



ASSESSING QUALITY IN HIGHER EDUCATION: IMPACT OF NATIONAL AND INTERNATIONAL RANKING

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ABSTRACT

Academic institutions develop methods to conduct their internal quality assessment of education. Academic Faculty assesses the merit of its educational programmes to get aware of its progress according to predetermined standards. External assessment is conducted through national agencies to meet the challenges in the global higher education system and to define the priorities in education. In Malaysia, Quality Assurance Division (QAD) in the Ministry of Education MOHE was constituted in December 2001. In March 2002 guidelines on criteria and standards for Higher Education (HE) in Malaysia have been constituted which is accepted by the consent of the academic community¹. International ranking is conducted through international regional agencies. International Ranking is used to be controversial² and “accountability does not drive improvement”.

Inputs, reputation and outcomes are the criteria used in Annual Ranking of U. S. News and World Report (USNWR⁴) are not enough; a multidisciplinary perspective approach may be taken into account^{5,6}. In 2001 the National Center for Public Policy and Higher Education USA simulated a report⁶ by considering six criteria: preparation, participation, affordability, completion, benefits, and learning. Any valid method to assess student learning was not developed⁵. Douglas C Bennett suggested that the “value added” is the only valid approach to determine quality of learning. Some other criteria used are retention rate, quantitative abilities, problem solving, understanding of their own culture, Multiculturalism in education and developing sense of responsibilities⁵ etc. National Survey of Student Engagement (NSSE)⁷ involve the students directly to ask about their participation in academic and extracurricular activities. Every year more criteria are suggested, selected and compounded and the system is more complicated. We need to formulate a very simple approach to assess the quality improvement, without making it complicated and inapplicable to practice. MOHE felt that the old higher education model would never prepare public universities for facing new challenges⁸. Efforts are in progress to develop more resources and a system to face new challenges and demands. Useful and some unavoidable impacts of the ranking system are here to settle. OECD is examining how the full range of education activities can be betrothed in ranking, notably teaching and learning.

Key words: Quality assessment, higher education, Stakeholders, impact, university ranking.

PURPOSES OF QUALITY ASSESSMENT:

Following are the purposes of quality assessment in higher education^{9, 10, 11}.

1. Accountability for public funds.
2. Funding decisions
3. Improving the quality.
4. Stimulating a trend of competition.
5. Ensuring uniformity across campuses
6. Enlighten students, parents and employers
7. Allowing international comparisons
8. Supporting student mobility.

INTERNAL ASSESSMENT:

Universities, schools and colleges of higher education developed their own system of quality assessment programmes. Ranking starts internally from the institution itself to assess its improvement. Institutional committee of highly learned experts develops internal code of practice for the institution by using external and internal guidance. It is kept under continuous review and effectively implements to enhance the quality of academic and postgraduate research programmes¹². Higher Education Institutions (HEIs) usually have undergraduate, post graduate and PhD programme of studies. Under- graduate education system is not research based. Each institution set the internal assessment criteria according to the need of different disciplines and programmes. There is flexibility and extendibility for the administration of the school to take into account the needs of academic programmes as well as of the stake holders¹³. ‘Government and higher education institutions do not have a monopoly on the measurement of quality’¹⁴.

EXTERNAL ASSESSMENT AND NATIONAL RANKING:

National agencies develop appropriate and standard methods for the supervision of academics and to determine total quality improvement of an academic institution. Assessment is practiced through accreditation, validation and auditing. National agencies are taking effective steps to enhance awareness to develop global knowledge economy and to meet with the era of globalization. To achieve excellence of quality is for the recognition in the country as well as for the international setting. Assessment provides guarantee of quality¹ and inadequate ranking and “accountability does not drive improvement”^{2,3}. A multidisciplinary perspective or multi criterion model is under discussion. The whole picture can be portrayed with the colors of the complete rainbow of the standard criteria. An inappropriate combination of all of the existed criteria may spoil the picture too. Literature is full of the suggestions for including a long list of criteria. The most fundamental are teaching and research¹⁵. Student learning surely is the most important category of all⁵. Many countries developed their ranking systems² to maintain and develop institutional growth and reputation and to promote research and funding but only few are stressing on learning²⁰, nobody has developed an appropriate method to assess the actual learning⁵. (See table 1) for the factors used, category included and purpose of ranking.^{2, 16, 17, 20, 21}

