

Linking Knowledge to Innovation in the Economy and Society:
The Role of Universities in Asia

Edited by

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1 Universities as Knowledge Institutions¹

Sujata N. Gamage²

1.1 Introduction

On January 25, 2007, the Sri Lanka Education Forum in partnership with LIRNEasia held a seminar titled Knowledge for Development (K4D): The Role of Universities in Asia.

The purpose of the seminar was to identify how cutting-edge knowledge can be used for innovations in new products and services in the private sector leading to growth and jobs. However, during the course of the seminar it became apparent that the term K4D can bring up images of individual farmers with laptops downloading the latest market information from the Internet or a laptop per child in rural areas. In order to make our purpose clear, we changed the wording in the title from K4D to K2I (or Knowledge to Innovation).

K4D or K2I strikes a responsive chord in Asia, where learning and knowledge are revered. Universities in Asia have capitalized on this reverence, often with little regard for accountability. How good are our universities? How well do they contribute to innovation and growth in the region? Through the seminar we intended to identify means of exploring those questions. In this paper I analyze and summarize the findings.

The seminar began with opening remarks by Prof. MTM Jiffry, member of the University Grants Commission of Sri Lanka. Next a plenary on the topic of 'A Market in Tertiary education' was delivered by Dr. G. Usvatte-aratchi, an eminent economist and a member of the UN Committee for Development. Markets are good because they permit choice to the consumer and choice is the essence of liberty, Dr. Usvatte-aratchi said. In order to make markets work, we need, suppliers, consumers with the purchasing power and information about the products. He concluded by reiterating importance of indicators in higher education markets. His remarks served the seminar well by highlighting not only markets in tertiary education but raising the question whether it is possible to look at markets in knowledge as a whole.

The country reports were presented by Dr. Catherine (Caren) Castañeda, Director for Programs and Standards at the Commission on Higher Education In *Philippines*, Dr. Imran Ho Abdullah, Associate Professor and Director of The Center for Academic Development in the University Kebangsaan, *Malaysia*, Dr. Mobasser Monem, Associate Professor of Public Administration, University of Dhaka, *Bangladesh*, and Dr. Colin Pieris, representing the Quality Assurance and Accreditation Council of *Sri Lanka*. The country reports gave us a sense of the state of higher education in countries in Asia and how those countries are coping with information issues. There are a lot of similarities between Bangladesh, Philippines and Sri Lanka, but Malaysia with its higher level of economic development, may serve as a benchmark for performance for less developed countries in the region. Some of the more generalizable issues from all four country presentations and other sources are highlighted here.

¹ Citation: Gamage, Sujata N. (2007). Higher Education Quality Imperatives in the Philippines. Seminar on "Knowledge for Development: Assessing the Capacity, Quality and Relevance of Universities in Asia" Colombo, Sri Lanka, 25th of January.

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1.2 Tertiary Education Landscape

Universities are typically treated separate from other tertiary education institutions but this could be the wrong approach for developing countries. Except for a few top universities in developing Asia³, the other multitude of degree-granting institutions can vary greatly in quality. In the case of public sector institutions, they are often called universities irrespective of their performances, because they are decreed to be so. Some of private degree programs too operate without much quality control.

Given the general lack of specificity about quality, it is appropriate that we view tertiary education in each country in its entirety and identify ways of differentiating institutions, before we discuss a role for universities in innovation in developing Asia.

1.2.1 Typology

In the Philippines, students complete only 11 years of schooling (6 primary and 5 secondary) and tertiary education begins at 16+ years of age. First two-years in college are dedicated to general education. Number of years required to complete a degree vary (most baccalaureate courses are completed in 4 year; engineering, 5 years; veterinary medicine, 6 years; law, 8 years; and medicine, 10 years). In Bangladesh, Malaysia and Sri Lanka, the education systems are more or less similar in structure due to the Commonwealth heritage of these countries. In Bangladesh, Malaysia and Sri Lanka, students complete 2 additional years of secondary schooling before commencing a degree program or most other tertiary education programs.

Even when the entry qualifications to tertiary education are more or less standard across the countries, the quality of education provided by tertiary education institutes can vary widely. In general we can say that there are four broad categories of tertiary education institutions in developing Asia.

- Universities
- Other degree-granting
- Technical and vocational
- All other tertiary

Universities carry out the traditional mission of teaching and research at the graduate and undergraduate levels, while the mission of other degree granting institutions are largely teaching-focused. Technical and Vocational institutions offer qualifications that are more oriented to specific skills.

1.2.2 Quality

The quality of institutions within the four types can vary widely. In the Philippines, there are over 1600 tertiary institutions regulated by the Commission for Higher Education. According to Castañeda:

³ South Asia: Afghanistan, India, Pakistan, Bangladesh, Nepal, Bhutan, Sri Lanka, and the Maldives ; South East Asia; South East Asia: Brunei, Cambodia, East Timor, ~~Hong Kong~~, Indonesia, Laos, [Malaysia], Myanmar, Singapore, Thailand and Vietnam

Though not formally classified, about 80-90% are teaching institutions with varying levels of standards. Approximately 5% are research universities and the rest are specialized universities that zero in on health and health related courses, or business predominantly, maritime only, or engineering related programs only (this report, p. 43).

In the Philippines, centers of excellence programme allows for high performing programmes within any institution to be recognized and rewarded as such.

In Malaysia there is an effort to categorize universities more specifically. According to Ho-Abdullah:

The rating and ranking (SETARA) of higher education is based on data across six domains including staff qualifications, student selectivity, research, academic programmes, resources and governance and management.....SETARA rating procedures allow the institution being assessed to be rated in three different (self chosen) categories: research universities, comprehensive universities, and specialized universities. The weight given to each domain differs with the type of university (this report, p. 33).

In Bangladesh and Sri Lanka there is no apparent rating of public institutions.

1.2.3 Enrolment

Private Sector Share

Enrolments in tertiary education in Asia have increased sharply in the past decade with the bulk of the increases coming from private investments. For example, in Malaysia, enrolments at degree level programs grew at an average annual rate of 13% during 2001-2005, while public sector enrollments grew only by 4%. Currently, private sector share of all tertiary enrollments stand at 47%, 55% and 67%, respectively, in Malaysia, Philippines and Bangladesh, respectively.

Table. Tertiary Education Enrollment data for 2005 or near, sorted descending by GNI per capita

	Enrollment, Gross			% Private
	Public	Private	ALL	
Malaysia (Pop. 25.3m ; GNI, 125.8b)	390,388	341,310	731,698	47%
Philippines (Pop. 83.1m; GNI, 108.3b)	1,321,027	1,591,675	2,912,702	55%
Sri Lanka (Pop. 19.6m; GNI, 22.8b)	119,081	NA	NA	NA
Bangladesh (Pop. 142.8m: GNI, 66.2b)	616,987	1,253,385	1,870,372	67%

Key: Pop. = Population; m = millions; GNI' = Gross National Income (GNI) per capita

Notes: According to UNICEF or the world bank, gross enrollment ratio, tertiary is the number of pupils (total, male, female) enrolled in tertiary, regardless of age, expressed as a percentage of the population (total, male, female) of the five-year age group following on from the secondary school leaving age. In the present case we use the total population as the base for lack of data at this point on the appropriate population eligible for tertiary education in each country.

The gross tertiary enrollment data reported for Bangladesh by the World Bank for 2003 at 877,335 is closer to higher education enrolments reported as of January 2007 by the Ministry of Education in Bangladesh.

Sources: Malaysia: Ninth Plan, 2006-2010, The Economic Planning Unit of Prime Minister's Department, Putrajaya (2006), Table 11-6

Philippines: <http://www.ched.gov.ph/statistics/index.html> (academic year 2003-2004); Public sector data include an enrollment of 491,846 in TESDA (Technical Education and Skills Development Authority), per personal communication by Casteneda

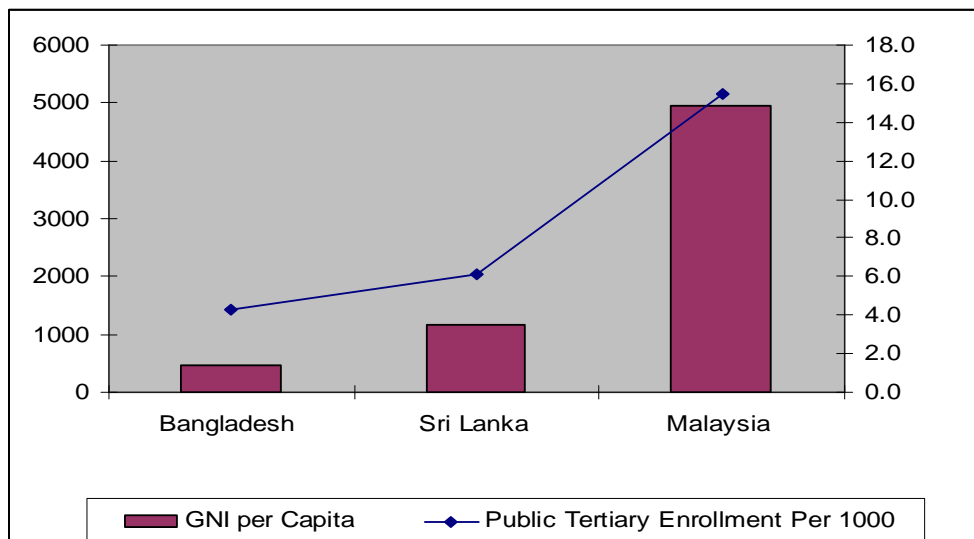
Bangladesh: Ministry of Education, http://www.moedu.gov.bd/edu_statistics.php

Sri Lanka: The total public sector enrollment numbers is the sum of technical and vocational education enrolment for 2004 (63,655, <http://tvec.gov.lk/Page.pdf>) and higher education enrolment for 2005 (55,426, <http://www.ugc.ac.lk/>)

Public Sector Share and GNI

Are the governments in developing Asia investing sufficiently in tertiary education?

Tertiary education enrollments in developing countries are reported by the UNESCO data Institute or the World Bank Ed Stats as gross or net enrollment ratios⁴ that are a composite of enrollment at public or private funded institutions. We were able to obtain more details as in Table 1, by using a multitude of sources for Bangladesh, Malaysia, Philippines and Sri Lanka. In Figure 1, we plot public tertiary education enrolment per capita against the GNI per capita.⁵



If we assume that Malaysia's public enrolment rate is commensurate with its national income we find that *public sector enrollment in Bangladesh and Sri Lanka are somewhat higher than what is warranted by*

⁴ Gross enrollment ratio is the number of all attending tertiary education divided by the number of persons in the age-cohort 18-25.

⁵ Philippines is not included in the comparison because in that country tertiary education begins after 10 years of schooling in the Philippines, and that the enrollment numbers also capture as tertiary education what other countries might consider Years 12 or 13 in senior secondary school.

with their respective national incomes. Although further work with other countries is needed before we can use this methodology to benchmark and assess the optimum public sector enrollment rates for developing countries, this rough analysis points to the need for a realistic assessment of the quantity of tertiary education opportunities that should be provided by tax payers.

However much they wish, governments in developing countries can not invest in tertiary education above and beyond the capacity warranted by their tax base since there are overarching demands for government's attention in other areas of education and other infrastructures. As many scholars have noted, for developing countries, the return to investment is highest for investments in primary and secondary education.

1.2.4 Labour Market

The distribution of employed persons across various occupational categories also provides a useful indicator of optimum public expenditure distribution across areas of education. If we analyze the distribution of occupational categories in the labour markets in Sri Lanka and Malaysia, we see that the greatest gaps are in the elementary worker category. In Sri Lanka 26.6% of the workforce is employed as elementary workers, while in Malaysia it is only 10.6%. The other significant gaps are found for associate professional and clerical or service categories.

Table. Distribution of Currently Employed Persons by Occupational Category and Country

	Sri Lanka	Malaysia	Difference
Professionals/SeniorProfessionals	12.7	14.2	-1.5
Associate Professionals	4.9	13.1	-8.2
Clerical or Service workers	13.6	23.4	-9.8
Skilled Workers	42.2	38.7	3.5
Elementary	26.6	10.6	16.0

Notes: Some data are aggregates. Details for those are as follows (The first and second numbers within brackets refer to percentage in Sri Lanka and Malaysia, respectively).

Professionals/senior professionals include professionals (5.5, 6.2); senior officials and managers (1.4, 8.0), and proprietors and managers of enterprises (5.7, 0.0); Skilled Workers includes plant and machine operators and assemblers (6.2, 14.5), skilled agricultural and fishery workers (20.6, 12.6) and craft and related workers (15.3, 11.6).

Sources: Malaysia: Ninth Plan, 2006-2010, The Economic Planning Unit of Prime Minister's Department, Putrajaya (2006)

Sri Lanka: The total public sector enrollment is the sum of technical and vocational education enrolment for 2004 (63,655, <http://tvec.gov.lk/Page.pdf>) and higher education enrolment for 2005 (55,426, <http://www.ugc.ac.lk/>)

If Malaysia can be used as model for development, the present distribution of occupational categories in Malaysia can be used as rough guide for future goals of Sri Lanka's labour market. If then, Sri Lanka should aim for more or less the same percent of professionals and senior professionals, but the advancement of lower occupational categories to higher occupational categories. For example public investments in education and training should be aimed at moving elementary worker categories to skilled worker categories and skilled workers to associate professionals. In education and training needs this means investments to attain higher pass rates at the GCE (O/L) (or After 11 years of schooling) and opening up education and training opportunities to those who leave school after Grade 10.

1.2.5 Private Investments

Given the demands of the labour market in Sri Lanka and the competing demands on public funds, the government of Sri Lanka, it is clear that countries such as Sri Lanka needs to curtail further expansion of public sector tertiary education and instead focus on upgrading the skills of the populace, to move those joining the elementary worker level to higher occupation levels.

