DIMENSIONS OF QUALITY ASSURANCE IN HIGHER EDUCATION: CHALLENGES FOR FUTURE

Rizwan Akram Rana,
Post Doctoral Research Fellow, The Centre for Science Education,
University of Glasgow, Scottland, UK,
Associate Professor, Institute of Education & Research,
University of the Punjab, Lahore – Pakistan.

Rizwan Akram Rana is an Associate Professor at the Institute of Education and Research, University of the Punjab, Lahore Pakistan. He has distinguished academic record have done M.Sc. Physics. M.A. Education and Ph. D. in Education from University of the Punjab. Mr. Rana recently completed his Post-Doctoral research studies in science education from University of Glasgow, Scotland, UK. He has been involved in teaching since to Master's classes in science education meant to produce professionals in science education/teaching, test development, research in science education and report writing. He is also involved in teaching on Continuing Development courses and Doctoral program in educational assessment and evaluation, research and computer applications in education. His research focuses on teaching and learning in science, with particular emphasis on nature of students' involvement, classroom learning environment, students' attitudes, self-concept, test anxiety, students' motivation for learning, impact of teacher's beliefs about science and learning on the student learning, assessment of student learning reflective of their competencies. He is a keen research worker and supervised about 130 Master's Research Projects, and supervising two Ph.D. research projects. He has special interest in data analysis techniques. He is a member of Pakistan Institute of Physics, Member Senate, University of the Punjab and Pakistan Association of Science Education and has represented his Institute in various committees of the University of the Punjab and in other Universities at National Level. He has presented papers in many National Conferences. He also presented papers in International conferences in Australia, Turkey and UK.

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Rizwan Akram Rana,
Post Doctoral Research Fellow, The Centre for Science Education,
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Associate Professor, Institute of Education & Research,
University of the Punjab, Lahore – Pakistan.

Prof. Norman Reid
Director, Center for Science Education,
Faculty of Education, St. Andrew's Building, 13-Eldon Street,
Glasgow G3 6NH, United Kingdom.

ABSTRACT

Quality assurance in higher education is a mess: the problem of quality is embedded in complex set of interacting issues that are the concern to many and varied stakeholders. The major aim of this paper was to point out the world-wide education reforms, paradigms and theories for assuring quality in higher education and to discus and suggest appropriate and most relevant strategies, indicators and models of quality assurance system in higher education for Pakistan.

INTRODUCTION

In 21st century, quality is an important issue in institutions of higher education all over the world. It gains importance because of the fact that key role of human resources have been increasing very rapidly in the present competitive world. Frazer (1994) discussed that "quality in higher education is important because universities must be accountable to society, to employers, to students, and to each other". Mok (2007) by referring different research literature has the opinion that quality in education is multifaceted, multidimensional, complex, and a dynamic positive concept. Warn and Tranter (2001) stated that in literature, quality in higher education is defined and interpreted in different number of overlapping ways. Frazer (1994) has discussed three broad aspects for quality in higher education. These are: (i) goals; (ii) the process deployed for achieving goals; and (iii) how far goals are achieved. Harvey (1997) identified five broad approaches for defining quality in higher education. These are (i) quality meaning exceptional, where quality is related to the conception of excellence; (ii) quality meaning perfection, where quality has consistent and error-free attributes; (iii) quality meaning fit for purpose, where quality fulfils the perceived requirements of stakeholders; (iv) quality meaning value for money; and (v) quality meaning transformation, i.e. quality necessarily involves a change from a current to an ideal end state.