Table 1: National ranking system of different countries.^{2, 16, 17, 20, 21}

<i>Country</i>	<i>Ranking source</i>	<i>Ranking time</i>	<i>Factors included</i>	<i>Categories included</i>	<i>Purpose</i>
<i>Australia²</i>	LTPF 2003 MII and GUG	annual	LTPE Students satisfaction, outcomes and success. MII including research performance, research training and teaching.	Instead of institution wide ranking four broad discipline groups were considered. GUG categorised institutes into five bands.	To award best demonstrate excellence in learning and teaching ^{16, 23} . GUG assessing the strengths and weaknesses of institutions.
<i>Canada²²</i>	Maclean's University Ranking	annual	student body, classes, faculty, finances, the library, and reputation	Undergraduate studies, comprehensive and medical doctoral	To compare their development
<i>China²²</i>	Govt and Guangdong Institute of Management Science Ranking	NA	Some standards of Excellence	100 universities are selected against some standards	To increase funding and to build a net work of world class universities.
<i>European Union</i>	Prepared by the Directorate General for Science and Research of the European Commission in 2003	took several years of specialist effort to compile	Science & Technology Indicators	Top European institutions	To encourage Development
<i>France</i>	Le Nouvel Observateur	NA	NA	Universities,	NA
<i>Germany</i>	CHE University Ranking, CHE Excellence Ranking, CHE Research Ranking	annual	based on the research-related data of the CHE University Ranking	Graduate Programmes, support the search for master's or doctoral programmes at higher education institutions	NA
<i>India</i>	IndiaToday, BusinessWorld, BusinessToday, Business ReviewWeekly.	informal/yearly	Reputation, Curriculum, Quality of Academic Input, Student Care, Admission Process, Infrastructure, Job Prospects etc	Graduate colleges and universities. Business Schools	NA
<i>Ireland</i>	The Sunday Times	annual	Students merit at the time of admission, Completion rates, staff-student ratio and research efficiency, Quality of accommodation and sports facilities, etc	NA	NA
<i>Italy¹⁹</i>	La Repubblica and CENSIS compiles a league of Italian universities.	annual	NA	NA	NA

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<i>Country</i>	<i>Ranking source</i>	<i>Ranking time</i>	<i>Factors included</i>	<i>Categories included</i>	<i>Purpose</i>
<i>New² Zealand</i>	PBRF	annual	NA	NA	Excellence in research is encouraged and rewarded
<i>Poland²²</i>	Perspektywy/ Rzeczpospolita	NA	NA	NA	NA
<i>Switzerland</i>	Swiss Up Ranking elite System	annual	Comparisons with German and Austrian universities.	University and polytechnic students Elite System for universities	To encourage Development elite System to boost funding to improve quality and to maintain their status
<i>UK</i>	HESA, RAE and Quality Assurance Agency QAA for HE	three yearly	Student Staff Ratio, Number of Academic Staff with Doctorates and Money spent on Student Service, employability RAE in 2008 will emphasis on research output than previous assessments, with 75% of the total score being derived from publication outputs ¹⁷ .	compiled by every HEI in the UK A national student survey which has been run three times	Rankings are used in the allocation of funding each university receives from the government, which take part receive grants from one of the four higher education funding bodies in England, Scotland, Wales and Northern Ireland.
<i>USA</i>	U. S. News and World Report_USNWR ranking in 1981 (pioneers)	NA	Reputation, graduation and first-year student retention rate, standardized test scores, merit at the time of admission, proportion of applicants accepted, Faculty resources, Financial resources and alumni giving rate.	NA	NA
<i>Ukraine</i>	Ministry of Education and Science of Ukraine Zerkalo Nedeli newspaper ranked the top 200 Ukrainian universities in 2007.	official yearly	NA	NA	NA

LTPF (Learning and Teaching Performance Fund)

MII (Melbourne Institute Index)

GUG (Good Universities Guide)

CHE (Centre for Higher Education)

HESA (Higher Education Statistics Agency)

RAE (Research Assessment Exercises)

Methodology²:

For assessment MII considered 36 measures categorise under 6 groups. Quality and international exposure of academic staff 40%, quality of graduate programme 16%, Quality of undergraduate programme 14%, Quality of undergraduate intake 11%, resources levels 11%, Opinion gained from surveys 8%.

GUG has grouped the institutions into five bands. Five stars indicate in top twenties. Four stars rate in second twenties. Poland and Spain also developed methods for national ranking.

International ranking:

International ranking was conducted by regional agencies no delegates or members from international community took part to set or establish standards for international ranking. They are doing it according to their own requirements.

Following ranking systems are in practice.

1. College and University Ranking.
2. League Tables of British Universities.
3. England Tables of schools performance.
4. The Shanghai Jiao Tong University (SHJT) Academic Ranking of World Universities.
5. Times Higher Education Supplement (THES) World University Ranking 2003. Newsweek Global Universities Ranking.
6. Web Ranking.
7. OECD is also in process of developing an appropriate method.