Does this mean that countries like Sri Lanka should invest less in higher education? Indeed not. Any public investments in higher education should be aimed at improving the quality of the public sector tertiary output while curtailing increases in enrollments. If an increasing number of school leavers (and their parent) want a college education, private sector should be given incentives to cater to the demand, because people should have the freedom to obtain the services they need if they are willing to take the risk of the investment.

Judging by the legislative initiatives and regulatory actions in each country, it is clear that policy makers in South and South East Asia, with the unfortunate exception of Sri Lanka, view private investments as crucial to the development of tertiary education. The emphasis seems to vary with the stage of development in each country.

Bangladesh

In the 1990s the government realized the need for setting up private universities as it was clear that the public universities in Bangladesh would not be able to meet the increasing demand for higher education. ... [T]he National Parliament passed the Private University Act-1992. The first government approved private university was established in 1992 quickly followed by several others. In 1998, the private university Act was amended to remove some inadequacies and prevent misuse of privileges granted by the Act. At present, we have 54 private universities in Bangladesh. Of the 54 private universities most are located in Dhaka. The total number of students enrolled in these universities is more than 30,000. This number is increasing yearly by 20 percent compared to 5 percent yearly increase in the public universities (Monem, this report, p. 25).

Philippines

In the Philippines the demand for higher education is largely met through private initiatives.

Higher Education is provided by both the private and public sector. There are 1,600 higher education institutions with a yearly enrolment of about 2.5 million full time, part-time and foreign students. Higher education in the Philippines is highly skewed to the private sector; approximately 76% of the higher education institutions (HEIs) are privately owned and 24% are public schools which are government subsidized. There are approximately 795 bachelor degree programs; 407 masters programs and 116 doctoral programs (Castañeda, this report, p. 41).

The government in Philippines recognizes and rewards private sector institutions that provide a quality education.

Grant of Autonomous & Deregulated Status: This grant is given to discerning private colleges and universities which have consistently shown exemplary performance in the provision of education research and extension services. Basically, institutions with a long tradition of integrity and untarnished reputation, commitment to excellence and have sustainability and viability of operations are given this grant. (Casteneda, this report, p. 43)

Malaysia

In Malaysia the government appears ready to invest more public funds in tertiary education.

Greater access to tertiary education will be provided to achieve the target of 40% participation rate of the age group 17-23 years in 2010. Enrolment at the post-graduate level will be expanded to meet the target of 25% of the total enrollment levels, particularly in S&T programmes. During the plan period, enrolment in tertiary education institutions at all levels is expected to increase to 1,326,340 in 2010 with 32.3 percent at first-degree and 35.8 percent at diploma levels (Section 11.59, p. 256, 9th Plan, Malaysia, Accessed December 2006)

With a higher Gross National Income per capita than all other three countries put together ⁶ Malaysia can afford to invest more public funds for tertiary education. The labor market needs of Malaysia too justify higher investments in tertiary education.

For example, the demand for knowledge workers in Malaysia, which comprise senior officials and managers, professionals, technicians and associate professional categories, is expected to grow at 2.5%, a higher rate than that expected in the growth in employment in general (9th Plan Malaysia, p.251).

Sri Lanka

Unfortunately for Sri Lanka, succeeding governments have chosen to ignore the reality of private tertiary education, private higher education in particular, and government agencies such as UGC and QAAC are understandably reluctant to take the initiative without political leadership to back them up. For example, the University Grants Commission has no reference to private higher education institutions on its web site (ugc.ac.lk), although, there are a seven private institutions that have followed the required procedures and received recognition as institutions awarding local degrees.⁷ A survey by the educationforum.lk shows that private institutions are indeed adding much value to the tertiary education in Sri Lanka. For example, in 2005, private institutions, awarding local or foreign degrees, graduated twice as many graduates as the public sector in IT,⁸ an area of critical tertiary education level manpower needs in Sri Lanka.

⁶ GNI per capita: Bangladesh, 470; Sri Lanka, 1160; Philippines, 1300; and Malaysia, 4960 (World Bank, accessed January 2007)

⁷ **Institute of Technological Studies**, DOR Dec 15 1988, IT; **Institute of Surveying and Mapping**, DOR July 24 1990, Surveying Science); **Sri Lanka Institute of Information Technology** (Guarantee) Ltd, DOR Oct 17 2000, IT and Information Management; **Sri Lanka Institute of Development Administration**, DOR April 24 2003, Public Management; **National Institute of Fisheries and Nautical Engineering**, DOR Dec 16 2003, Fisheries and Marine Sciences; **National Institute of Social Development**, DOR Oct 10 2005, Social Work; **Aquinas College of Higher Studies**, DOR Oct 10 05, Religious Studies, IT and Psychology and Counseling (DOR, date of registration; Source: <http://fulbright.lbcc.edueducation.html>)

⁸ Educationforum.lk (2006), IT Education Ranked, Itimes, Wijeya Newspapers Ltd., Colomob, Sri lanka

1.3 Knowledge to Innovation Capacity of Universities

How does knowledge move, if it does, from universities to the economy and society? The obvious means are educated individuals (people) and codified knowledge in the form of research publications and report (research). How effective are universities in this regard?

According to a paper by the Social Science Research Council (SSRC) of USA titled 'University-Industry Linkages as Drivers of Urban Development in Asia:'

Research on advanced economies has established clearly that world-class universities enlarge and continually renew the pool of skills in the communities where they are located by attracting students and scholars from across the nation and indeed from around the world.

Only a handful of metropolitan areas in [Asia] have succeeded in making their growing universities into full-fledged partners in the development of knowledge-intensive clusters, but the experience of success in developed countries suggests that the rewards for those that find a winning formula will be handsome indeed.

The rewards may be handsome, but, are universities in developing countries, and the societies of which they are a part, ready for the role?

1.3.1 Developing Asia

As important as this question is for Asia, very little work has been done to address the question. Universities existed in Asia long before the first university in the western world was formally established in Bologna, Italy, in 1158.⁹ Nalanda University, a famous centre for Buddhist scholarship, flourished from the 5th to 12th Century in southeast of Patna, the capital of Bihar State in India. It was the first residential international university in the world where 2,000 teachers and 10,000 students from all over Asia lived and studied.

Yale University's Dean Jeffrey E. Garten¹⁰ writing about the current plans for a world class university in Nalanda remarked:

[A rebuilding of Nalanda] will be exceedingly difficult to achieve; even today, Asia's best universities have a long way to go to be in the top tier. In a recent ranking of universities worldwide, Newsweek included only one Asian institution, the University of Tokyo, in the world's top 25. In a similar tally by The Times of London, there are only three non-Western universities in the top 25.

Even if we take the top 200 universities identified by the Times Higher Education Supplement of UK or the Top 500 World Universities identified by the Shanghai Jiao Tong University

⁹ <http://www.eng.unibo.it/PortaleEn/University/Our+History/default.htm>, accessed January 2007

¹⁰ In <http://www.nytimes.com/2006/12/09/opinion/09garten.html>

(SJTU), only a handful of universities from 'developing Asia' are found in those two international ranking surveys put together.¹¹ Majority of ranked universities are institutes of technology or management in India. Only four comprehensive universities are ranked in the top internationally.

Majority of current universities in developing Asia are indeed lesser transplants of universities in Europe and North America. Universities in Europe and later North America have had the advantage of flourishing economies, rule of law and ample time to develop into the partners in economic and social advancement that they are today. Usvatte-aracthi (2004) elaborates the economic argument in the following manner.

In The Island newspaper of 11 November, its greatly admired editor, writing about our [Sri Lankan] universities remarked "If ever Sri Lanka is to change from a poor developing country to a modern developed nation, a primary requirement will be the elevation of our universities to such standards." My contention here is to stand that argument on its head and insist that unless this poor economy grows and develops into a stage when universities can help, they must stand in the margin more or less."

Kishore Mahbubani (2004), a diplomat and scholar from Singapore, in his book "Can Asians Think" puts forward other political, social and cultural issues as to why or why not countries in Asia may remerge as knowledge-driven societies.¹²

The real reason that Asian societies have fallen behind European societies in the past hundred years is a simple one: Asians have held Asia back. ... There is hope for change. But the first lessons that Asian societies must learn is how to develop, implement and maintain the right software: meritocracy, peace and honesty.

While we wait for meritocracy, peace and honesty, are there short-term remedies? Are there niche areas where we might actually see Asian universities fulfilling their roles as centers of learning and dissemination?

1.3.2 Sri Lanka

In the last session we had some stakeholders bring us down to earth with their responses. They included Dr. Thrishantha Nanayakkara, University of Moratuwa representing a public university, Dr. Athula Pitigala Arachchi, from APIIT, a private college specializing in information technology, Mr. Lionel Perera, from the Sri Lanka ICT Association representing the IT education sector, Dr. Keerthi Kotagama, CIC, Sri Lanka for agribusiness and Mr. Ravi de Silva for Aitken Spence Hotels for tourism. Dr. Shahani Markus Weerwarana, a former human resource manager from Virtusa and IT developer was not able to attend due to illness.

¹¹ SJTU's top 500 universities ranking for 2006 included only three institutions from developing Asia and all three are from India - Indian Institute of Science, Indian Institute of Technology at Kharagpur and The University of Calcutta. The THES's Top 200 universities rankings 2005 and 2006 combined included the seven Institutes of Technology in India as one set, six Institutes of Management in India as one set, Jawaharlal Nehru University, University Kebangsaan Malaysia, the University of Malaya and the University of Science in Malaysia.

¹² Mahbubani (2004), p. 43.

Dr. Athula Pitigala Arachchi made important contributions from an academic's point-of-view. He felt that the introduction of competition as a means of making universities more relevant was a necessity. He made the interesting observation that competition will also lead to collaboration. In a competitive environment, collaboration is a must for survival. While he felt the dissemination of information about institutions and programmes is important for competition, he also felt that ranking exercises may hide information more than reveal. What is necessary is to highlight the strengths and weaknesses of each programme so that students and employers can make informed decisions about the programmes and the products of these programmes.

He stressed the distinction between 'standards' and standardization. We should aim for standards not standardization. What we need is diversity of institutions and programmes including diversity of quality and standards - yes, diversity of quality and standards. This is the only way that the knowledge products can meet the diversity of needs in the industry and commerce in a cost effective manner.

The responses from industry stakeholders underscored two types of knowledge use - adaptation and original creations. Although it is often hard to tell where an adaptation ends and creation of a new product or service begins, it is a reasonable distinction, for all practical purposes.

As Keerthi Kotagama emphasized, the bulk of their new products and services come from the adaptation of processes used in Thailand, India and such. The qualities he wished to see in his recruits were largely attitudinal.¹³ Ravi de Silva's comments supported Kotagama's criteria. Mr. Ravi de Silva reiterated Kotagama's views and felt that exposure to new ideas and new experiences will make our graduates more attractive to industry.

Although the two industry participants from agribusiness and tourism could not name the creation of a new product or service that resulted through interactions with universities, they did not rule out the utility of universities to their industries. It was unfortunate that we could not hear the views of the software developer industry in Sri Lanka, because they may have a more positive experience with local universities. A panel made up of industry personnel from Malaysia, a country that is at a higher stage of development than Sri Lanka would also have been able to cite more examples of university to industry contributions that directly or indirectly led to innovations in industry.

1.4 Knowledge to Innovation (K2I) Indicators

Discussions on K2I assume the presence of research universities because those are the institutions most likely to have the people or the knowledge with the potential for K2I. It is noteworthy that in developing Asia there are no private universities from among those ranked internationally and it is unlikely that a top research university may emerge in the near future from among the private institutions. Given this reality, a discussion on K2I in developing Asia

¹³ (a) Knowledge, skills, and positive attitude/mindset and be willing to work in remote areas (b) In the former, apply theory into practice and have management skills (c) A basic understanding of the agricultural sector. (d) They must be technically sound and have commercial thinking. (e) Be well conversant in second language (f) The graduate should have a liking towards agriculture. (f) They should be ambitious and career-oriented. (g) The graduate should be task oriented and sociable (h) Most importantly, the graduate should be thorough in his/her work

has to take place within the context of appropriate government policies, and the case has to be presented to policymakers in a convincing manner.

In his essay on Intellectual Representation, Edward Said (1993) says:

In speaking the truth to power¹⁴, an intellectual tries, to the best of his or her ability, to tell the truth by weighing alternatives, picking the right one, and then intelligently representing it where it can do the most good.

Indicators, applied and communicated consistently, are useful for influencing the policy process in the chaotic policy environments that characterize developing economies in Asia.

1.4.1 Current State of Indicators

Although country papers included in this reports give us details of each higher education system there are only a few resources that compare higher education institutions against common standards.

Table 1 Sources of comparative data on higher education

International

International Association of Universities directory (IAU)
Commonwealth Universities Year Book
Top 500 World Universities by the Shanghai Jiao Tong University (SJTU)
Top 200 World Universities by The Times Higher Education Supplement of UK (THES)
Asiaweek Survey of Universities Survey (now defunct; last survey in 2000)
Competitiveness indicators, by country (IMD and World Economic Forum, respectively)

National

Times Good University Guide, UK
Guardian University Guide, UK,
Good Universities Guides, Australia
America's Best Colleges by US News and World Report (USNWR)
Top 10 Colleges of India for five fields of Study* by India Today
Canada's Top Schools by Macleans

None of the existing surveys give sufficiently comparable information to assess academic programs, directly or indirectly, in terms of their ability to make their knowledge products more relevant to development (See Table 2 for some of the commonly used indicators in academic program rankings). As Imran Ho-Abdullah presents in his paper in this report (p. 34), some international rankings such as the Competitiveness Scoreboard published by the IMD Business School in Switzerland present the industry view of universities relevance but these survey data are collected by country, not individual institutions.

¹⁴ Speak truth to power is the term said to have been used by a quaker leader referring to the effort that is made to speak from the deepest insight of the Quaker faith to powers that be.