A core component of higher education reforms all over the world is systematic quality assurance and improvement of higher education institutions (Bornmann, Mittag, & Daniel, 2006). Anderson (2006) has the opinion that the quality revolution in higher education has underscored the expectation that universities must demonstrate that they are providing quality education and producing quality research and constantly strive to improve both. Higher education is facing extraordinary challenges of quality assurance around the world universities

(Strydom, Zulu, & Murray, 2004). The current focus on quality assurance procedures emphasises compliance, accountability, reliability, credibility, development and efficiency (Hodson & Thomas, 2003). Kontio (2008) by defining quality assurance stated that quality assurance means all the procedures, processes and systems that support and develop the education and other activities of the higher education institutions. Quality assurance is the systematic and continuous attention to quality in terms of quality maintenance and quality improvement (Vroeijenstijn, 1995). Lim (2001) stated that quality assurance refers to all policies and processes directed to ensuring the maintenance and enhancement of quality. Quality assurance has been defined by Higher Education Quality Council (1994) as all those planned and systematic activities to provide adequate confidence that a product or service will satisfy given requirement for quality. Gibbons (1998) discussed that quality assurance system has been introduced in public and private universities and institutions across the world as a result of increasing demand for accountability. Strydom, Zulu, & Murray (2004) by referring research literature argued that major motivators for the establishment of quality assurance systems internationally appear to be: (i) massification of higher education; (ii) accountability from a value for money perspective; (iii) internationalisation of qualifications; (iv) increased mobility of staff and students; (v) matching programs to labour and employment needs; (vi) rise of private education; and (vii) indirect steering of higher education by governments. Due to these challenges, countries across the world developed quality assurance systems.

SYSTEMS FOR QUALITY ASSURANCE

Quality assurance systems are based on the hypothesis that everyone in higher education institution (university) has a responsibility for maintaining and enhancing the quality of the product (students). It requires commitment, time, effort, and willingness of everyone in the university, from top level administration to the lower level of hierarchy (Tam, 2001). Bogue (1998) discussed following four contemporary approaches for effective quality assurance systems in higher education:

1. Peer Review Evaluations
   This was a traditional approach mainly comprising of principles of peer review and external standards. In this approach, quality assurance was guaranteed through (i) accreditation: the test of mission and goal achievement; (ii) ranking and ratings: the test of reputation; and (iii) program reviews: the test of peer evaluation.
2. Assessment-and-Outcomes Movement
   It includes development of performance evidence and attention to value added questions.
3. Total Quality Management
   A more recent approach, which was originally developed for quality assurance in corporations and manufacturing industries with a major concern for continuous improvement and customer focus, is also used for effective quality assurance in institutions of higher education.
4. Accountability and Performance Indicator Reporting
   These reports generally provided information about enrollment trends and rates, student performance on entry examinations, retention and graduation rates in general and professional examinations. On the basis of results of performance indicators, higher educational institutions can be made accountable by public bodies.

Another approach referred as "instrumental approach" was given by Lim (2001). According to him, instrumental approach to quality assurance begins by stating the objectives of higher education institution which must be consistent with national objectives. This process is called establishing "fitness of purpose". After establishing this purpose, a series of sequential steps are involved to achieve the mission. The first step will be comprised of identification of mission of the university. A mission statement should be developed with the involvement and cooperation of all stakeholders of university. The mission statement must be consistent with the objectives, laws, and aspirations of the nation.

The second step involves identifying different functions to fulfil the missions of the university and faculties. These functions of a university are generally teaching and research and relation with community. Identification of objectives for each function and setting of quantitative and qualitative performance indicators is referred as third step. For teaching, the objectives may include providing latest, challenging and effective curriculum; effective, reliable, and valid teaching and assessment strategies. Similarly, for research, the objectives may be doing quality research in different disciplines, dissemination of results for creating new body of knowledge and to serve community and society in effective way.

The fourth step comprised of establishing quality assurance management system in university to achieve these objectives. The fifth and final phase/step will establish a quality audit system. This system will evaluate the performance of university (by applying internal and external procedures) in order to check how the system is functioning and will identify the areas where improvements are required. Lim further discussed that wherever the quality assurance systems are implemented in higher education institution, these steps are followed in same sequential steps.

Literature indicates that the instrumental approach to quality assurance system is used widely in higher education institutions of developed countries with significant differences in the implementation procedures (Ratcliff, 2003; Lim, 2001; Warn & Tranter, 2001). During the period of 1993-95, the major focus of Australian universities was on holistic or whole-of-institution approach. In this approach, Australian universities evaluated their whole system in terms of teaching, research and community services provision. On the other hand, in UK and Netherland, the major focus was research only.