British Publication Times higher education in association with Quacquarelli Symond (THES-QS), annually publish a list of 200 universities from all over the world. UK is the first in the world for papers and citations per dollar spent and rated fourth for papers per academic¹⁹. Ranking League Tables of British Universities and England Tables of schools performance are controversial³. UK and US universities dominating the top ten places^{12,20}. “They have the largest concentration of research power that is publications in journals”¹². A large number of English language journals are edited from these countries for their scholars. Impact factor is another instrument that is unconsciously used²⁰. The Shanghai Jiao Tong university (SJTU) ranking is the ‘brand leader’²¹, provided much-publicised ranking of top 500 universities based on academic, research performance and Publication citation¹³. Results are cited by The Economist magazine. For methodology (see table 3). The Times higher education supplement (THES) ranking based upon opinion survey 50%² (see table 2). “Times results go up and down very fast¹³”. In Times higher education supplement (THES)³ Malaya, one of the top Universities of Malaysia drop 80 points^{18,23}. US magazine Newsweek ranking 2006 is a mixture of SJTU and THES ranking. It ranked top100 universities. For methodology (see tables 4). The credibility of Shanghai Jiao Tong University (SJTU) ranking and Times- QS World University Rankings derives from its simplicity²¹. All these rankings were conducted by regional agencies according to their own requirements and facilities. In international rankings no delegates or members from international community are taking part to set criteria or establish standards for ranking. They established the system of ranking in such a way that is not even appreciated by their own

academicians. Web ranking includes G- factor international university ranking, Webometrics ranking of world universities and 4 international colleges and universities (4icu)^{2, 17}.

Ranking methodology see tables 2,3, and 4

Table 2: The Times higher education supplement (THES) ²

Indicator	Weight
Opinion survey (reputation)	40% from peers, 10% from graduate recruiters.
Citation per faculty	20%
Faculty student ratio	10%
International faculty	5%
International students	5%
Quality in teaching	10%

Table 4: Newsweek ranking²

Indicator	Weight
Highly cited researchers, Articles published in Nature and science, Articles in science citation Index-expanded, Social Science Citation Index and Arts & Humanities Citation Index	50 %
international faculty, international students, faculty student score and citation per faculty	40 %
Library holding	10 %

Table 3: The Shanghai Jiao Tong university (SJTU)^{17, 24}

Criteria	Indicator	Code	Weight
Quality of education	Alumni of an institution winning Noble prizes and field medals	Alumni	10 %
Quality of Faculty	Staff of an institution winning Noble prizes and field medals	Award	20 %
	Highly cited researchers in 21 broad subject categories	HiCi	20 %
Research out put	Articles published in Nature and science. For humanities and social sciences weight of N & S is relocated to other indicators.	N & S	20 %
	Articles in science citation Index-expanded, Social Science Citation Index and Arts & Humanities Citation Index	SCI	20 %
Size of institution	Academic performance with respect to the size of an institution	Size	10 %

In December 2004 in Washington D C an international group IREG was formed¹⁷. International ranking expert group (IREG) constitutes an International Observatory on academic ranking and excellence on April 18, 2008 in Warsaw. The aim of IREG observatory is to conduct academic ranking for the benefit of higher education, its stake holders and the general public²⁵.

INSTITUTIONS ARE DIFFERENT:

Comparing Universities is not justifiable because university is not a single entity⁵. Universities provide management to a number of entirely different schools and departments. They offer education in different fields so at the time of ranking, agencies cannot justify by

keeping all of them in the same place. The same scale of compounded criteria can not be put on every class of HEIs and ranking them with the same stick. Medical colleges or engineering universities for example are institutions of professional learning not the research institutions. Every category of schools and institutes are fulfilling different tasks. Ranking may be credible if educational institutes are categorized into different classes according to their nature of work. Ranking can be performed among the institutions of the same characteristics²⁰. For ranking purpose learning institutions may not be compared with the research institutions. Comparison among them is not justifiable. Ranking among the discipline groups is warranted Instead of ranking among the universities.