1.4.2 Future Directions

K2I indicators should concern paths from knowledge to innovation through education and research both. There are attempts to make university *education* more relevant. These attempts involve systemic changes in higher education systems. For example, the World Bank funded project to improve the quality and relevance of undergraduate education (IRQUE) in Sri Lanka covers all aspects of higher education reform.

These are endeavors that require changes across the higher education systems. Higher education systems are not islands. They are affected by norms of behavior in the larger society. Bringing about systemic changes in higher education or any sphere is a very difficult task in societies plagued with problems of underdevelopment and associated behaviors.

Attempts to make university *research* more relevant typically envisage some sort of formal interaction between universities and industry. As Sutz (2005) remarked:

To increase their contribution to development through the production and distribution of knowledge, universities in developing countries need to transform themselves into 'developmental universities'. But to achieve this, other participants, such as industry and government, must be also be prepared to take on new responsibilities. No ready-made model exists to guide these changes; they will require both creativity and the willingness to engage in thoughtful dialogue, both within and outside universities (Sutz, 2005).

Where does one find these individuals and institutions that are creative, thoughtful etc.? Surely, not with the impeding bureaucracies or the lethargic industries that characterize underdevelopment.

For answers we turn to the Internet. The Internet has become a powerful medium through which individuals and organizations connect with each other crossing geographical, organizational and time barriers. Your results from a small research project may not seem like something your library would archive but if you post your research or an abstract of your research, somebody somewhere at some point of time with a need for it has access to it. The knowledge to development process is too complex to be defined by technology transfer agreements and the like. A necessary condition for applying knowledge to development is to make that knowledge known. "If a tree falls in the forest and no one hears it, does it make a sound?"¹⁵ If your work is not accessible to those who may need it, does it matter that you did the work or not?

1.4.3 Web presence as a K2I indicator

A necessary condition for applying knowledge to innovation is to make that knowledge known. In this age of the Internet where individuals and organizations can connect with each other crossing geographical, organizational and time barriers, we hypothesize that you need a Web presence to be relevant and make the case that the Web presence of researchers and the

¹⁵ Attributed to Bishop George Berkeley (1685-1753)

relevance of that presence should be included as additional indicators in the traditional set of quality indicators used by universities.

Web presence as a necessary condition for K4D is beginning to be appreciated. In a recent article Katz and Cothey (2006) described a computational method to measure the Web presence of Universities more accurately. Their article was titled "Web Indicators for Complex Innovation Systems". There are others who have talked about the importance of Web presence but our own work on the Web presence of telecom policy researchers (Gamage and Samarajiva, 2006) could be one of the first empirical studies of individual researchers.

1.4.4 Web Presence by Industry Sector

Internet presence by itself can be a cumbersome measure because an Internet search for engineering at University of Kebangsaan Malaysia, for example, can give so many 'hits'. But if we were to search for scholarly outputs on engineering aspects of disaster management, say, the searching would become more manageable. More targeted search tools such as scholar.google.com are beginning to make Web searches more meaningful. In addition, by searching in terms of a specific application, you put the emphasis on the application not the academic program.

What we propose is then is a survey where you begin with the sectors or sub sectors that are more important for reasons that are economic, social or cultural. Then we apply new Web presence measures to ask not whether universities are performing for their own sake, but whether one or more industry sectors are performing well because of universities.

The survey would be used to assess the knowledge base in institution (or country) X , say, relevant to industry Y, say, along the following criteria:

- Web Presence or the Extent to which knowledge of relevance to industry Y is accessible on the Web
- Quality and relevance of the Web presence as indicated by citations to the presence by other researchers and scholars and industry users
- Quality and relevance of the education and training as rated by industry

These new measures would complement not replace measures that are currently used to assess the performance of academic institutions or programs,¹⁶ although a debate as to whether any of these measures really help the consumers of the information should accompany attempts to apply them.

1.5 Suggestions for Further Work

How important is a Web presence of Knowledge producers and users? If important how can we include Web presence as a performance indicator and what strategies can be used to improve

¹⁶ INPUTS: Undergraduate Student Selectivity-, Faculty Quality-qualifications/rank, Faculty Quality-research, Facilities and resources; PROCESSES, Teaching - Teaching Assessment score, General-Student retention rates; OUTPUTS, Student success – graduation rate, Student success – employment rate, Student satisfaction – alumni giving rate, Student quality- Peer survey rating,

Web presence? How do these new measures compare with the traditional ones in terms of their usefulness to stakeholders in higher education?

We propose a set of action research projects to further develop, apply and test Web presence measures. Specifically, we propose to work with a selected set of sectors such as tourism, a sub sector of agro technology or ICT, and:

1. Develop an information system that provides adequate information for students, parents and employers about the *credentials* relevant to the selected sectors that are offered by universities in the selected countries.
2. Assist *researchers* who are doing sector-relevant research to document their work as scholarly papers or research reports.
3. Increase the 'presence' of above researchers and their research in the Internet by assisting them to archive their research outputs (or abstracts of those) on the Web
4. Increase the awareness of innovators in the selected sectors and the media to the Internet presence of researchers
5. Work with national foundations for research and relevant post-graduate institutes, national research institutes and businesses to secure funding for further research in the selected sectors
6. Assess the relevance of the Web Presence by surveying relevant personnel in the selected industry sector.

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2 Higher Education in Bangladesh: Status, Issues and Prospects¹⁷

Mobasser Monem¹⁸

2.1 Introduction

The development of a modern society depends to a large extent on the nature and standard of higher education. Thus the role of higher education is to prepare competent, knowledgeable and far-sighted people for assuming various higher responsibilities. The growing importance of knowledge in the modern world can hardly be overemphasized, especially in the era of globalization and in a global environment which is fiercely competitive. Particularly, higher education has enormous potential to promote prosperity in the developing nations (UGC: 2006).

In Bangladesh there was a time when higher education used to be considered a luxury in a society of mass illiteracy. However, towards the turn of the last century the need for highly skilled manpower started to be acutely felt every sphere of the society for self-sustained development and poverty alleviation. Highly trained manpower not only contributes towards human resource development of a society through supplying teachers, instructors, researchers and scholars in the feeder institutions like schools, colleges, technical institutes and universities. They are also instrumental in bringing about technological revolution in the field of agriculture, industry, business and commerce, medicine, engineering, transport and communication etc (UGC: 2005)

Institutions which are grouped together to comprise the higher education sector vary from country to country. In the case of Bangladesh, higher education, also called the tertiary level education is generally used to comprehend the entire range and dynamics of post higher secondary education.

2.2 Present Scenario

Higher education in the public sector is a legacy of the British colonial education system. At present there are 80 universities in Bangladesh of which 26 are public and 54 are private universities. Of the public Universities ten are general universities, five are engineering, three agricultural, five science and technological and one is university of arts and culture, one affiliating and one offering education only on distance mode. The number of students in the public universities is around 92000 excluding those in the affiliating National University and Open University offering distance mode education. The number of students in the latter two were 800,000 and 437500 respectively in the year 2004-05. Thus at the moment above 1.3 million of population receive higher education in Bangladesh of which 74 percent were male and 26 were female students in the year 2004. The percentage of female students enrolling at the universities is on the rise (UGC :2005). Higher education facilities of the public universities are

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spread over the entire country, so that students of different regions can receive higher education without going very far from their familiar environment at home. Thus there is at least one public university in all the administrative divisions of the country.

2.2.1 Structure

There are 5 types of higher education available in the country. These are: i. General Education; ii. Science and Technology and Engineering Education; iii. Medical Education; iv. Agricultural Education; v. Distance Education. In addition, the higher education sector also provides Vocational and Madrasha education.

In Bangladesh higher education consists of a 3 year pass-course or a 4 year honours course for the bachelor's degree, followed by a two year Master's course for pass graduates and a one-year Master's course for honours graduates.

2.2.2 Students and Teachers

There are just over 1 million students studying at higher education level in the country. The following table shows their composition: the total number of students in the public universities is 112,430 while the affiliating National University (NU) and the Bangladesh Open University (BOU) have total of 777,492 and 437,500 students respectively. However, in the BOU only 84,271 are pursuing higher education studies.

The number of teachers in public universities other than NU and BOU is 6280 of whom about 17 percent are absent for different reasons. Leaving aside the absentees, the average student/teacher ratio in the public universities is about 1:18 (UGC :2006).

The number of National University Affiliated colleges in 2001 was 1297. There were 32278 teachers and 773492 students in these colleges, which meant a 1:24 teacher student ratio. At present, among the graduate and post-graduate students, 83% were studying in national University affiliated colleges and the rest in the public universities (UGC :2006).

2.3 Public Universities in Bangladesh

The area comprising the present Bangladesh was to have no university for a long time during the British rule. A teaching cum residential university was set up first in Dhaka in 1921. The second university was set up in Rajshahi in 1953. In total there had been 6 public universities in the country before 1971. After the liberation of Bangladesh in 1971, during the last 35 years, higher education scenario has greatly been transformed. The number of public universities has increased significantly. Let us look at some features of Public Universities-

- Enrollment rate has increased over periods
- There has been commensurate expansion of faculty in the universities. The teacher-student ratio, on average, has not varied much. On paper, teachers in the universities have better academic qualification now than before. There appears to be more publications made by academics now than before.
- The expansion is mostly quantitative. Quality of education has not improved.

- In general higher education is highly subsidized. In absolute term the extent of subsidy has been increasing over time.
- In the last decade the share of university allocation to total education reveals a saw-tooth trend with, however, a decreasing trend for last three years.
- The employee-student ratio reveals interesting trend. Against teacher student ratio of 1:17 on average, this ratio is 1:5 on the average.

Public universities are the foremost choice of the majority students seeking higher education. This is for various reasons. First, these universities offer wide range of subjects in Science, Commerce, Liberal Arts, Humanities, Engineering and Technology, Law, Education and Medicine disciplines. Second, public universities attract the best brains and researchers as teachers although monetary compensation for them is anything far from attractive. Third, library, laboratory, internet and research facilities are much better there than anywhere else in the country. Fourth, seminars, symposiums, workshops, debates, exhibitions and visiting teachers lecture series are often held in these institutions with a wide scope for national and international exposures for promising young knowledge seekers. Fifth, residential and boarding facilities at low cost/subsidized rates are available in these public universities.

2.3.1 Financing Public Universities

Most of the public universities are dependent on government for funding. However, of the 26 public universities the National University is financially independent of the government and very solvent. It derives its entire fund from students' registration and examination entry fees. The Open University of Bangladesh can cover about 30% of its revenue expenses from the fees collected from its enrollees and the rest is financed by the Government through the University Grants Commission of Bangladesh (Mahfuzul Huq :2003). The other public universities meet their needs in the following ways:

Students Tuition Fees and Other Fees:

Public universities cater the educational needs of the thousands of meritorious students at a nominal cost of TK. 12 (about 20 US cents) per month which has remained static for about the last 75 years. Thus, it goes without saying that sum does not even cover the cost of collection and maintenance records. Other incidental fees such as registration fees, sports, students union fees and examination fees have, however, increased to a large extent over the years so as to cover cost and even generate some income for their universities. But the tuition fees can not be enhanced due to strong pressure from students union and opposition political parties. Neither the university administration nor the government is keen on taking serious steps to increase the tuition fees simply because of the fear of students' unrest and opening up a new front for political opposition.

Government Funding:

In the face of the above vis-à-vis a huge rise in costs of university administration the government has to spend a large amount of money for the public universities from the public exchequer every year. About 95 percent of the fund for higher education is provided by the government while a maximum of 5 percent on average are generated by the universities from their own resources.

Table 1: Public Expenditure on revenue account in some public universities

Universities	2002	2003	2004
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Dhaka (general)	31027 (24559)	37496 (22616)	34413 (22683)
Bangladesh Agricultural	83123 (5001)	87761 (5172)	77359 (5596)
Bangladesh Engineering and Technology	34317 (7215)	36007 (7278)	35515 (7501)
Medical University	n.a.	161111 (522)	154430 (553)

Source: UGC Annual Report, 2005 (Note: Figures in parentheses are the total number of students)

The table indicates that expenditure per head varies from year to year and types of public universities. Thus, average expenditure for medical students and agricultural scientists has been the highest (Tk.154430 and Tk. 87761 respectively) particularly because of fewer number of students vis-à-vis high fixed costs while for general universities the average expenditure is rather low. Against the per head tuition fees of less than 150 (about 2.5 US dollars) per year released from the students this sum of public expenditure appears to be colossal in the backdrop of a poor country like Bangladesh. Yet, tertiary education receives inadequate importance in the public budget. This is true for both revenue and development allocations. While education is of all types of has received the highest priority in the budget allocation (about 10-11 percent of total revenue budget), funding for university/higher education has never reached even 1% of total revenue budget allocation during the last 10 years.

Table 2: Revenue Allocation for Education and Higher Education in the National Budget (in Crore Tk.)

Financial Year	National Budget	Allocation for Education	Allocation for Universities	Share of Percentage of University in Education Budget	Share of Universities in National Budget
2000-2001	34597.00	3587.46	288.67	8.05%	0.83%
2001-2002	35479.29	3738.97	293.57	7.85%	0.75%
2002-2003	39945.45	3960.39	323.53	8.17%	0.81%
2003-2004	46263.62	4474.80	389.85	8.71%	0.84%
2004-2005	50069.36	4608.85	409.11	8.88%	0.82%

Source: Bangladesh University Grants Commission, 2006

One striking feature of the revenue expenditure on education is that about 71% of the fund allocated for education was spent on teachers'salaries, pension and fringe benefits, 16% on general contingency and the rest 13% only was available for education contingency in 2003-2004. Yet, more surprising is the fact that only a tiny percentage of fund is allocated for research. Thus in the year 2001-2002 only 29 million taka out of 3773 million taka was earmarked for research and this is certainly a low percentage compared to the developed countries (Mahfuzul Huq :2003).