Paradigms of Quality Assurance in Education

Cheng (2003) discussed three different waves of reforms for quality assurance in education starting since 1970s. According to Cheng, each reform movement is based on different paradigms and theory of education. A brief overview of these reform movements is discussed here.

First Wave Paradigm: Internal Quality Assurance

Starting in 1970s, the major concern of this wave was on the effectiveness of internal education process by emphasizing on teaching and learning. The main focus of quality assurance procedures were on the achievement of planned goals in terms of students' achievement. Cheng & Tam (1997) introduce eight models of quality in education. On the basis of these models, a comprehensive framework for understanding and conceptualizing quality in education from

different perspectives and facilitating development of management strategies for achieving it can be developed. The framework can contribute to ongoing policy discussion, school practice, and research development on issues of quality in education institutions. The models are: (i) the goals and specifications model; (ii) the resources input model; (iii) the process model; (iv) the satisfaction model; (v) the legitimacy model; (vi) the absence of problems model; (vii) the organizational learning model; and (viii) total quality management model. Among these models, the goal and specification model, the process model and the absence of problem model can be used for internal quality assurance in education because of major concern of these models on internal goal achievement, process improvement, and internal problem avoidance.

Second Wave Paradigm: Interface Quality Assurance

In the second wave since 1980s, quality assurance efforts was concerned with the satisfaction of stakeholders with the education services including education process and outcomes; and accountability to the public (Cheng, 2003) referred as interface quality assurance. Among the models discussed above, the resource input model, the satisfaction model, the legitimacy model, the organizational learning model, and total quality management model has major focus on the interface quality assurance. Resource-input model has the assumption that quality assurance in higher education can be achieved by taking high quality intake of students, recruitment of more qualified staff, better student-teacher ratio, and provision of better facilities and more financial support from the concerned authorities and society. In the satisfaction model, quality assurance refers to the extent to which the performance of educational institution can satisfy the needs and expectations of its powerful stakeholders. Quality assurance efforts in the legitimacy model are generally concerned with the concept that how well an educational institution can cope with the challenging, demanding and competitive environment of accountability in the market in order to win support of the community and stakeholders (Cheng, 2003).

Hargreaves & Hopkins (1991) have the opinion that through organizational learning model, the quality assurance in higher education can be achieved by focusing on the strategic management, developmental planning and staff development. Experts in the area of total quality management model posses a strong belief that this approach is a powerful tool for assurance and enhancement of quality in education (Cuttance, 1994; Tenner & Detoro, 1991). Quality assurance through this model referred as the total management of interface, internal people and process with outputs meeting the needs and satisfaction of stakeholders (Cheng, 2003).

Third Wave Paradigm: Future Quality Assurance

The 21st century is the era of rapid globalization. Modern and most sophisticated means of information and communication technology have long lasting effect on institutions of higher education (Välimmaa & Hoffman, 2008; Williams & Dyke, 2007). Educational policy makers and experts are facing a tremendous challenge to rethink about change in curricula and pedagogy and to prepare young people for the future so that they should be in a position to cope with present day requirement for the economic and social development of their respective countries. Experts in the field of quality assurance have the doubt about the usefulness of second wave generation of educational reforms will be in a position to meet the challenging task in the current era of globalization, information and communication technology, and knowledge based economy (Cheng, 2003). This leads to the development of future quality assurance paradigm, which based on internal and interface quality assurance models, these efforts should concentrate on the

relevance of aims, curricula, pedagogy, practices, research, and outcomes of education to meet the challenges of this modern era (Brennan & Teicher, 2008).

An Overview of Quality Assurance around the World

In this section, a brief overview of different countries is presented.