STUDENT'S LEARNING:

In assessing higher education quality, importance is given to human capital development, its cost to public finances and to individuals and their families, and the needs of business and industry²⁰. The most important and basic criterion neglected is 'students learning'. This is the basic cause around which the whole system of education revolves. Quality of teaching provided by any institute of higher education may easily be evaluated, but the extent of learning of every student in the same class is always varied. Learning does not depend only on quality of teaching, the caliber of students or in other words merits of the students at the time of admission are also important. If an institution is getting best students from the student lot then most of the credit of learning goes to the students. Otherwise, a school is getting students of low merits at the time of entry and the credit of learning is going to the institution. Basic criterion for quality assessment in graduate studies is learning and efforts must be utilized in developing good quality learning and appropriate method of assessment of learning of every student in the school. "Total experience of student is important, only access to computers or access to libraries is not sufficient"¹¹. GRE scores or honors won by the student will show only the quality of the best graduates not the attainment of all of its graduates⁵. Existing system of assessment is supporting to assess the best among the best students. The learning of the mediocre students is having no importance in the system. For the ranking purpose learning institutions may not be compared with the research institutions. Comparison among them is not justifiable. Ranking among the discipline groups is warranted Instead of ranking among the universities.

Assessment of students' learning:

Douglas, C. Bennett⁵ (2001) suggested that the "value added" is the only valid approach to assess the learning. "Value added is the difference between their (students) attainment when they have completed their education and what they have already attained by the time they began". This value can be assessed by the institution annually to determine the quality of learning in that particular year. At the time of assessment by the national quality assessment agencies all years can be added to find out the total progress of each student of a particular session. Criteria for assessment of learning must be selected according to the requirement of the discipline groups. Higher education bachelor programmes are not research based they may not be included where the criteria of assessment is research.

Assessment of total quality improvement of an institution:

Method of assessment of improvement in quality can be developed as 'value of quality achieved' by the individual institution. During external assessment on national bases, the value of quality achieved in the previous assessment of an institute can be compared with the recent

assessment and the difference will be the 'value of quality achieved'. Value of quality achieved of each institute in a particular year can be compared for accountability or ranking.

Post graduate research programmes:

There are different types of post graduate research programmes: research masters degrees, research based full and part time PhD, research and course work mixed mode PhD. Researchers and PhD students are more important²⁵. PhDs require significantly more resources to conduct quality research work²⁶. The Basic criterion for assessment of the quality of education for post graduate studies is research work and papers published. If post graduate programmes are adequately developed these researchers may be the main force to produce quality research work and get papers published. Research programme is developed according to academic requirement, social and market demands. The British research assessment exercise (RAE) in 2008 will derive 75% of the total score from publication¹⁹ Regional agencies assess research output to distribute government funds. PhD research is largely depending on the quality of the supervisor rather than the department. If research as a 75% weight has to be used for funding than assessment should be performed on groups rather than departments²⁶

Impact of ranking:

In the response of global ranking every country is trying to improve their quality of higher education to take part in this competition despite of a "lot of scepticism"². If they can not afford that huge expenses per year they are trying to manage at least one such university which can compete global standard. Agencies used different criteria and different set of weighted indicators to measure HE without considering its impact and influence on the institutions and stake holders²¹. Whether or not universities and colleges agree with the existence of ranking systems, and no matter how controversial they appeared to be, they have their greater impact on the pace of development and improvement in higher education all over the world. Now the Point of concentration is to find out the best performance indicators, procedures, and ethical considerations that should be included in a conceptual framework of higher education ranking systems²⁷.

National ranking of higher education institutions forced improvement in quality of the education but the global rankings impact is so great that it has forced a big change which impacts directly or indirectly on higher education system, stake holders, sponsoring employers and Academic staff.

Impact on higher education Institutions:

Changes in the global higher education imposed new demands and pressures on higher education system. Credibility of the institutions and senior management is on stake due to uncertainty and changes in the methodology of ranking.. In the THES-QS world rankings 2004, Universiti Malaya (UM)²³ in Malaysia achieved 89th place and the Universiti Sains Malaysia (USM) also did well. Very next year in 2005 UM loose 100 places, and USM disappeared from the top 200²⁵ without any decline in its performance¹³. By adding and/or deleting one criterion, a series humiliation is imposed on institutions and academic leaders²⁸. University of Tokyo in 1999 and 19 Chinese universities refused to participate in ranking of Asia week magazine for annual ranking of universities of Asia-Pacific². 11 institutions in Canada refused to give their data to Maclean's magazine for ranking. It may be overcome if institutions can contribute by

adopting measures of providing well calculated data^{22,31}. A serious matter to be considered which ranking is going to cost is changes in organisation and institutional priorities, even shifting resources from teaching to research activities²¹.

Impact on Government policies:

In many countries Government developed national ranking system for the allocation of the funds. See table 1. Rankings are a demonstration of global competition and are used as a policy instrument²¹.