Since the close of the last century the public universities started facing huge amount of deficit in revenue budget. Thus in the year 2002-03 it was observed that 11 older universities in the public sector had an estimated deficit of around Tk. 100 crores. Most part of this deficit is accountable

to inadequate release of fund in the revenue budget by the government vis-à-vis the demand by the universities to the Government (placed through the University Grants Commission).

On the other hand, student tuition fees and other dues could not be adjusted upward due to the vehement opposition from the pressure groups. Ad-hoc arrangements were made to make up this deficit in the form of spending from teachers and staffs provident fund, development fund and borrowing from banks. As a result, much needed development works, repair and maintenance suffered (Mahfuzul Huq :2003).

Trust Funds: The older and also some relatively newer universities receive trust fund from benevolent elite members of the public. Usually these funds are donated for particular purposes e.g. for awarding scholarship/research grants or medals for distinct performance in academic fields etc. in the name of some near or dear ones and hence can not be utilized by the recipient universities for other purposes such as infrastructural development or defraying particular expenses that may be urgently required.

Other Incomes: Some bigger universities have a few additional sources of income rental income from immobile properties (as residential houses, shops and related lands), income from forestry, fisheries, orchards and dairy. However, these incomes are often negligible and hence are not shown in the budget (UGC: 2005).

Modus Operandi of Budgeting Tertiary Education

Several stages are involved in the budget preparation for funding the tertiary education sector. The focal points of budgeting are three such as the University Grants Commission, the respective universities and the Ministries concerned (Ministry of Education and the Ministry of Finance). In general, the Ministry of Education asks the University Grants Commission (UGC) to submit a provisional budget on the basis of expenditure for 3 months (July, August and September of the current year) by the 31th October of each year. Accordingly, the respective universities are notified by the UGC. These universities, on the basis of demands for appropriation by each academic faculty/department, institute and administrative office prepare a provisional budget for the following year and a revised budget for the current year and submit the same to the University Grants Commission which is statutorily obliged to handle all financial matters of the public universities with the government. The UGC aggregates all the university budgets item wise, then submits these to the Ministry of Education with a marginal upward adjustment of 10% to 15% of the previous year's budget (UGC: 2004).

Again in February –March the university budgets are finalized by the UGC on the basis of previous 6 months' expenditure pattern of each university. Scrutinizing of individual budget through visit to the university at this stage are made by the UGC accounts officials in order to check the accounts and verify the authenticity of claim for appropriation. In the process necessary amendments/cuts in the budget are made. The UGC then negotiate with the Ministry of Education on behalf of the universities. The budget is ultimately finalized in March-April in a joint meeting of the Ministry of Education and Ministry of Finance. On receipt of the aggregate sanction by the Ministry the UGC apportions this among individual universities on the basis of its subjective evaluation of each university's needs (UGC: 2004).

2.3.2 Quality Assurance

In the context of Bangladesh various Education Commissions that were set up so far theoretically emphasized on unlocking potential at all levels of society and creating a pool of highly trained individuals to contribute to the national development. For example, National Education Commission-2000 under the title Higher Education inter alia states that the goal of higher education will be acceleration and inventing new knowledge and creating skilled persons (MOE :2000). But these objectives can not be achieved if quality of education can not be ensured. Quality assurance in this context denotes "All the policies, systems and processes directed to ensuring the maintenance and enhancement of the quality of educational provision within an institution. A quality assurance system is the means by which an institution confirms to itself and to others that conditions are in place for students to achieve the standards that the institution has set"(Donald Ekong: 2003). It is important to note that quality is not static; with changing environment and advancement of technology it needs to be dynamic and always endeavor for excellence.

As to the public universities, quality assurance deserves more attention because these universities are established by the government and financed through state exchequer. Compared to private universities, the cost of education in these institutions is less as it is highly subsidized. In such a context and wider scope of entrance, vast majority of students enroll themselves in these institutions. On the whole, in Bangladesh the quality of graduates of public universities seems to have deteriorated as seen from the reports of the Public Service Commission and the analysis of opinions of employers both in the public and private sector jobs. This, however, does not mean absence of a small percentage of very high quality of students.

Quality Assurance: Major Issues and Problems

Quality assurance must be understood with clear idea about what to be assured. The relevant aspects in this regard assumed to be admission access policies, equal opportunities, credit accumulation, programme design course review, resource allocation for courses, research student's supervision, assessment and degree, academic staff appointment and development, academic staff appraisal, teaching and innovation, academic standards, interaction with accrediting bodies and professional organizations, securing of student's view on academic matters (Mikas Sanjal :1992).

Though unfortunate it is largely true that quality education in the public universities has declined and that quality assurance faces internal and external problems.

Internal Factors

a. Student Intake :

University education is likely to be adversely affected by its poor base line i.e. intake. Quality of education at primary and secondary level is not satisfactory in most cases. Thus the outputs they provide as inputs of universities are found to have adversely affected quality of graduates in line with 'low level trap' (UGC: 2005).

b. Faculty Recruitment

There are four grades of university teachers such as Professor, Associate Professor, Assistant Professor and Lecturer. There is set rule of recruitment for which UGC has provided a guideline. But universities are found to have modified the rules through their respective syndicate in a lenient way. But the crux of the problem is that the best talent to jobs in education sector cannot be always ensured due to real pay and facilities compared to civil services and private sector opportunities.

c. Staff Development:

Quality of faculty is not up to the desired level. Selection procedure though theoretically more or less ideal yet in some cases proved faulty resulting from various factors. The situation as to appointment in the positions of Assistant Professor and above through upgradation/restructuring have proved to be counterproductive. Staff development, both as idea and practice, suffers from a lamentable lack of infrastructure facilities too. Teachers' commitment to search for knowledge, adequate teaching norms of academic behaviour is not above question. Teaching has become another job for some, where consultancy has become more important. The process has been further complicated by absence of faculty evaluation in the Universities. Improving the quality of faculty is made more difficult by the ill-conceived incentive structures. Faculty pay is generally very low in relation to that offered by alternative professional occupations.

d. Teaching Method:

The present method of teaching the basic subjects, particularly teaching science at all levels, have been made ineffective by outmoded method and lack of broader aspects of disciplines. The growth of quality education at all levels is based on teaching method to a greater extent which need to be supported with required infrastructure and facilities. Such a situation is very much lacking which needs upgradation.

e. Library and Laboratory:

Library and laboratory conditions are not conducive for quality education. There is no denying the fact that the use of library facilities by students and teachers have declined over the years. The teachers in most cases seem to rely on particular texts and the students seems to possess increasingly poorer language ability to comprehend and explore the vast expanse of scholarship that the libraries hold. The libraries are poor as they lack adequate resources to buy recent publications and order for the basic journals. Likewise, the laboratories suffer from inadequacy of equipments. Import dependence for such items have made the problems much more complex (Monjur Morshed Mahmud: 2002).

External Factors

a. Politicization:

Of the external forces, the prevailing political culture of the country has been identified as being mainly responsible for the fact that the administration, the teachers and students body have all been thoroughly politicized. The net result is factionalism: chaos and session-jam. In fact, the system of linking political parties with their student wing resulting in the open political patronage to student politics has meant many things at once; a student leader can take out a noisy procession on the corridors of an academic building in complete disregard of the classes in progress and this without any permission from any authority he has free access to the highest political leaders either arising from national issue or local/university issue leading to disturbance, closure, strike at the university causing unscheduled suspension of classes.

b. Unplanned Expansion:

In absolute terms there has been an impressive quantitative expansion in the general university education even though the rate of increase in science and technology sector is not significant. There is no objection to such increase in line with population increase and increase in primary

and secondary level output. But the crux of the problem is that such increase always does not correspond to the needs, required infrastructure, faculty and financial facilities (UGC: 2006).

c. Financial Constraints

University administration faces a host of pressing problem to ensure required facilities for academic development and quality assurance under condition of severe resource constraints. For years it is observed that the governmental budgetary allocation to university education has declined considerably vis-à-vis other levels of education. Another significant feature has been that recurring expenditure increased rapidly at the expense of development grants (Taherul Islam: 2002).

2.3.3 Accountability Mechanism

To run universities freely as a centre for academic freedom some facilities like conducive environment for teaching and research, autonomy coupled with accountability etc. are necessary. In some public universities such as Dhaka University, Rajshahi University, Chittagong University and Jahangirnagar University, 1973 University Acts introduced the concept of autonomy, introduced the Senate and established the principle of collective leadership of the vice-chancellor in the Syndicate. But the gain proved short lived for various reasons with the result that during the period 1975-90, the changed tone of politics gave a new set of Acts for the newer universities. Autonomy, however, in the absence of universities' own adequate resources, and because of its sole dependence on the government has always been fragile, in actual terms (Zillur Rahman Siddiqui :1997). Further, it is seen that 1973 Act, provided some autonomy theoretically but the concept of accountability of administrative personnel and teachers was very much lacking. Further, neither the chairman nor the Dean who in terms of assigned responsibility, should be authorities to take note of a teacher's failure, whatever may be the nature of failure, is not in a position to play the expected role.

Absence of Faculty Evaluation

Evaluation of teachers help both self development of the teachers and improvement in teaching and quality education. In different countries this evaluation is done through self-evaluation scheme, peer rating, student evaluation and management evaluation. But in Bangladesh the system faculty evaluation is yet to be introduced due to fear of political victimization, although some quarters strongly feel the necessity for introduction of some form of evaluation.

2.4 Private Universities in Bangladesh

In the 1990s the government realized the need for setting up private universities as it was clear that the public universities in Bangladesh would not be able to meet the increasing demand for higher education. The government recognized and appreciated the initiatives taken, in the early nineties by a group of educationists to establish private universities. After due examination of their proposals, the government felt the necessity of enacting the legal framework under which private universities could work. As a result the National Parliament passed the Private University Act-1992. It was a milestone in the history of higher education in Bangladesh. With the ratification of this Act, the government lost the monopoly of providing higher education. The first government approved private university was established in 1992 quickly followed by several others. In 1998, the private university Act was amended to remove some inadequacies and

prevent misuse of privileges granted by the Act. At present, we have 54 private universities in Bangladesh. Of the 54 private universities most are located in Dhaka. The total number of students enrolled in these universities is more than 30,000. This number is increasing yearly by 20 percent compared to 5 percent yearly increase in the public universities (UGC: 2006).

2.4.1 Justification

Besides supplementing the functions of public universities, the establishment of private universities is justified for a number of reasons. Besides factors mentioned earlier, it was felt that in the modern world of science and technology, public universities could not provide ample opportunities in all the need-related disciplines due to fund constraints and other factors. The justifications of private universities are as follows:

- Private universities could be guided by the market related phenomena in providing higher education.
- Higher education in the private sector can reduce the financial burden on the government
- The condition of private sector answerability can help maintain academic schedules and avoid session jams
- Private universities can also offer a better student-teacher ratio compared to public institutions. As a result, attendance, participation and evaluation of students can be more easily ensured and monitored.

2.4.2 Regulations

Private universities are growing fast. However, except for a handful of universities, most of these private institutions are small in size and offer rather low quality education in a narrow range of subjects. Many of them have no proper campus and are located in rented facilities and run by part-time teachers. In this respect, the rules and regulations regarding private universities need to be strengthened and their implementation ensured. The growth of the student enrolments in the private universities suggests that some of these universities have a good prospect. A sound growth of private universities is important in achieving a balanced competition between public and private universities resulting in an improvement in the quality of education. However, the government/regulators have the responsibility of ensuring that these universities are providing adequate standards of education.

Private universities are managed in accordance with the provisions of the Private University Act 1992 which is in the process of revision. Ideally, private universities should have a similar administrative structure to their public counterparts, including Vice-Chancellors and other statutory bodies. In reality, in most cases, these administrative structures are not in place. The Vice-Chancellors are appointed by the Chancellor based on the recommendation of the sponsors of these universities. Apparently these sponsors exert considerable influence in managing the affairs of the university. The major impediments of the private universities include: non-compliance with the statutory requirements, absence of consistent admission and examination policies, non-transparent financial management, lack of adequate number of full-time faculty, lack of proper infrastructure, inadequate laboratory and library facilities, absence of co-curricular and extra-curricular activities and a commercial bias in decision making.

For private universities, specific guidelines need to be developed for ensuring a good governance system. This should include restructuring their governing bodies and a more transparent appointment of their Vice-Chancellors. The Governing bodies must have a wider representation, including academics and members of the civil society. The Private Universities should ensure strict compliance in the appointment of the required number of full-time faculty and putting in place standard academic logistics and facilities. The UGC should supervise private universities emphasizing the public interest point of view. The UGC should nominate senior university professors to the academic councils and syndicates of the private universities. The growth of the private universities must be regulated both in terms of their quantity and quality. In the private institutes a realistic tuition cap can be introduced and arrangements must be made so that poor students can also study in the private institutions.

2.4.3 Financing

The private universities are financed by the Board of Trustees of the respective universities. The Boards in turn derive their finances out of the tuition and other fees realized from their enrollees. The private universities earn a huge profit over costs in running the private universities through charging exorbitant tuition fees and other charges which are often comparable to those in the universities of affluent countries. Naturally, only a handful of fortunate students from high-income families can afford to avail the facilities of higher education in these institutions.

2.4.4 Quality Assurance and Related Practices

Quality in Teaching:

Offering good academic programmes is a necessary condition but not a sufficient condition to assure quality education. The degree requirements and academic programmes may be well designed in terms of both national and international standards, but this does mean that the output will be of high quality. The well meaning curricula may not produce good results if the University does not or cannot hire adequately qualified, experienced and committed teachers to teach the courses. Let us review the current status of the faculty strength of the private universities in general. While the cases of a few universities are now strong but in general, the faculty situation is very weak. When private universities started in 1993, a few expatriate teachers from USA and only part-time local teachers mostly from Dhaka University were hired. It was understandable in the early stages. But even today, with a few exceptions, most private universities rely on part-time teachers from public universities. To maximize their personal income, these teachers from public universities teach at several private universities, in addition to their full time job at the parent university. As a result, the effectiveness and efficiency of these teachers tend to drop at deplorably low level. This, naturally, lowers the quality of the private universities (Hafiz G.A. Siddiqi: 2005).