Quality Assurance in UK Higher Education System

University of Oxford and University of Cambridge are the oldest universities of United Kingdom established in twelfth and thirteen centuries followed by University of Glasgow and Aberdeen in fifteenth century. In sixteenth century, Edinburg University was established, and later on some universities and colleges were established according to the needs of UK to meet the needs of the time. Before the implementation of formal quality assurance systems in UK higher education institutions, the pre-1992 universities had a latent quasi-quality assurance system in place in shape of the traditional university committee system and external examiner system (Lim, 2001; Stanley & Patrich, 1998). Lim (2001) discussed that government in UK was not satisfied with pre-1992 quality assurance type of quality assurance system in higher education sector, so a formal quality assurance system was introduced in university sector in 1992. This system has three major components: (i) quality audit, (ii) teaching quality assessment, and (iii) research assessment exercise. Table 1 depicts the major processes of quality assurance in United Kingdom.

Table: 1. Major Processes for Quality Assurance in UK (Stanley & Patrich, 1998)

Aspects	Quality Audit	Teaching Quality Assessment	Research Assessment Exercise
Responsible Agency	Higher Education Quality Council (HEQC) (institutions); moving to Quality Assurance Agency for Higher Education (HEAAHE) (government and institutions)	Funding council (government); moving to Quality Assurance Agency for Higher Education (HEAAHE) (government and institutions)	Funding Council (government)
Purpose	To support institutions' self-regulation by auditing the procedures by which they assure themselves of the quality of their academic provision	To ensure provision is of sufficient quality to justify public support, to improve quality, and to "inform" funding and reward excellence external	Highly selective distribution of funds in support of high-quality research
Type of regulation (self, external, mixed)	Mixed	External	External
Scope (institution, department, program)	Institution	Subject area	Subject area
Activity assessed	Internal quality control mechanism for teaching and learning	Teaching and learning	Research
Criteria (framework)	Nine broad aspects of institutions' quality control mechanism	Six core aspects of subject provision	Research environment and plans
Standards	Mission-dependent	Mission-dependent	Adjudged national and international standards in each subject area
Evaluators	Predominantly peer-review, with external assessors	Predominantly peer-review, with external assessors drawn from private sector and professions	Predominantly peer-review, with external assessors drawn from private sector and professions
Self-study	Yes (self-criticism encouraged)	Yes (self-criticism encouraged)	Yes (strengths highlighted, weaknesses downplayed)
Site visit	Yes	Yes	No
Indicators used	Predominantly textual material	Student entry profile, expenditure per student, progression and completion rates, qualifications attained, subsequent destinations)	Peer-reviewed publications, research grant income, numbers of research assistants and students.
Type of rating	Detailed written report, highlighting strengths and weaknesses	Each of the six core aspects rated on a four-point scale	Seven categories, dependent on judgments concerning national and international standing
Dissemination	Funding Councils, institutions, potential consumers, press	Funding Councils, Web, institutions, potential consumers, press	Funding Councils, Web, institutions, potential consumers, press
Financial Impact	None	Funding withdrawn for persistent unsatisfactory provisions, no reward so far (1997-98) for excellent provisions	Profound: core funding focused on research excellence
Internal Impact	Significant; increasing; a more structured approach to quality control mechanism	Significant; increasing; a more structured approach to the assurance of high-quality teaching and learning	Profound: organizational structure and management; faculty recruitment; teaching neglected
External Impact	Modest; increasing, dissemination of best practice and report on findings published	Modest; increasing, dissemination of best practice and report on findings published	Considerable: bandwagon effect as more research sponsors, faculty, and students are attracted to strong areas

Lim (2001) has the opinion that on the basis of above mentioned quality assurance systems, press and other agencies by using information about all three aspects produce national ranking of universities. The ranking helps the prospective students and their parents about the selection of higher education institutions of their own choice.

Quality Assurance in Higher Education in Australia

Australian Universities were structured on the British model, funded by government and independent in teaching, learning and research. At its initial stages, quality assurance systems in Australia was compared with the benchmarks of UK standards, but after the expansion of university sector in 1970s, and 1980s, the first official higher education quality policy was introduced in 1991 (Anderson, 2006; Lim, 2001). In 1999, the Australian Universities Quality agency (AUQA) was established. Coates (2005) and Anderson (2006) have discussed that quality assurance system in Australian higher education sector is multidimensional in nature comprised of different factors including internal processes, self assessment, performance, students' feedback, peer review, and external accreditation through professional bodies.