Impact on Students:

To get entrance into the best institutions there is a distinct increase in the competition among the students to achieve highest marks and credits. Higher position of the institution in ranking attracts the students of highest caliber at the time of admission²⁹. Good students follow ranking tables to shortlist institutions and universities of their choice²¹. Students are the recipients of the services of the college. They demand best value for money they are paying for higher education³². Construction of the bridge of understanding between recipients of education and educators became essential now. Which is possible through formal student representation at all levels in Staff-Student Committees. Regular meetings are helpful in improving the pedagogy, curriculum, assessment methods and other issues that impact on the student learning. To conduct moral values institution has to implement clear and severe penalties for plagiarism and other breached of the regulations³⁰.

Impact on Globalization of education and regional competition:

Effect of globalization on educational institutions is understandable. Boundaries between the nations and the states are in fact disappearing. Mobility of affordable students in global academic institutions is prominent. Those can not afford have provided opportunity of the Distance Education, both on the Internet and otherwise. There is an increasing awareness that education from outside the region are of a higher standard than those from within. It is clear that the survival of the regional colleges and universities now depends upon assurance of quality. This awareness compels the improvement of quality amongst institutions^{33, 34}.

Customer's needs:

The employer or consumer is an important part of the input and the direct involvement of the consumer (industry) and the producer (education institution) are needed for the possible best product (student). Academic staff has to be well informed with the requirements of industry, national and international needs. An industrial model of quality assurance is 'meeting the customer's needs'. In industry quality of the product is improved by modifications to suit the perception of the customers and all the items of a lot shall be the same. This may not be suitable model in an educational setting. It is not decided whether the costumer is student, parents or sponsoring employers. The 'product' provided by an educational institution is indefinable 'service'. Teaching and learning process is difficult to control. All the students in a class can not be same^{33, 34}.

Impact on employee recruitment:

At the time of employment global ranking impose great impact on the decision of selection committee. Graduates of highly ranked institutions are blessed with more significant resume to get job of their choice. Ranking greatly influence the decisions of key stakeholders about accreditation, funding, sponsorship and employee recruitment²¹.

CONCLUSION:

Education is not a business to purchase the costly brands by those who can pay more. It is a sacred act to raise the sons and daughters of the nations by providing them the best education in every field of life. So they would be able to serve the nation without any discrimination or selectivity. Development is not to invest more on already developed institutions the need is to develop all the education institutions which are lack in progress by providing them all the facilities as provided to the best institutions. The brand institutions attract the best brains where the whole credit of achievement should not be given to the institutions. Those get the students with less merit the credit of learning definitely goes to the institutions. The need of the time is to establish a simple and uniform method of assessing the quality of learning and teaching. Looking at the impact of the global ranking it creates activities which are not in any way adding any quality to teaching or learning. In this game of competition the loss of precious time, lack of stability and impose of selectivity shall be the only prize. At the end, majority of the students could not be able to get entrance into the branded institutions. They shall suffer more due the selectivity which deprive them of their achievements. Ranking system creates selectivity system in the HEIs not only at the time of admission but during recruitment at the time of employment also. The worst impact would be the creation of branded recognition elite and non branded mass classes in education too²¹. Majority of the countries in the world are not able to spend \$1b- \$1.5b a year²¹ to establish a world class university or \$1.5b- \$2b a year to get a world class medical School²⁰. They could manage only on sacrificing other social and economic objectives. Even in well developed countries only “few societies or (public) institutions can afford this level of investment²¹. Not every country could even spend \$217.5 million to enhance language and communication skills for their undergraduates³⁵. Those would not be able to meet the requirements of ‘research concentration’ in fact be fail to be recognized. It is not worthwhile to sacrifice priorities and shift resources from teaching to research. Institutions should be allowed to grow to meet the international criteria while maintaining their priorities, distinctive characters, roles and missions. In assessing quality of education it is essential to include the most important criteria of quality teaching and student learning. An appropriate method to assess student learning is missing from the Landscape of Higher education.

Abbreviations

CHE (Centre for Higher Education)
GUG (Good Universities Guide)
HE (Higher Education)
HEIs (Higher Education Institutions)
HESA (Higher Education Statistics Agency)
IREG (International ranking expert group)
LTPF (Learning and Teaching Performance Fund)
MII (Melbourne Institute Index)
MOHE (Ministry of Higher Education)

NSSE (National Survey of Students Engagement)
OECD (Organization of Economic Cooperation and Development)
PBRF (Performance based research fund)
QAA (Quality Assurance Agency)
QAD (Quality Assurance Division)
QS (Quacquarelli Symond)
RAE (Research Assessment Exercises)
SHJT (Shanghai Jiao Tong University)
THES (Times Higher Education Supplement)
USNWR (U. S. News and World Report)

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