Teacher's Capability of teaching and Quality Assurance

Teaching is a special skill and effective teaching skill is necessary to maintain the quality of the university. Therefore, it is desirable that some mechanism be instituted to determine the teaching ability and or commitment of the teachers. Two such mechanisms are (a) student evaluation and (b) peers' evaluation. In line with the American system, some private universities as a matter of routine administer compulsory students' evaluation. This system requires the students to express their views anonymously about the overall performance of the teacher in the class room by asking such question as, did you understand what the teacher taught? Did s/he cover the entire syllabus which s/he distributed at the beginning of the semester? Did the teacher explain again if

you had asked for any explanation in the class? Did s/he extend academic help outside the class room? And similar other questions. These responses are evaluated by the university, and the results are forwarded to the teachers concerned. The purpose of the evaluation is to help the teacher improve his/her teaching skill. Similarly, colleagues' opinion about a particular teacher is also sought. All these indirectly reinforce the process of accountability and help improve the teaching quality of the university in general (Hafiz G.A. Siddiqi: 2005).

Transparency in Grading System

The examination system is a mechanism used to assess the students' performance in a course. In American system, one examiner, namely the class teacher concerned, is the single and final assessor. This has merits and demerits. One demerit is that a particular student may be favoured unduly or deliberately victimized. To avoid such possible unwanted outcome, students are encouraged to seek the examination scripts from the teacher and check the markings to find if any mistake is made or injustice has been done. The teachers are required to be transparent and explain to the student why he or she got "C" and not "A". Such accountability of teachers helps improve the quality of teaching.

Formation of Accreditation Council

The UGC is convinced about the inevitability of having an Accreditation Council to ensure maintenance of a minimum standard and guaranteeing of a quality assurance in tertiary education imparted by the universities in Bangladesh. Since the main purpose of any exercise by Accreditation Council is to inform the stakeholders and the guardians of the students as to the quality of education in an institution and/or of the value of its degree, there is a need to determine yardstick/standards that should be followed by a university in its academic and all related activities (UGC: 2005).

The UGC is at present evaluating the private universities according to a few yardsticks. It has already set a high powered committee to work out the details of the Accreditation Council. The committee is preparing a comprehensive set of criteria to be used to evaluate both the public and private universities. The committee suggested that the proposed Accreditation Council would have the responsibilities to ascertain if (a) instructions are being imparted according to a modern, scientific and relevant curriculum (b) by well qualified full time faculty members (c) management is transparent (d) examination system is objective and impartial (e) accountability is established in respect of academic, administrative and management matters and (f) compliance of all rules and regulations is ensured. The committee suggested that the proposed Accreditation Council would be entrusted with the responsibility of assessing and grading an institution in an overall sense as well as certifying all the components so that the weighted average of the grades can form the overall grade score of the institution. In this process, those who need the assessment of specific programmes would get to know them along with an overall grading of the institution. The proposed Accreditation Council will be autonomous and free from Government control. The government, through the Ministry of Education, will play the role of a facilitator, and provide necessary funding for smooth running of the Council (UGC: 2006).

2.5 Concluding Remarks

There is no denying the fact that funding from the government for higher education and research is not at all adequate and UGC fails to provide fund according to the need of respective

universities. The very amount provided to the universities is mostly spent for the salary and allowances of the faculty development, research and establishment of new departments in response to the demand of time. Though presently, the allocation budget to the education sector is higher than previous years, yet the allocation in higher education sector is still negligible. This budget cannot satisfy the demands of public universities. There are universities which do not spend anything for research.

A monitoring board under the UGC can be established to assess the quality, recruitment and efficiency of teachers. Reward to the good teachers, internet facilities, modern library and resource centre, and establishment of human resource development centers may improve the standard of higher education in Bangladesh. Throughout the World, universities change the society and remain the center of change and development. But in our country universities now-a-days are very weak and do not change anything. Better understanding among teachers and students, introduction of modern teaching methods and dedication of teachers and students can improve the culture of higher education in Bangladesh. A proper academic calendar can bring discipline. One other important thing is that a tough measure should be taken by the concerned authority to free the public universities from the clutches of party politics.

The government must shift its focus of attention from general education to science, technology and ICT based education. The Government of Bangladesh has recently formulated a 20 year (2006-2025) strategic plan for higher education with the help and support of the World Bank. In the past World Bank's interest in Bangladesh education sector as a donor was confined to all sub-sectors but tertiary education. Hence the fund allocation to tertiary sub-sector showed remarkable stagnation vis-à-vis other sub-sectors. In the last few decades the demand for tertiary education in Bangladesh has increased tremendously. World Bank's recent interest in our tertiary education sector is an indication of its appreciation of this reality and the possibility of additional resource mobilization in this sub-sector. The strategic plan document for higher education suggests that in the face of a changed scenario of higher education, quality improvement in the higher education has to be the main focus of attention and development of science and technology based education should be given top priority by the government and the private sector in the next two decades.

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3 Institutional Benchmarking in Malaysia: Some Operational Definitions¹⁹

I. Ho-Abdullah & M. Yahaya²⁰

ABSTRACT

This paper examines the criteria used in the assessment and rating of institutions of higher education in Malaysia conducted by the Research University (RU) Auditors and the National Accreditation Board. Some remarks on the comparison of these two sets of criteria and their indicators to the criteria used in the evaluation of a nation's competitiveness is made.

KEYWORDS

Performance indicators, rating and ranking, strategic planning, higher education performance measurement systems.

3.1 Rating and Ranking of Public Institutions

Recent benchmarking in Higher Education (HE) in Malaysia include the on-going rating of public institutions of higher learning (SETARA) by the National Accreditation Board and the audit selection and subsequent designation of several public universities as research universities under the Ninth Malaysian Plan. Both initiatives require existing public institutions of higher learning (PIHE) to be benchmarked or audited in order to consider their worthiness and performance. The assessment of their capacity, quality and relevance are based on different sets of criteria and performance indicators. The process and criteria used by Research University Committee of the Ministry of Higher Education are comparable to the criteria used by League of European Research University and Lombardi's *Top American Research Universities*.

3.1.1 Research Universities

The establishment of research universities in Malaysia is in line with the second thrust of the Ninth Malaysian Plan 2006 – 2010 (9MP) to raise the capacity for knowledge and innovation and nurture 'first class' mentality among Malaysians. The capacity for knowledge and innovation entails that the human capital of the nation be enhanced. One aspect of human capital essential to the development and growth of the nation is the critical mass of research scientists and engineers (RSE). In turn, the RSEs are crucial if the nation is to harness scientific and technological innovations to drive the nation's economy and ensure our future competitiveness. In this light, the establishment of Research Universities (RUs) is timely and much needed. The 9MP (11.66) makes provision for this by designating four universities, namely Universiti Malaya, Universiti Kebangsaan Malaysia, Universiti Sains Malaysia and Universiti Putra Malaysia as

¹⁹ Citation: Ho-Abdulla, Imran & Yahaya, M. (2007). Institutional Benchmarking: Some Reflections on the Operational Definitions of Indicators. Seminar on "Knowledge for Development: Assessing the Capacity, Quality and Relevance of Universities in Asia" Colombo, Sri Lanka, 25th of January.

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research universities (RUs) to be further developed to be on par with world renowned universities.

The role and function of the Malaysian research universities would be not only to facilitate the creation of a critical mass of research scientists and engineers but also to generate knowledge and innovation to enhance the economic value chain and ultimately contribute to the economy and general well-being of the society. The establishment of research universities is a natural evolution and expansion of the overall education system in Malaysia in line with the drive towards Vision 2020. The RUs will play a vital role in the technological research, development and innovation especially in the areas identified to move the Malaysian economy up the value chain such as Biotechnology, Agro-industry, Advanced Manufacturing, Aero space, Information Communication Technology and the like.

The question is how can we determine whether a university is truly a research university? Can one just 'designate' a university as a research university by a stroke of a pen or proclaiming it to be so? Should it be a process of just designating a university as a research university or should "membership" be based on some qualitative and quantitative criteria? The League of European Research Universities (LERU), for instance, (whose members include among others the leading research universities in Europe such as University of Cambridge, University of Oxford, and the Universiteit van Amsterdam and seventeen others.) admits members (by invitation) based on periodically evaluation of the universities against a broad set of quantitative and qualitative criteria, such as research volume, impact and funding, strengths in PhD training, size and disciplinary breadth, and peer-recognised academic excellence. Can we be confident that our designated universities will be able to fulfil their role as research universities?

The broad criteria in the determination and evaluation of the RUs in Malaysia include the Quantity and Quality of Researchers (e.g. the critical mass of researchers and experience of the university staff and qualification); the Quantity and Quality of Research (e.g. publication. competitive research grant obtained both nationally and internationally), Quantity and quality of Postgraduates, Innovation (e.g. commercialisation, patents), Professional Services (e.g. consultancy and endowment), Networking and Linkages (e.g. international and national research collaborations, leadership and representation in learned and professional associations); and Support facilities (e.g. library holding and accredited laboratories). The weightage of the criteria are shown in Table 1.

Table 1. Malaysian Research University Assessment Criteria

Section	Criteria	Weightage
A	General information	-
B	Quantity and Quality of Researchers	25
C	Quantity and Quality of Research	30
D	Quantity of Postgraduates	10
E	Quality of Postgraduates	5
F	Innovation	10
G	Professional Services and Gifts	7

H	Networking and Linkages	8
I	Support Facilities	5
TOTAL		100

The standards or minimum requirement for the Malaysian RUs were determined after considering factors such as local conditions with the minimum requirement for each criteria benchmarked against internationally renowned universities. Performance data on these criteria over five years were audited and scored.

3.2 Rating and Ranking Criteria

The initial efforts for the ranking and rating began at the Quality Assurance Division, Ministry of Higher Education in 2005 but is currently overseen by the National Accreditation Board (www.lan.gov.my) (<http://202.185.40.70/utama/index.cfm>). The SETARA rating is based on data across six domains including Staff Qualifications; Students' Selectivity; Research; Academic Programmes; Resources; and Governance & Management. Data for SETARA are based on a single year. SETARA's rating procedure allows the institution being assessed to be rated in three different (self chosen) categories: research universities, comprehensive universities, and specialised universities. The weightage for each domain differs with the type of university. The weightage for each domain according to the university-type is shown in Table 2.

Table 2. Weightage of Domains and University Type

Domain	Institution Category		
	Comprehensive	Research Intensive	Specialised
Academic Staff	25	25	25
Competitiveness (students' preference)	10	10	10
Research	20	25	15
Academic Programmes	25	15	25
Academic Resources / Infrastructure	10	15	15
Governance and Management	10	10	10

As seen in Table 2, the weightage for each domain may differ according to the type of university. For the academic staff, students' preference and governance domains, there appears to be no difference in weightage regardless of the type of university. Differences in weightage only occur in the domains of research, programmes and resources. As expected, the research domain is weighted most heavily for research intensive universities compared to other types of universities while academic programmes carries less weight in a RU compared to other types of universities. The assumption behind the distribution of weightage across domains is based on the perceived core function of the different types of universities. Comprehensive and specialised universities must pay more attention to undergraduate teaching, while the research intensive universities focus on research.

This same assumption seems to exist in the RU Criteria. Emphasis is placed more on the quality and quantity of post-graduate. Bearing in mind that categorization of university type is self-declared in SETARA, some designated research universities which are also comprehensive universities (in the sense of offering a wide spectrum of programmes and disciplines) may opt to be ranked in that category rather than the research-intensive category. How would this impact on the ranking and rating process? Some ranking and rating system allows university to be rated in several categories, hence a comprehensive research-intensive university might not appear to be ranked in the overall rating and ranking scheme but score high in a particular discipline. Similarly, might not a small specialized university be research-intensive in some ways? Currently, SETARA does not yet have that granularity of analysis in their rating procedure. Furthermore, the three existing categories can be disputed. Apart from the fact that most research-intensive universities are also comprehensive, the categorical types are also based on different attributes. Comprehensiveness and specialized is a continuum on the scale or scope of discipline or programmes offered while research-intensiveness being based on a different function of university.

3.3 Discussion

The criteria used in the assessment of research universities and the rating of universities share many things in common especially indicators that are commonly associated with the core functions of the universities, namely teaching & learning and research. Both instruments place emphasis on qualification of staff (in terms of number of PhD holders among their staff either as indication of quality of staff or as critical mass of researchers. Publication is the main indicator of research quantity in both assessment exercises. The SETARA rating assessment also includes governance and management as well as infrastructure. These items do not appear as significantly in the research university assessment. The criteria in both cases are developed by people who are close to academia and thus one can expect similarities in the criteria. How would non-academics measure the capacity and worth of a university? In this light, it is interesting to examine the set of criteria used in measuring a nation's competitiveness. For the sake of discussion, some of the IMD World Competitiveness Yearbook 2006 (one of the two most important reports on international competitiveness, the other being the World Economic Forum Report) criteria on competitiveness which is related to the education system is presented below.

1. Total public expenditure on education measured in terms of percentage of GDP
2. Does the education system meet the needs of a competitive economy?
3. Does the language skills meet the need of enterprise?
4. What is the percentage of population in the 25 – 34 years cohort in tertiary education?
5. Does university education meet the needs of a competitive economy?
6. Is the knowledge transfer between industry and universities highly developed?