Quality Assurance in Higher Education in Hong Kong

Hong Kong was the first country in East Asia to apply quality assurance measures to monitor the higher education sector in 1993. This policy was the impact of globalization around the world. The quality assurance mechanism in Hong Kong was comprised of institutional and academic reviews, formal and informal visits, and discussion at various levels organized by University Grants Commission (UGC). The UGC adopted a clear mission to provide higher education to people who can master high-level skills to respond to change and challenge in the future (Mok, 2000). For assuring quality teaching and learning, major attention was given to the following dimensions:

1. *Curriculum Design*: By what processes are curricula designed, reviewed, and improved?
2. *Pedagogical Design*: By what processes are the methods of teaching and learning decided upon and improved?
3. *Implementation Quality*: How well do faculty members perform their teaching duties?
4. *Outcomes Assessment*: How do staff, departments, schools, and the institution monitor student outcomes and link outcomes to the improvement of teaching and learning processes?
5. *Resource Provision*: Are the human, technical, and financial resources needed for quality made available when and where needed? (Mok, 2000, p.159).

Quality Assurance System in Higher Education in Malaysia

The quality assurance division for public sector universities was established in order to set up quality audit system. The major aim of this system was to promote public confidence about higher education in public sector universities regarding their degrees and academic program (Fehmi, 2006). The quality assurance division evaluates the academic programs of public sector institutions by conducting academic reviews, quality of learning opportunities and institutional capacity and management of standards based on approved national standards and

criteria. This division is also responsible for developing bench marks, practices, post graduate standards, procedures, and good practices for quality assurance efforts in higher education.

The Malaysian Qualification Framework (MQF) was developed by the quality assurance division in 2002 and approved by National Higher Education Council in 2005, being responsible for quality assurance of institutions and programs.

Brief Summary of Quality Assurance Efforts in Developed Countries

Lim (2001) has discussed certain conditions on the basis of which quality assurance system have worked in universities of developed countries. These are: (i) qualified academic staff is available in these universities with acceptable level of teaching and research skills; (ii) full time employment in the same institution; (iii) Availability of the required physical, electronic, and administrative support services; (iv) commitment and understanding of university's top leadership to quality assurance system; (v) appointment, retention and promotion of faculty on the basis of merit based criteria; and (vi) presence of a fair degree of academic freedom.

After going through the literature available in the area of quality assurance in higher education, it can be concluded that approaches to quality in higher education in most developed countries have started with an assumption that, for various reasons, the quality of higher education needs monitoring. At root, governments around the world are looking for higher education to be more responsive, including:

*making higher education more relevant to social and economic needs;
*widening access to higher education;
*expanding numbers, usually in the face of decreasing unit cost;
*ensuring comparability of provision and procedures, within and between institutions, including international comparisons.

Coates (2005) has the opinion that since principles and practices of quality assurance become more and more embedded in higher education, it is essential and important to raise methodological questions about quality assurance. The quality assurance methods need to be examined keeping in view the continuous changes in the phenomena being measured and as a result of feedback from the quality assurance system itself.

A Brief Overview of Performance Indicators for Quality Assurance System

Harvey (2004) defined that *performance indicators are data, usually quantitative in form, that provide a measure of some aspect of an individual's or organization's performance against which changes in performance or the performance of the others can be compared*. A definition of performance indicators by Vlăsceanu, Grünberg, & Pârlea, (2007) indicated that it is *a range of statistical parameters representing a measure of the extent to which a higher education institution or a program is performing in a certain quality dimension.* These authors have the opinion that performance indicators will only work efficiently if used as a part of a coherent set of input, process and output indicators. Segar & Dochy (1996) discussed that performance indicators provide information about the activities of an institution. Fielden & Abercromby (2001) discussed that higher education institutions can use the performance indicators for the purpose of: (i) internal management; (ii) comparison with other institutions; (iii) marketing and

image building; (iv) evaluation of teaching and research activities of individuals and departments; and (v) students entry and completion of courses. Segar & Dochy (1996) opined that performance indicators are empirical data of either qualitative or a quantitative nature. First, these indicators have to be interpreted within the context of the institution concerned, and secondly, they must be discussed as time-dependent. Quality of education is an ongoing process and performance indicators must reveal developments instead of presenting snapshots. Tavenas (2003) stated that considerable caution must be exercised in using and interpreting performance indicators. In particular:

- The statistical indicators of any university activity have to be regarded as elements that support a particular judgement rather than objective facts;
- Indicators have to be used in complementary clusters so as to give a very precise and thorough picture of the activity concerned;
- Indicators should preferably be concerned with the distinctive features of a particular institution or university sector and enable it to monitor its strategic orientations (Tavenas, 2003, PP.18).

