Educational Statistics reports show that the enrolment in technical and vocational schools increased markedly in the past three decades, i.e. the enrolment was 4,924 in 1970, 18,031 in 1980, 30,691 in 1990 and 67,607 in 2001. As the enrolment in technical and vocational schools grew with time, so did the

number of female students but there is a persistent gender gap in student enrolment. The proportion of female students in the total enrolment of technical and vocational schools was 16.2 percent in 1970, 29.4 percent in 1980, 25.1 percent in 1990 and 34.3 percent in 2001. In addition, male and female students tend to specialise in different areas. Aminah Ahmad (1998) and Azizan Baharuddin (2003) have found that female students are concentrated in non-technical or arts-based courses. For instance, in the 1990s female students accounted for over 70 percent of the total enrolment in commerce and no less than 90 percent of the enrolment in home economics. In contrast, female participation in engineering courses has been relatively low, i.e. less than 30 percent in technical schools and about 10 percent in vocational schools.

The Educational Statistics reports reveal that post-secondary education in polytechnics is gaining popularity amongst men and women. The male (female) student enrolment in polytechnics increased from 2,409 (615) in 1980 to 5,813 (1,544) in 1990 and soared to 12,774 (9,961) in 2001. The notable increase in enrolment in recent times may be partly attributable to the increasingly wide range of courses that are offered to cater to the interests of both gender groups as well as to the growing demand for skilled and trained manpower.

Based on the figures above, it is evident that female participation in polytechnics has improved as reflected by the female-male student ratio that increased appreciably from 20:80 in 1980 to 39:61 in 2001. But it is also pertinent to investigate whether there has been any progress in terms of women venturing out of traditional “female” courses and making inroads into male-dominated fields of specialisation. The 2001 Educational Statistics report shows that the proportion of female students was relatively high in courses such as Secretarial Science (96 percent), Apparel and Fashion Design (97 percent), Banking and Finance (84 percent), Book-keeping (78 percent), Business Studies (74 percent), Insurance (73 percent) Hotel and Catering management (73 percent) and Data Processing (69 percent). On the other hand, female representation was relatively low in Architecture (42 percent), Industrial Design (40 percent), Civil Engineering (39 percent), Building Services Engineering (33 percent) and Mechanical Engineering (12 percent). It appears that women still constitute the majority in arts-based courses and males continue to dominate the science and technical courses. However, the gender gap in the male-dominated fields has contracted over the years. For instance, the female-male student ratio in civil engineering increased from 22:78 in 1990 to 39:61 in 2001 whilst in mechanical engineering it increased from 1:99 in 1990 to 12:88 in 2001.

Finally, we turn to the case of tertiary education. Azizan Baharuddin (2003) presents the gender composition in various tertiary level courses in the late 1990s. It was found that women comprised about 60 percent of the total

number of students in arts-based courses that include Humanities, Economics, Business and Law. Females represented about 58 percent of the student population in the sciences that consist of courses like Medicine, Dentistry, Applied Sciences, Pure Sciences and Computer Science. However, females lag behind males in technical courses like engineering, architecture and survey, i.e. females form about 27 percent of the total enrolment in this area of tertiary education. In spite of the general male predominance in engineering, there are signs that more women are now attracted to newer engineering fields. According to Koh (2004), the University of Malaya’s enrolment figures in the current millennium reveal that whilst women still tend to shy away from the traditional forms of engineering such as civil and mechanical engineering, female undergraduates outnumber males by about 50 percent in telecommunication engineering and their numbers are a notch above males in chemical engineering. The trend in Malaysia is similar to that in Singapore where women equal or outnumber men in some engineering courses.

Conclusion

In Malaysia the selection of applicants to schools and institutions of higher learning is based on merit and there is no discrimination against females. Given the absence of educational policies that limit female enrolment in educational institutions, it appears that segregation in education is the result of gender stereotyping that prevails in society. Moreover, females may be more inclined to enrol in traditionally female courses because conformity is a means of gaining social support and avoiding feelings of isolation. However, those who opt for female-dominated courses tend to get lower paid and lower status jobs. Furthermore, as the economy becomes increasingly technological and mechanised, the job opportunities for those without the relevant vocational and technical training, who are mostly women will become increasingly restricted. They will have to compete for what could be a shrinking pool of professional as well as non-professional jobs not requiring technical skills which will become increasingly insecure and poorly paid, and this would consequently perpetuate the gender earnings gap in the economy.

REFERENCES

- Aminah Ahmad. (1998). Women in Malaysia. Asian Development Bank Country Briefing Paper.
- Azizan Baharuddin. (2003). “Servicing the Global Society: Women in Science and Technology”. In Omar, R. & Hamzah, A. eds. Women in Malaysia: Breaking Boundaries. Kuala Lumpur: Utusan Publications, pp.31-64.
- Koh Soo Ling. (2004). “Women Engineer Their Way In”. New Straits Times, 25th April.

Workshop on Enriching the Ministry of Higher Education's Concept Papers

IPPTN was recently requested by the Ministry of Higher Education to prepare five concept papers related to higher education. The institute subsequently formed five committees comprising several researchers from public and private institutions of higher learning to discuss and prepare the following papers.