While only one Malaysian university (Universiti Kebangsaan Malaysia) appeared in the world top 200 universities in the Times Higher Education Supplement 2006, the comparison of the standing of Malaysia's higher education institutions and the higher education system in general based on the IMD's indicators for the six criteria above is certainly an eye-opener. By the IMD measurements, Malaysia is not doing too badly at all, though there is still plenty of room for improvement. (See Table 3 – 8)

Table 3. Percentage of GDP spent on education

1. Israel	8.4%	19. Jordan	5.8%
2. Denmark	8.2%	24. Austria	5.6%
3. Belgium	8.1%	25. Malaysia	5.3%
4. Slovenia	7.4%	28. Australia	5.1%
5. Iceland	7.4%	34. Taiwan	4.5%
6. Sweden	7.4%	41. Hong Kong	4.2%
7. New Zealand	7.1%		
16. France	5.9%		

Table 4. Does the educational system meet the needs of a competitive economy?

1. Singapore	13. India
2. Finland	14. Malaysia
3. Austria	19. New Zealand
4. Ireland	20. Netherlands
5. Iceland	21. USA
6. Switzerland	23. Taiwan
7. Australia	25. Sweden
10. Denmark	32. Japan
12. Hong Kong	35. Thailand

Table 5. Are the language skills meeting the needs of enterprise?

1. Luxembourg	12. Singapore
2. Switzerland	15. Israel
3. Denmark	18. Philippines
4. Iceland	19. Malaysia
5. Sweden	22. Germany
6. Netherlands	24. Jordan
7. Finland	25. Hong Kong
10. India	30. Taiwan

Table 6. Percentage of population in the 25 – 34 years cohort that have attained at least tertiary education

1. Canada	53%	14. Hong Kong	37.4%
2. Japan	52%	15. Ireland	37%
3. Singapore	49%	18. Australia	36%

4. Korea	47%	23. Russia	31%
5. Taiwan	43.2%	37. Malaysia	18%
6. Israel	42%		
7. Finland	42%		
12. Spain	38%		

Table 7. Does university education meet the needs of a competitive economy

1. Singapore	18. Sweden
2. Iceland	20. Malaysia
3. USA	21. Norway
4. Switzerland	24. Netherlands
5. Ireland	25. Jordan
6. Finland	27. Germany
7. Austria	31. Taiwan
10. Israel	34. Thailand
14. Hong Kong	50. Korea
16. India	

Table 8. Is the knowledge transfer between industry and universities highly developed?

1. Finland	13. Malaysia
2. USA	14. Hong Kong
3. Austria	16. Australia
4. Israel	18. Germany
5. Iceland	21. Japan
6. Singapore	23. India
7. Bavaria	28. Philippines
12. Taiwan	32. Korea
	36. Thailand

3.4 Conclusion

The SETARA rating system is designed with the purpose of creating a national rating scheme for assessing and evaluating institutions of higher education. On the other hand, the RU Criteria and Audit is to determine the worthiness of an institution as a research intensive university. Rating and auditing of institutions in order to assess their capacity, quality and relevance require a set of criteria (and performance indicators). These might be in the form of perception data (soft data) or actual data (hard data). Though most people would agree that the higher education system contributes directly to a nation's economy, either through innovation and the supply of man power, the way we measure the worth of our universities and the way economists measure the contribution and role of universities to the national economy might differ. The criteria and measures of the worth of academia might in the end have no bearing on the competitiveness of the nation's economy.

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4 Higher Education Quality Imperatives in the Philippines²¹

Catherine Q. Castañeda, PhD²²

4.1 Introduction

Higher education in the Philippines is the concern of so many sectors. It is thus structured to respond to the needs of a growing and fast moving population and a vibrant labor sector that eagerly awaits the very best every graduation day. The Philippines has a highly literate and educated society with over 84 million population. Education remains a priority development agenda of government and at the tertiary level it remains a major concern. Philippine educators constantly lament the dismal performance of many higher education institutions (HEIs) that churn graduates who cannot be gainfully employed.

Higher Education is provided by both the private and public sector. There are 1,600 higher education institutions with a yearly enrolment of about 2.5 million full time, part-time and foreign students. Higher education in the Philippines is highly skewed to the private sector; approximately 76% of the higher education institutions (HEIs) are privately owned and 24% are public schools which are government subsidized. There are approximately 795 bachelors degree programs; 407 masters programs and 116 doctoral programs

Higher education institutions have mushroomed extensively, producing more than a thousand graduates yearly. This however, does not necessarily mean producing the best for the labor market's consumption. Data from the Professional Regulation Commission (PRC) tells us that only about 1/3 of those who take the licensure exams make it. Government supported schools totaling 112 known as state colleges and universities have increased; these are basically "products" of legislated moves. A third set of HEIs are the local colleges and universities created and financed by local governments in the various cities and municipalities throughout the country.

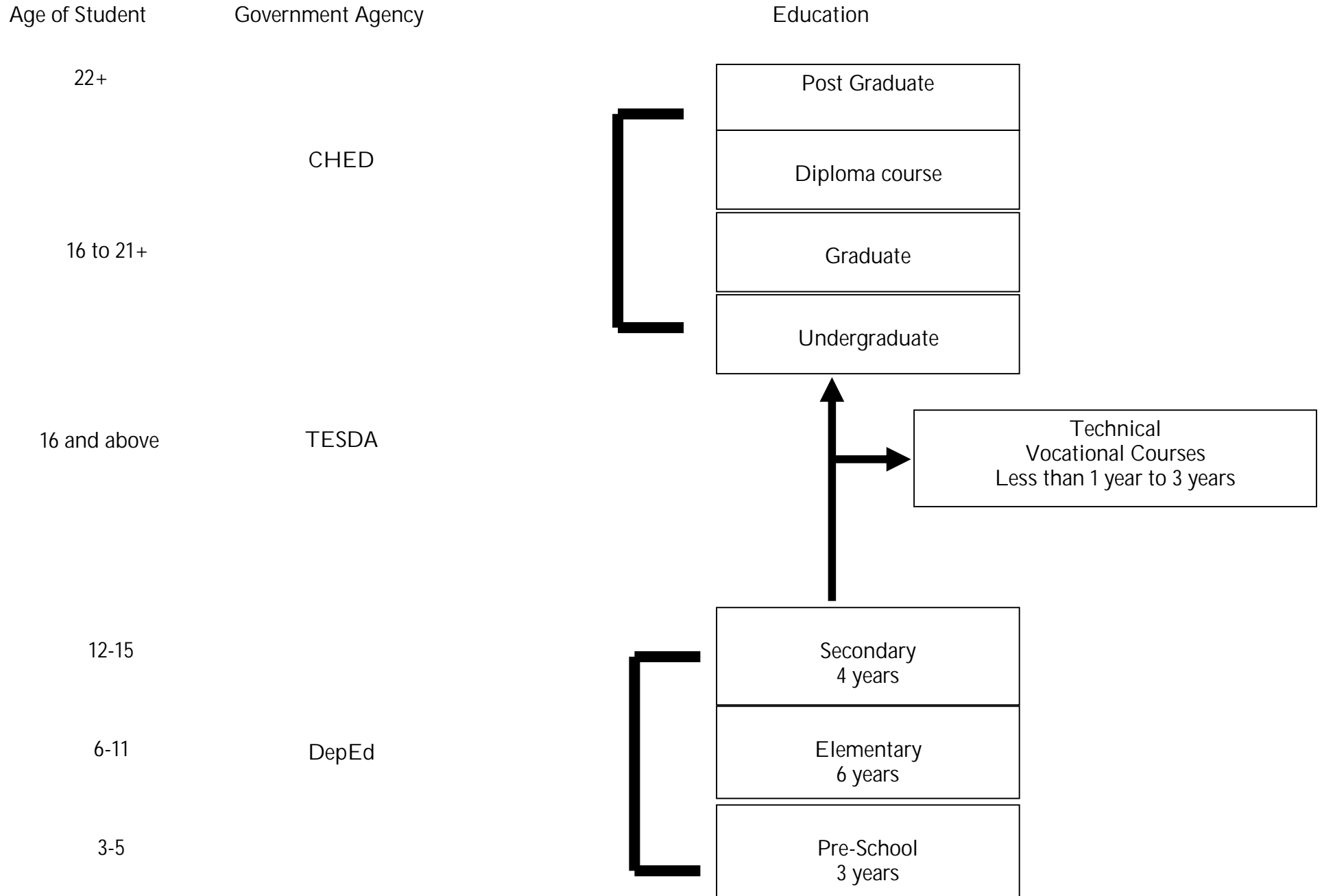
4.2 The Structure of Education the Philippines

The Philippine has a 10-year basic education set-up: 6 years in elementary and 4 years of secondary or high school. Graduates of high schools take entrance exams to enter into degree programs in higher education. Most baccalaureate courses are completed in 4 years, others like engineering take 5 years; veterinary medicine, 6 years; law, 8 years and medicine, 10 years. Degree programs less than 4 years and with no General Education component are basically regulated by the Technical Education and Skills Development Authority (TESDA), the country's technical vocational education ministry. (Please see attached diagram)

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PHILIPPINE EDUCATION STRUCTURE



4.2.1 Typology of Higher Education

Though not formally classified yet, about 80-90% of HEIs are teaching institutions with varying levels of standards. Approximately 5% are research universities and the rest are specialized universities that zero in on e.g health and health related degree courses, or on business predominantly, maritime only, or engineering related programs only. As of this writing, the Commission is still fine tuning the criteria for such typology.

4.3 Quality Assurance Programs

4.3.1 Institutional Monitoring and Evaluation for Quality Assurance (IQuAME)

The institutional Monitoring and Evaluation for Quality Assurance (IQuAME) is a flagship program of the Commission aimed at enhancing educational institutions' capacity in designing, delivering and managing its programs and services, identify its areas for reform and intervention and ensure that quality learning outcomes are responsive to changing domestic needs and comparable to international standards. Basically, IQuAME enhances accreditation and accreditation enhances IQuAME. Program accreditation shows the HEIs ability to set and achieve program standards, while IQuAME looks at the effectiveness of an institution in its entirety, particularly the development of institutional systems that ensure the quality and standards of programs. This new program will be implemented in all HEIs in the Philippines.

4.3.2 Centers of Excellence/Centers of Development (COEs/CODs)

The Centers of Excellence (COE) project is an inherent mandate of the CHED designed to strengthen and improve tertiary education. Since these COEs are expectedly the very best in terms of graduate education and research, they are expected to take the lead in uplifting the quality of education, initiate linkages & networking projects focusing on faculty development, industry-academe collaborations, sharing of equipment & library resources & joint research activities. The COEs are expected to promote the "big brother-small brother" relationship, where COEs assist the development of HEIs situated within their geographical area of coverage.

General criteria developed by the technical panel of CHED experts include the following: instructional quality (45%), research & publication (30%), extension & linkage (20%), and institutional qualifications (5%). Details of each criteria are tailored according to the nuances of standards per discipline. To date, only the COEs in Science & Math have been screened and identified; the rest of the other disciplines will complete their screening and evaluation in the early part of 2007. Benefits, financial as well as non-monetary subsidies such as graduate scholarships, research grants, priority in bilateral agreements and training arrangements with foreign universities are some of the privileges.

4.3.3 Grant of Autonomous & Deregulated Status

This grant is given to discerning private colleges and universities which have consistently shown exemplary performance in the provision of education research and extension services. Basically, institutions with a long tradition of integrity and untarnished reputation,

commitment to excellence and have sustainability and viability of operations are given this grant.

Long tradition of integrity and untarnished reputation – an attribute ascribed to a higher education institution (HEI) that has consistently adhered to existing laws, rules and regulations and hence has no record of confirmed violations of Philippines laws, CHED memorandum orders (CMOs) and policies, standards and guidelines (PSGs), and no school officials, faculty or staff involved in anomalies.

Commitment to excellence – The HEI demonstrates academic excellence as evidenced by the presence of COEs, CODs, accredited status or Accreditation institutional monitoring or evaluation for quality assurance in higher education (IQuAME) category comprise the basic criteria. Singular or combinations of such criteria qualify HEIs to be either autonomous or deregulated.

Integrity and untarnished reputation is a must criterion. Failure to meet this will automatically disqualify a HEI for the grant of autonomy or deregulated status.

To qualify for autonomous status an institution must obtain a minimum of 70% under Commitment to Excellence and a total percentage score of 91-100%. To qualify for deregulated status, an institution must obtain a minimum of 60% under commitment to Excellence and a total percentage score of 81-90%.

4.3.4 Monitoring and Evaluation of Graduate and Undergraduate programs

The implementation of CHED policies and standards is the major task of CHED's regional offices that make sure that HEIs comply with the minimum standards. Thus, the regional offices conduct monitoring and evaluation activities of undergraduate programs with the Regional Quality Assessment Team or RQAT (counterpart of the national-based technical panels) For graduate programs, selected degree courses like education, maritime, nursing, law & medicine, the Office of Programs and Standards (nationally-based) monitor & evaluate the programs with the assistance of the technical panel experts. The Commission has set high standards for graduate education so evaluation is implemented very rigidly. The maritime sector relies solely on one international standard set forth by the International Maritime Organization (IMO). The IMO standards is strictly complied with by the country-signatories to the Standards of Training Certification and Watchkeeping for Seafarers (STCW) Convention. Nursing, a most explosive career field now in the Philippines, is likewise reviewed thoroughly, to answer the massive need locally and their high demand in developed countries. Medicine and law are basically treated as high level courses so national experts are called upon to assist the Commission in monitoring and evaluating such programs.

4.3.5 Benchmarking of Selected Curricula

The Philippine has identified specific curricular that the country needs to propel the economy and respond competitively to global demands. Thus, the CHED found it

necessary to conduct benchmarking activities in selected developed countries in America, Europe, Asia and Australia to improve the Philippine standing in the disciplines of science and math, engineering, business, health sciences especially nursing and medicine, ICT, agriculture, the maritime industry, teacher education and selected social sciences. With limited funds, the CHED secured up-to-date data through international visits, exchange of materials among consultants who presented scientific papers abroad, internet scanning & extensive literature research in state-of-the-art libraries.