Quality Assurance in Pakistan

In the past decade universities in developing countries have followed the international quality assurance systems to improve the quality of their activities (Lim, 2001; Idrus, 2003). Though there is a huge difference in the economic and financial status between developed and developing countries, still it will be useful to apply quality assurance system in the higher education institutions in developing countries. However, for successful system, attention must be given to conditions prevailing in the developing countries.

Lim further argued that it is necessary to check the relevance of quality assurance systems implemented in higher education in developed countries for the higher education sector of developing countries. The reason for his argument has two bases. First, It is not verified by research studies that adoption of quality assurance has produced the effects at the same intensity as it was assumed, though both positive and negative or least effects have been found in the universities of developed countries. Secondly, questions can be raised about the usefulness of successful quality assurance systems of developed countries in developing countries because of the relevancy of aims to the higher education needs of these countries.

In Pakistan, the quality assurance system in higher education was introduced by Higher Education Commission Pakistan (HEC). Azam (2007) has discussed that quality assurance program of the HEC was comprised of three major components. These were:

(i) Development of criteria and standards for various quality parameters in higher education;
(ii) Development of processes and capacity building to ensure implementation of these criteria; and
(iii) To develop a system to arrange regular internal and external monitoring of the higher education institutions in respect of the status of the implementation of the quality criteria and quality control processes (Azam, 2007).

Quality assurance committee was constituted by HEC in on October 23, 2003 comprised of Vice-Chancellors of different universities of Pakistan. The significant contribution of this

committee was developing a framework for accreditation and ranking of universities in Pakistan (Batool & Qureshi, 2006) and issuance of guidelines for Ph.D. programs.

HEC has constituted Quality assurance agency (QAA) with a mission to arrange the capacity building training/seminars and workshops in order to enable the higher education institutions of Pakistan to meet the challenges of quality assurance in higher learning. Under the auspicious of Quality Assurance Agency, in first phase, HEC has established quality enhancement cells (QEC) in 10 public sector universities of Pakistan. In phase 2 for the year 2007, HEC has planned quality enhancement cells in 20 other universities of Pakistan in order to monitor and improve the quality of higher education. These quality assurance cells have been given a mandate to introduce quality assurance procedures in universities. By analyzing the progress, work and difficulties faced by quality enhancement cells in different universities, Azam (2007) suggested that the mechanism of quality assurance should be introduced slowly and gradually in the universities of Pakistan in order to get full benefits of this program.

Proposed Model of Quality Assurance in Pakistan

Organizational culture plays a crucial role in the successful implementation of any quality assurance strategy. As we know that typical current culture in educational institutions of the world including Pakistan is bureaucratic in nature with a basic strategy of conflict rather than collaboration. Similarly, there is no single agreed upon model of quality management and assurance in higher education because of the reason that quality management models developed for industry have not been successful in educational institutions (Srikanthan & Dalrymple, 2002). Birnbaum & Deshotels (1999), by surveying about the adoption of Total Quality Management in 469 institutions of higher education in United States, andv Vazzana, Elfrink, and Bachmann (2000), who conducted a longitudinal survey involving 400 business colleges in US, have concluded that few institutions were using TQM to manage core learning process.