1. Consolidating Research in Public Institutions of Higher Learning (IPTAs)
2. Assigning Niche of Public Institutions of Higher Learning (IPTAs)
3. Restructuring Private Higher Education Institutions (PHEIs)
4. Study of the Competitiveness of selected Faculties of Universities in Asia
5. Study of the Competitiveness of Graduates of Local Institutions of Higher Learning vis-a vis Graduates of Foreign Universities

In order to enrich the papers before they were presented to the Ministry, a workshop was conducted for two days at Grand Plaza Parkroyal, Penang from 30 November to 1 December 2005 gathering all committee members involved in the preparation of the papers and representatives from various public and private institutions of higher learning.



Caption



The workshop, which was chaired by IPPTN's director, Professor Morshidi Sirat, was attended by 42 participants. The Vice Chancellor of Universiti Sains Malaysia, Professor Dato' Dzulkifli Abdul Razak and the Head Assistant Director of Higher Education Department, Ministry of Higher Education, Encik Mohd. Anuar Mohd. Zainun, were also present.

Following presentations by each committee chairman, various proposals and plans were put forward by the participants to strengthen the concept papers. The five concept papers were duly revised after the workshop session and forwarded to the Ministry.

■ Noraini Yusof

ANNOUNCEMENT

National Conference on
Skills & Competencies in
Education **2005**



Date: 29 & 30 November 2005

Venue: Universiti Sains Malaysia

Objectives

- To understand problems, issues, challenges and prospects related to competencies learnt, acquired and disseminated in education today.
- To revisit and review the meaning of skills and competencies in education and industries.
- To provide practical and theoretical insights into the links between education, students and the workplace.
- To instill interest among educators on the development of skills among students.

Themes

Workplace Literacy, Information Communication Technology (ICT), Employer-Driven Education, Multi-Intelligences, Thinking Skills, Language Skills, Communication Skills, Creativity, Curriculum Design, Educational Practices, Leadership and Entrepreneurship.

Call for Papers

The organizers cordially invite presentations addressing the objectives and themes of the conference. Abstracts of not more than 300 words to be submitted in electronic form should be type-written in English using MS Word97 (or above). Use only Times New Roman 11pt, single spacing. Abstracts should also include title, author(s), affiliations, contact numbers and email address. The abstracts should be submitted to the Secretariat via email (ncsce2005@usainsgroup.com).

Language

Papers may be presented either in Bahasa Malaysia or in English.

Organiser

School of Humanities, Universiti Sains Malaysia.

Publication

Selected papers presented at the conference will be published in Bulletin of Higher Education Research.

For more information, please visit the website:

<http://www.usainsgroup.com/NCSCE2005>



THE FOURTH INTERNATIONAL LITERACY CONFERENCE (LITCON 2005)

TEACHERS, PRACTICES AND SUPPORTIVE CULTURES

Date:
15 - 17 AUGUST 2005

Venue:
**BERJAYA GEORGETOWN HOTEL
1 - MIDLANDS PARK
PENANG, MALAYSIA**

THEMES

- Teachers
- Teacher Practices
- Language Teaching:
Primary, Secondary, Vocational,
Tertiary, and Private-Commercial

Supportive Cultures

General

Organized By:

INTERNATIONAL LITERACY
RESEARCH UNIT (ILRUS)
UNIVERSITI SAINS MALAYSIA

In Collaboration With:

PENANG EDUCATION DEPARTMENT

Guidelines on Submission of Manuscripts

1. Manuscripts should be written in English, typed using Times New Roman 12 point font, and double spaced on only one side of A4 size paper with ample left and right margins on Microsoft Word.
2. The length of the manuscripts should not exceed 1000 words. An abstract of about 150 words should be included.
3. Authors are responsible for obtaining permission to use any published material. The publisher shall not be held responsible for the use of such material.
4. Citations in the text should include the author's last name and date of publication, e.g. (Ashton, 2001). If quotations are used, page numbers should be indicated, e.g. (Ashton, 2001:30).
5. Endnotes may be used.
6. Include tables and figures within the text. Number tables and figures consecutively.
7. The reference list should be arranged in alphabetical order and should include only works cited in the text.

Examples:

Yule, G. (1996). Pragmatics. Oxford: Oxford University Press. Wolfe, R.N. & Johnson, S.D. (1995). Personality as a predictor of college performance. Educational and Psychological Measurement, 2., 177-185.
Watkins, D. (1998). A cross-cultural look at perceptions of good teaching: Asia and the West. In J.J.F. Forest (Ed.), University teaching: International perspectives. New York: Garland.

8. All submissions should include a cover page containing the title, name of author(s), designation, affiliation, mailing/E-mail address and telephone/fax number. A brief biographical note of the author(s) should also be included.
9. Manuscripts submitted must not be those already published or those which have been offered for publication elsewhere.
10. Manuscripts received will be acknowledged but not returned.
11. Submission of a manuscript will mean that the author agrees to transfer copyright of his/her article to the publisher if and when the article is published. Authors who wish to send their articles to be published else-where should seek the written agreement of the publisher.
12. Manuscripts may be sent via e-mail attachment or via post together with the diskette.

CALLING FOR NEWS BRIEFS AND SHORT ARTICLES

Bulletin of Higher Education Research welcomes short articles, opinions, comments and information about people and events related to higher education in public and private institutions in Malaysia and abroad. Please address your correspondence to:

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