As a result, the Philippines has been identified as highly competitive globally in the fields of maritime education, engineering, architecture, nursing, midwifery and to a limited extent, accountancy and customs administration.

4.3.6 Faculty Development

Faculty members in various HEIs need faculty development programs (FDP) and a sizeable number need to complete their masters degrees. Thus, the FDP was conceptualized to enable existing faculty who teach the crucial general education curriculum (humanities and the required social sciences geared towards the development of the TOTAL MAN) to complete their graduate degree courses.

There are other scholarships like “sandwich” programs for Ph.D. dissertations in the development of cutting edge technologies to propel priority areas of development in the country. To draw these human resources from the HEIs, CHED extensively disseminated information to all the regions of the country to equitably enable those in the rural communities to avail of the scholarships. In addition, CHED also provides MS & PhD thesis/dissertation grants to graduate students.

4.4 Recent Quality Assurance Initiatives

4.4.1 Moratorium/Cut-Off Points in Licensure Performance

The Commission reviews performance of HEIs in yearly licensure exams given by the Professional Regulation Commission (PRC). For HEIs performing poorly, the CHED phased-out programs where results reveal a low five (5) percent turnout for five (5) consecutive years. For 2007, this will be increased to 8% across all professions.

At present, there is an existing moratorium for oversubscribed courses like nursing, and soft management programs and higher standards for teacher education, maritime education, engineering and business fields.

4.4.2 Strengthening the Proficiency of English Language Learners

While the Philippines is basically an English-speaking country, the bilingual program implemented in the 1980s has adversely affected proficiency in the use of the English language. To rectify this and in line with national directives, the CHED has embarked on English proficiency among teachers and students as well. Training programs for trainers, enhancement programs for teachers, development of centers of training will be implemented.

4.4.3 Harmonization of Standards

In the development of policies, standards & guidelines (PSG), the CHED has harmonized the criteria and standards across various professions for qualifications of deans & faculty, library holdings, laboratory requirements, infrastructure basics, classroom size, practicum requirements and community exposure/industry immersion. Competency standards for each field/discipline were also identified and course specification for each professional subjects were developed. These two form part of the PSG.

4.4.4 Policies for Transnational Arrangement

The CHED is currently fine-tuning the policies covering various categories of transnational arrangements as follows: distance education directly offered by foreign higher education with local institutions; academic programs offered with local representatives as partners; franchised foreign programs; foreign educational programs offered in the conventional mode. Only foreign higher education providers (FHEPs) recognized by their respective governments as quality higher education providers and accredited by a recognized accrediting body in the country of origin may be given government authority where it is required to offer undergraduate, graduate and post graduate degrees. No FHEP shall be allowed to establish its branch without approval of the CHED and appropriate registration required in the Philippines.

4.4.5 Regular dialogues with professional bodies and other education sector

To harmonize implementation of reform agendas in education, the CHED conducts regular dialogues and consultations on implementation of joint programs and assure focusing towards national thrusts. The CHED also holds regular dialogues with the Professional Regulation Commission to assure tie-ups in the preparation of licensure tests, joint visitations to HEIs monitored and evaluated, and uniformity of data and statistics on licensure examination for the HEIs utilization.

4.4.6 Regulation of Review Centers

Because of the generally low turnout of board passers, review centers have sprouted in all parts of the country, many of them hardly even known. With a Presidential Order, all review centers will now be regulated by the CHED.

Recently the country experienced some irregularities in the board exams for nursing prompting a thorough investigation of all involved sectors. Thus, the President tasked the CHED to regulate the establishment and operation of all review centers, setting criteria and corrective and preventive measures for the purpose. Now, review centers will have to tie-up with recognized and reputable institutions of higher learning for them to be allowed to operate.

4.5 Enabling Programs for Greater Access and Equity

4.5.1 Distance Education

This is a mode of education delivery where teacher and learner are separated in time and space and instruction is delivered through specially designed materials and methods using appropriate technologies and supported by organizational and administrative structures and arrangements. In the Philippines, an academic program is classified as a distance education program if at least 25% of total courses are offered via the distance mode. The CHED encourages only programs at the post baccalaureate level to be offered through distance education; undergraduate students need face-to-face interaction with mentor and peers as part of the academic environment for optimal learning. CHED has set the standards that only HEIs with Level III accreditation or is a center of excellence and has complied with the CHED Quality Assurance System can offer programs via distance education (DE) mode.

Crucial to DE is effective instructional materials which form the core of DE programs and that delivery strategies or modes consist of learning packages designed for independent learning. To date, the Philippine experience reveals the dearth of sufficient and effective instructional modules as well as assessment instruments and standards to gauge the learner's progress. Student support services especially guidance and orientation are likewise wanting.

4.5.2 Ladderization of Program Offering

In response to the President's call to enable more Filipino to study at a certain period, and then work as his needed but return to the academe to earn his degree, the program of ladderization of program offering was given a highest priority by government. This is essentially crediting competency-based courses in technical vocational education to higher education. The CHED has initially selected degree programs in eight (8) disciplines; namely hotel & restaurant management & tourism in business, maritime, agriculture, midwifery as a preparatory course towards nursing, information technology, criminology and teacher education. With the CHED Order, implementation is now in full swing and massive orientation throughout the country on credit transfer and the embedded TVET courses are currently being undertaken.

4.5.3 ETEEAP

The expanded tertiary education, equivalency and accreditation program or ETEEAP is a non-traditional educational assessment scheme that puts a premium on the recognition of knowledge, skills and prior learning of individuals. Credits are given to learning competitiveness, not the experience per se towards the awarding of degrees. To date there are eighty-seven (87) HEIs in the Philippines that are 'deputized' to offer ETEEAP programs in about thirteen disciplines at the undergraduate level.

4.6 Influence of the Academia on National Development

The academia remains to be the most potent source of fresh, new and revolutionary ideas that can propel a nation's growth. They are catalysts to the refocusing of national thrusts. With the wealth of ideas drawn from the minds of mentors and students, the university is the seat of fertile ideas, new technologies and unorthodox approaches that can put substance and new thought in the workplace. Ideally, this is what everyone wants to happen.

Universities produce graduates to supply the critical mass that the labor sector needs. They develop potential leaders; quality graduates are expected to respond to needs articulated by various categories of stakeholders.

This is not the case though in many colleges & universities. There is a dearth of mechanisms of application of mature technologies in the workplace. There is importance placed on research utilization, but application in actuality is not substantial. Society expects more valuable data from the outputs of research and scholarship.

Expectedly, HEIs that are COEs are expected to be the trailblazers in various disciplines to propel development in specific fields. We need to identify HEIs that can take the lead in bilateral and crosscountry arrangements in research and scholarship. These HEIs can take the lead in designing the future of higher education and provide the blue print of worthwhile academic pursuits.

The local Department of Science of Technology has spearheaded technology transfer in areas where the need is high. While academic successes are many, their level of utilization usually end with scientific presentations in local and international fora and hardly adopted in the work place for the improvement of communities. There is a need for academia to address this in the soonest possible time with substantial impact. There is a need for specialists to translate technical data and information for immediate utilization. Outputs of academia provide practical application to the gaps identified in industry and in the workplace. While this is ideal, it might take sometime for leaders to see progressive gains in the nation's economic development.

5 Need for Quality Assurance and Accreditation in Sri Lankan Universities²³

Colin N. Peiris²⁴

Abstract

This paper presents a brief description of the Quality Assurance framework introduced into the Sri Lankan higher education system recently. At present, the Sri Lankan Quality Assurance framework composed of four main components, namely Codes of Practice, Subject Benchmarking, Credit and Qualification Framework and External Quality Assessments. The paper discusses some of the lessons learnt and experience gained at the initial phase of the External Quality Assessment Process. Finally, it provides some suggestions for the future development of the Quality Assurance programme in Sri Lanka.

5.1 Introduction

University education in Sri Lanka is offered by 15 conventional public universities with an enrolment of 40,000 students and an Open University having an enrolment of 20,000 students. This represents a participation rate in university education of less than 3 percent of the age cohort and stands in sharp contrast to the higher rates in other South and South East Asian countries. Furthermore, the quality and relevance of many courses has led to high graduate unemployment with up to 40 percent of recent graduates being unemployed.

The Ministry of Education has given priority to address the above issues and concerns of the present higher education system. The priority areas identified include legislative and administrative reforms, a revised university funding formula, establishment of an autonomous board of quality assurance and accreditation, inclusion of social harmony within curricula, developing learning materials to teach competencies and skills needed in the labour market, improvement of the teaching skills of the teachers, upgrading equipment and facilities including IT, strengthening labour market linkages and increasing university intake in priority disciplines in high demand in the labour market.

Development of a comprehensive Quality Assurance (QA) framework for Sri Lankan higher education system was initiated in 2001, as a collaborative work between the University Grants Commission (UGC) and the Committee of Vice Chancellors and Directors (CVCD). As an outcome of this collaborative work, *Quality Assurance Handbook for Sri Lankan Universities* was published in 2002 (CVCD/UGC, 2002), which provided detailed guidelines for the external quality assessments. Then six *Codes of Practice* covering key aspects in higher education were developed in 2003 (CVCD/UGC, 2003). Further, the work in connection with the development of *Subject Benchmark Statements* was begun in August 2003. Finally, the *Sri Lankan Credit and Qualification Framework* was developed in 2004 (CVCD/UGC, 2004).

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Subsequently, in September 2005, a Quality Assurance and Accreditation (QAA) Council was established under the UGC. The proposed functions of QAA Council are as follows:

- Evaluation of new curricular and courses, new degree programmes including distant learning programmes;
- Establishment of new departments, faculties, institutes including postgraduate institutes, centers of study and schools;
- Evaluation of degree awarding status of institutes and upgrading into postgraduate status;
- Development of criteria and procedures for the recognition of new universities;
- Quality assurance of self-accrediting universities, their curricular and courses of degrees, staff and infrastructure;
- Accreditation of courses offered by non-self-accrediting institutes;
- Assessment of the quality of foreign degrees and delivery arrangements, and mutual recognition of awards accredited by foreign QA agencies;
- Making recommendations regarding national QAA arrangements;
- Conducting external quality assessments in public and private higher educational institutes;
- Establishing benchmark statements for subject disciplines;
- Training of reviewers, auditors and accreditation inspectors;
- Establishing and developing internal QA units in public universities and private higher educational institutes.

At present, the Sri Lankan QA framework composed of four main components, namely Codes of Practice, Subject Benchmarking, Credit and Qualification Framework and External Quality Assessments (viz. Institutional Review and Subject Review).

5.2 Codes of Practice

Six codes of practice covering key aspects were developed as one of the components of the overall comprehensive QA framework for Sri Lankan higher education system (CVCD/UGC, 2003). They are Code of Practice on Assessment of Students; Career Guidance; External Assessors; Postgraduate Research Programmes; Programme Approval, Monitoring & Review and Student Support & Guidance. These six codes reflect consensus amongst universities and other groups on the key elements of good practices which support the student learning experience and provide a reference point for all higher educational institutes, covering the main aspects of academic standards and the quality of education. The codes are intended to be used to guide and inform institutional activity, to promote and disseminate good practices and to encourage a commitment to continuous improvement.

It is expected that the existence of these codes of practice providing guidance on good practices at national level would facilitate the implementation of QA mechanisms and the continuous improvement of quality in the higher educational institutes. Individual institutions will be expected to use these codes to guide their own developing practices and to supplement it with local

handbooks that reflect particular context and requirements of individual institutions.

The codes are intended to be dynamic documents which continue to develop over time. This will enable them to take account of national developments and to capture changing university practices. Feedback is therefore invited on any aspect of the codes.

5.3 Subject Benchmarking

The work in connection with the development of Subject Benchmark Statements (SBSs) as another component of the comprehensive QA framework for Sri Lankan higher education system was begun in August 2003. Up to date, SBSs have already been prepared in respect to 11 subject disciplines, namely Accountancy, Botany, Civil Engineering, Economics, Geography, Mathematics & Statistics, Mechanical Engineering, Medicine, Physics, Veterinary Medicine & Animal Science and Zoology.

Further, the preparation of SBSs in respect of another 10 subject disciplines, namely Agriculture, Chemistry, Dental Sciences, Electrical Engineering, English, History, Philosophy, Sinhala, Sociology and Tamil, is currently in progress. It is intended to finalize the SBSs in respect of the remaining major disciplines taught in the Sri Lankan Universities by the end of 2007. SBSs provide the institutions and academic staff with a framework for articulating the intended learning outcomes of programmes and with a minimum standard for the award of a degree in a particular subject area. They provide peer reviewers with a reference point for making judgements about the appropriateness of programme outcomes and their achievement. Further, SBSs provide students, employers, professional bodies and others with the information about the range of provision in particular subject/discipline areas, the qualities developed in graduates and the standards that would be of graduates.

5.4 Credit and Qualification Framework

The Credit and Qualification Framework (CQF) is another main component of the overall QA framework that supports academic standards and the development and dissemination of good practices in Sri Lankan higher educational institutions (CVCD/UGC, 2004). CQF shows how a particular institute's award/qualification and the level and volume of credits relate to a national qualification and credit 'standard', whilst the coverage and content of a particular programme of study leading to that qualification can be matched with the relevant SBS.

One of the objectives of the Sri Lankan QA programme is to enable universities to respond more quickly to the demand of higher education and to the changing needs of the employment market. This has necessitated the focusing of attention on the consistency and comparability of university level qualifications and on promoting student mobility by creating more flexible arrangements for student learning and by enabling students to combine employment with study. The CQF has been designed to support and facilitate:

- student mobility through lateral entry and exit for students between courses within universities, and student mobility between universities;
- recognition of pre-university learning, including work-based learning and work experience, for entry to higher education or to count towards an academic qualification;
- enabling students to complete a four-year Bachelor degree by transferring to another institution, where the relevant subject expertise and resources are available;
- enabling students to leave or interrupt university study with recognition of successful learning.