By reviewing the models for managing quality in education (i) Transformative model by Harvey and Knight (1996) requires the learning experience to be based on a dialogue between learners and teachers about the nature, scope and style of their learning, and also among the teachers about teaching and learning process; (ii) The engagement model by Haworth and Conrad (1997) foresees teaching and learning to be based on critical dialogue, mentoring and co-operative peer learning; and emphasizing on interaction and engagement between students, faculty and administration; (iii) University of learning model by Bowden and Marton (1998) highlights a synergetic involvement of academics in course/research team, developing a holistic view of students' competencies and a collective consciousness of what is common and what is complementary. This model argues that quality in university context relates strongly to quality of learning; (iv) The responsive university model by Tienery (1998) emphasises communication, which requires new relationships and partnerships both internally and externally, Srikanthan and Dalrymple (2002, pp.219) proposed a holistic model of quality management and assurance for higher education which can meet effectively the requirements of core function of educational institutions: service(general administrative activities) and the process of education (teaching, learning, research and community services).

Srikanthan and Dalrymple (2005) summarised the core elements of above mentioned model for addressing quality management in education as follows:

- A clear focus on transformation of the learners, enhancing them through adding value to their capability and ultimately empowering them;
- A synergetic collaboration at the learning interface which transcends not only the traditional power relationship but breaks the barriers among institutions and reaches out into developing new external partnership with the community;
- A strategic focus on assessment of the students as means of embedding and improving learning (Srikanthan & Dalrymple, 2005, pp.70).

Srikanthan and Dalrymple (2005) concluded that to implement the holistic model for assuring quality management in higher education effectively, institutions focus on learners and their learning.

Coates (2005) discussed value of students' engagement data for quality assurance. He argued that this data will provide a highly sensitive index for assuring and generating high quality learning outcomes. Student engagement data will provide a means for determining the productivity of the university education. So, the main significance of students' engagement data may be that it focuses on the quality of the university education on students and their learning.

Phase Model of Quality Assurance

Jeliazkova & Westerheijden (2001) discussed a phases in quality assurance system which based on two principles of internal and external dynamics. The basic idea behind this model suggested by the authors is that different types of problems in higher education systems are best addressed through different types of quality assurance systems. The model is given in table 2.

1. Problems	2. Role of quality assurance	3. Information base	4. Nature of external review
Phase 1: Serious doubts about educational standards.	a) Identifying sub-standard educational programs.	Descriptive reports. Performance indicators.	Summative; accreditation, checking standards. Report to state.
Phase 2: Doubts about the efficiency of the higher education system and/or institutions.	a) Public accountability b) Creating quality awareness in institutions	Descriptive reports Covering: a) performance, b) procedures	Ranking of institutions. One report to state and institutions Identifying good practices
Phase 3: Doubt about innovation capacity and quality assurance capacity of institutions	Stimulate self- regulation capacity of institutions Public accountability	Self-evaluation reports about: a) performance, b) procedures	Audit report to: - the institution - the state
Phase 4: Need to stimulate sustainable quality culture in institutions	Split between: - improvement based on self-regulation - public accountability	Split between: - self-evaluation reports about processes and strategies based on benchmarking; - self-report about performance indicators	Split between: - audit report to the institution; - verifying data to be incorporated in public data bases
New challenge: Decreasing transparency across higher education systems	Market regulation, i.e., informing clients (students, employers)	Performance indicators about 'products' (knowledge and skills of the graduates)	Publication of comparative performance indicators Standard testing of graduates?

Adopted from Jeliazkova & Westerheijden (2001; pp: 3)

After going through the research literature, efforts, activities and models in the discipline of quality assurance, we propose that a Quality Assurance Model for higher education in Pakistan should be combination of Holistic Model and Phase Model of quality assurance with following three components, with a major emphasis on teaching and learning process and active students' engagement and quality assessment procedures;

1) External Evaluation Procedures;
2) Internal Evaluation Procedures; and
3) Performance Indicators.

CONCLUSION

Quality assurance in higher education is an important topic and concern for everyone who is involved in education: the academic staff, the students, the administrators, as well as tax payers. In Pakistan, there is growing interest, effort, and concern for effective quality assurance systems in order to excel as a nation in the world of globalization. However, this needs a high level of commitment and cooperation from administrative leaders, faculty members and students to meet the challenges of 21st century and make Pakistan a prosperous and developed country.

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