The CQF combines descriptors of qualifications at each level with credit measures that indicate the levels and volume of learning that a student is expected to achieve for each type of qualification.

The CQF is capable of accommodating diversity and innovation in programme development and has sufficient flexibility to enable institutions to develop programmes that are responsive to changing needs of students and graduates, universities and employers. It provides paths for progression to facilitate lifelong learning, and maximizes opportunities for credit transfer, thereby minimizing duplication of learning. Individual universities will be expected to take cognizance of the guidelines contained in the CQF when revising existing programmes of study and also in designing new programmes.

5.5 External Quality Assessments

The main objectives of the external quality assessments presently adapted by the QAA Council are as follows:

- To safeguard the standards of awards and the quality of delivery of academic programmes;
- To encourage good management of academic institutions;
- To identify and share good practices in the provision of education;
- To implement procedures that is based on academic peer review combined with strong administrative support at national and institutional level;
- To enable funding judgements to be taken on the basis of the outcomes of external assessments;
- To implement the system in such a way as to make use of existing structures, documents and other materials wherever possible, rather than to introduce additional bureaucracy.

At present, the QAA Council conducts two types of external assessments, namely institutional review and subject review.

5.6 Institutional Review

Institutional Review (IR) focuses on the powers and responsibilities, which universities hold for quality and standards. It is concerned with how a university assures itself and the wider

public that the quality and standards it sets for itself are being achieved. IR is concerned with university-wide processes, which support sound quality management and university planning to maintain an appropriate environment for teaching, learning, research and other activities (CVCD/UGC, 2002).

The overall purpose of IR is to achieve accountability for quality and standards and by using a peer review process to promote sharing of good practices and facilitate continuous improvement. This overall purpose could be divided into four specific parts:

- To instill confidence in an institution's capacity to safeguard standards, both internally and externally, through a transparent process which involves and is owned by staff throughout the institution and is accessible to students and other external groups with an interest in an institution's teaching, learning and research activities;
- To achieve accountability through external review and public report of an institution's evidence of its own attentiveness to quality and standards, and of actions taken to improve and be responsive to feedback from students and others engaging with the institution as a provider of academic activities;
- To provide systematic, clear and accessible information on the standards and quality claimed by an institution so as to inform the choices and decisions of potential students, employers, funding bodies and other 'users' of an institution's intellectual resources and qualifications;
- To promote improvement by identifying and sharing through peer review, good practice and encouraging innovation and active use of national and international standards and benchmarks.

There are eight aspects of evaluation under IR, namely University Goals and Corporate Planning, Financial Resources & Management, Research, Quality Management & Administration, Quality Assurance, Learning Resources & Student Support, External Degree Programmes and University/Industry/Community/Other Extension Activities.

IR analyses and tests the effectiveness of an institution's processes for managing and assuring the quality of academic activities undertaken by the institution. It evaluates the extent to which internal QA schemes can be relied on to maintain the quality of provision over time. The main features of the IR are the production of an analytical self-evaluation by the institution, peer review (review visit of 5 days) and a published report with an overall judgement.

Hence, the outcome of IR is a published report. Its purpose is to inform the institution and external parties of the findings of the review and to provide a reference point to support and guide staff in their QA activities. In particular, the report will give an overall judgement on the reviewers' level of confidence in the institute's QA arrangements, supported by commentary on the robustness of the institute's mechanisms for discharging its responsibility for the standard of its awards, the quality of the education it provides, the effectiveness of its planning, quality and resource management, the efficiency of its administration. The commentary will include areas of commendation and areas where improvements or actions need to be taken. There will be three options open to the review team in making the overall judgement, i.e. *confidence*, *limited confidence* or *no confidence*. In all cases, the judgement has to be supported by the evidence contained in the report.

The first cycle of IR assessments of public universities was commenced in 2003, and up to date three assessments were conducted at the University of Peradeniya, Open University of Sri Lanka and the University of Moratuwa. It is intended to complete the first cycle of IR assessments of 15 public universities by the end of 2009.

5.7 Subject Review

Subject Review (SR) evaluates the quality of education within specific subject(s) or programme(s). It is focused on the quality of the student learning experience and on student achievements. SR is designed to evaluate the quality of both undergraduate and taught postgraduate programs (CVCD/UGC, 2002).

The main features of the SR are the production of an analytical self-evaluation by the academic staff delivering the programme(s), peer review (a review visit of 3 to 4 days and review against the aims and intended learning outcomes contained in the self evaluation) and a published report with judgements. The aims and learning outcomes contained in the self-evaluation provide an important reference point for SR. Reviewers evaluate the quality of education in the subject(s) or program(s) under review according to the aims and learning outcomes aspired to them by the Department. Reviewers do not use any externally set standards against which the programs are judged.

There are eight aspects of evaluation under SR, namely Curriculum Design, Content & Review, Teaching, Learning & Assessment Methods, Quality of Students, including Student Progress & Achievement, Extent & Use of Student Feedback, Postgraduate Studies, Peer Observation, Skills Development and Academic Guidance & Counseling.

In addition to the overall judgement, review team will provide a separate judgement of each SR aspect. The review team is expected to summarize its findings in each aspect, noting strengths, good practices and weaknesses. At the end of each aspect, review team will use one of three judgements, namely *good*, *satisfactory* or *unsatisfactory*. The collective statements on each of the eight aspects will lead the team to their overall judgement of *confidence*, *limited confidence* or *no confidence*.

The first cycle of SR assessments of public universities was commenced in 2004, and up to date 50 assessments were conducted. The QAA Council intends to complete the first cycle of SR assessments in public universities by the end of 2008.

5.8 Lessons Learnt

5.8.1 Progress during the Initial Phase

The concept of QA in higher education is a new phenomenon to the Sri Lankan university system, and as such the need for an active awareness campaign at the initial stage was strongly felt. Awareness programmes for academic staff were launched in the year 2005, and up to now 90% of faculties/departments of all public universities were visited. A detailed account on the activities of the QAA Council as well as the external assessment process is

provided through these awareness programs. After the completion of the awareness programs for academic staff, QAA Council intends to launch similar awareness programs for administrative & non-academic staff and students.

Considerable progress has been achieved so far with regard to the SR process. During the period from November 2004 to August 2006, the QAA Council was able to conduct 50 SR assessments in different public universities. It is important to note that for almost all the faculties/departments/programmes within the Sri Lankan university system except for few professional programmes such as medicine, engineering etc., this is the first time that their own performance has been assessed by professional colleagues in a systematic way. It is welcoming to note that many have accepted the benefits from an external assessment.

However, still there are some academic members within the system who consider the entire QA programme as an additional burden. They feel that more emphasis on documenting evidence is a time consuming distraction from the real business of teaching and research. As it was the case in India (Stella, 2004), there is a general inertia and the fear of getting assessed by others and also doubts in the minds of some about relevance and usefulness of external assessments.

5.8.2 Transparency and Flexibility of the Assessment Process

Maintaining the transparency of the external assessment process is vital to build up the confidence in and acceptance of the external quality assessments by the university community, especially during the introductory phase. Accordingly, it was agreed that the review panels appointed by the QAA Council have to be accepted by the institute or the department which is being reviewed. This has further helped to avoid any conflict of interests. However, objections from the institution in respect to any member of the review panel have to be justified adequately.

Further, following either an IR or SR assessment, university may ask the QAA Council for a discussion with the review panel about the contents of the review report, prior to publication. The university should notify the QAA Council of its wish to take up this opportunity within one month of receipt of the first draft of the report, highlighting the particular areas it wishes to discuss. The review report is published only after the consensus is reached between the both parties, i.e. review panel and the institute/department.

It is also felt that the acceptance of the external assessment process could be enhanced by making the process as flexible as possible, at least during the first review cycle. There are 433 departments of study in all public universities and almost all the departments offer more than one programme for undergraduate students. Hence, it was decided that all the programmes offered by a particular department will be evaluated under one SR assessment during the first review cycle. In other words, the present SR assessments are to be more appropriately called as either "*departmental review*" or "*programme review*". This has not only improved the acceptance of the external quality assessments by the university community, but also would expedite the completion of the first review cycle.

5.8.3 Sharing of Good Practices

As mentioned earlier, one of the objectives of the external quality assessments is to identify and share good practices in the provision of education. Further, the first review cycle is not expected to result in ranking of universities and programmes, and is also not linked with any form accreditation. In other words, the first review cycle has to be considered not as an “*external quality audit*” but as an “*academic review*”. The main expected outcome of the first review cycle is the introduction of good practices and procedures that will facilitate the continuous quality improvement.

For example, preliminary analysis of the already conducted SR assessments have revealed that most of the departments in public universities are weak in two aspects, namely peer observation and student feedback. Accordingly, the QAA Council has initiated a series of workshops on the use of peer observation and student feedback with the aim of introducing these two good practices.

5.8.4 Internal QA along with the External Assessments – Quality Culture

It is felt that the internal QA procedures have to be strengthened along with the external assessments, especially with the first review cycle. Accordingly, internal QA units have been established in all public universities in 2005 and a broad framework has been prepared with the involvement of all the stakeholders. However, it has to be noted that there should not be any strict directives or instructions as how to develop internal QA mechanisms within the context of each institution. The idea is for each and every institution to develop their own system which is most appropriate to the institutional environment and uniqueness.

It is expected that the internal QA mechanisms would bring the staff members in the same institution together to share and learn from each other, publicize the good practices and to appreciate the achievements and contributions of one another. Further, the implementation of internal QA mechanisms would create a sense of responsibility and a new awareness of process approach throughout the institution.

The ultimate goal of the internal QA mechanisms is to create (or inculcate) the ‘*quality culture*’ within the institution, that would be based around an internal system of continuous quality which seeks to provide quality education through a holistic approach on a day to day basis.

5.9 Conclusions and Suggestions for Future Development

Considering the fact that the concept of QA is a new phenomenon in Sri Lankan higher education system, even at this relatively early stage, it could be concluded that a considerable progress has been achieved in respect of overall QA activities, especially with regard to the external quality assessments. Even-though, the external quality assessments are still voluntary for universities/departments, it is welcoming to note that the QAA Council was able to conduct 50 SR assessments in different departments of public universities during a period of 18 months. However, the need for a multi-pronged strategy to gain a wider acceptance of the external quality assessments by the majority of the university community has to be emphasized. Even in countries where “quality work now has become well established as a valuable innovation and some institutions even have reached the stage of early adoption”, as Massy states (1999), it has not yet “reached the critical mass for self-sustained growth”.

It is desirable to evaluate the impact of the external assessments conducted on the quality of programmes, courses and other related activities before the commencement of the second review cycle. In this regard, a follow-up review cycle in a more simplified form after one to two years of the first review is recommended. For this follow-up assessment, the report of the first assessment could be used as the reference point and the continuity could be assured by obtaining services of at least one member from the original three member panel of reviewers. In our opinion, a model similar to the '*process review*' conducted in Hong Kong (Massy & French, 2001) could be adopted. "While not wishing to suggest that documentation is the end of quality assurance", Massy & French emphasize that "there was often a close correlation between the clarity and consciences of the documentation provided (during the review) and a department's or faculty's understanding of and engagement in the formal and informal processes of teaching and learning quality assurance". According to Massy & French (2001), the Hong Kong model provides several important lessons. "First, one can evaluate an institution's teaching and learning quality processes without getting bogged down in paper trials and bureaucracy. Second, such evaluations provide useful insight on an institution's commitment to assuring and improving quality. Third, it is easier for a third party to gauge quality processes and commitment than to assess quality itself."

Accordingly, in the proposed follow-up review assessments it is expected that the reviewers would pay special attention to whether and how the QA processes and procedures are in place, in addition to assessing whether the recommendations made during the first assessment are being addressed adequately. Conducting such follow-up assessments in between two proper review cycles, on the one hand, facilitate the continuous quality improvement. On the other hand, it would enhance the preparedness of the university or department for the second review cycle, which could result in ranking of universities/programmes and accreditation.

The fact that one of the main functions of International Network for Quality Assurance Agencies in Higher Education (INQAAHE) is to "promote good practices in the maintenance and improvement of quality in higher education" (INQAAHE, 2003) implies the importance of identifying and sharing of good practices in the provision of education for continuous quality improvement. Hence, it is imperative for the universities/faculties/departments to be ready to share and learn from each other's experience. More workshops and seminars would be needed to facilitate discussions on the lessons learnt and the feedback from the reviewers as well as from the academic community should be communicated to all the stakeholders. In the light of the lessons learnt, it would be necessary to make amendments/revisions to the existing guidelines for the external quality assessments, may be after the completion of the first review cycle.

Overall responsibility for maintenance and continuous improvement of quality and standards can only lie effectively where the powers to control or change practices exist, that is with the institution itself and not with an external agency. As Gosling and D'andrea (2001), argue "quality assurance with its emphasis on measurement, external accountability and regulatory control can identify issues and possibly shame departments into taking some actions to comply with the regulatory framework, but it cannot in itself bring improvements and does not necessarily engender an attitude among staff which is focused on improvement". Therefore, it is the university authorities who should make every effort to induce the desire for quality as a main principle in every operation in their institutions to

create a quality culture. In this regard, the institutional strategies have to be linked with internal QA processes.

Finally, there is a need to assess and analyze whether and how the QA mechanisms have resulted in the improvement in the quality of programmes, courses and other related activities, and eventually the quality output. Obviously, a formal evaluation of the impact of external quality assessments could be done only after the completion of the first review cycle.

While arguing that the progress achieved in overall QA activities and especially with regard to the external quality assessments, in its initial stages is quite satisfactory, it has to be accepted that the quality assurance is a never ending process. When planning for the future, it is imperative that the wealth and knowledge already available internationally has to be taken into consideration along with the lessons learnt from the external quality assessments in Sri Lankan conditions.

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