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Parameters of Quality in Higher Education: A Theoretical Framework

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Abstract

The concept of "quality in education" is an immensely significant concern for academicians and academia globally, and lately this notion has also treaded the realm of Higher Education in Pakistan. It is an accepted fact that there are a number of factors responsible for assuring quality in education both internal and external to an institution. Any endeavour to either induce or monitor quality in academic setting hinges on the awareness about the factors responsible in bringing about this desired attribute. This paper presents a theoretical framework the concept of Quality in Higher Education by identifying the parameters which are central contributors towards quality of an academic institute of higher learning. The descriptive study identifies and explains these parameters, including Higher Education policies and practices, curriculum, faculty KSA, institutional design and strategy, institutional leadership, learners' profile, resources, open-system thinking and change, and the sub factors in each parameter of this "octet of quality in education." The study attempted to link the recent trends in Higher Education in the local context with the global practices associated with quality assurance thereby providing a starting point for targeting quality in higher education. The presented octet paints vividly the concept of how to achieve quality and enables individuals and institutions instantaneously identify the component which is missing in their quality assurance mechanism through which attaining quality seems unattainable.

1. Background

Quality is a key concern of academia across the globe and several efforts in multiple directions are made by the administrators and academicians to induce this component into the teaching learning situation. In developed countries, following massive research and scholarly output (Bonser, 1992; Crosby, 1979; Feigenbaum 1983; Juran and Gryna, 1988; Peters and Waterman, 1982), quality assurance remains the basic component in the policies and practices of the institutions that are training individuals for assuming various roles in the society. They are fully conscious of the fact that if quality in education is ignored, then, profound adverse affects are created on the society which reduces the concept of viewing "education as means to harmonize and develop societies" to a mere fantasy (Holt, 2000, UNESCO, 1996). In the developing countries also, presently, there is a shift in the value system pertaining education and those involved in education have begun discussions regarding the missing quality factor in their respective education system which has rendered all efforts surrounding the training and grooming of masses completely ineffective.

In the local contexts quality is becoming the focal point of all academic policies and practices, a fact evident from the establishment of Quality Assurance office in the Higher Education Commission, Quality Enhancement Cells in general and professional universities, ISO Certified academic institutions. Also, academia are holding conferences on this theme to create awareness and to work out modalities how to achieve quality at collective and individual levels within academia in its entire domains viz. curriculum, pedagogy, and testing. (AKU-IED, 2006). It is encouraging to see the local scenario changing with an increase in the concern exhibited for quality. However, attaining quality as an outcome of the academic activity, factors that are crucial for inducing quality in education and the needed procedures and policies that ensure quality are the issues which still need to be settled before one can appreciate the present scenario portraying a general concern for quality in education.

Quality in education is seen as a positive and dynamic idea achievable by design with meaningful investment (Crawford and Shuttler,1999) and the quest for quality should reflect customer oriented approach with continuous improvement of the products and services, and of the processes brought about by the planning, implementing, evaluating, and decision making methods (Navaratnam, 1997). Quality principles in higher education are meeting customer needs, continuous improvement, leadership, human resource development motivation, appreciation and reward, coordinated teamwork, evaluation and decision making (Seymour, 1992). Quality in education is achieved when education output conforms with the planned goals, specifications and requirements (Crosby, 1979). Hence, quality is not a vague concept which can be made visible by the presence of one or more beneficial feature which were either made possible because of preference or convenience; rather, quality in education is a very conscious and planned effort of all those who are involved and about every stage and component in this activity. Quality in education may assume myriad forms owing to the numbers of institutions and their nature, stakeholders and their concerns, regulatory bodies and their authority; also because of the significance and seriousness that is attached to education by the state and its citizens; therefore, it is imperative to identify a framework which would provide baseline for initiating efforts towards quality assurance and would also provide a criteria for its evaluation.

Octet of Quality in Higher Education: Framework for Quality
The need for addressing the issue of Quality in higher education is confronted time and again when teaching and testing, while admitting and passing out students, in carrying out academic and administrative activities whether general or professional university in the public or private sector. The need to enhance the quality of higher education is strongly felt when the students are seen struggling in the global workforce market, professions and technical fields operating with compromised professionalism and excellence resulting in creating obstacles to national growth and prosperity. This paper attempts to present a framework that identifies core factors that induce quality in higher education. These factors are seen as contributing towards quality assurance of an academia. Analysis of the research findings on quality in education in quality assurance as well as best practices formulate the bases for identifying important parameters which constitute the notion of quality. This quality framework sees eight key components responsible for driving the quality attribute of an academic institution. Due to the eight factors the model is termed as Octet of Quality for HE [See fig. 1 below]

Fig.1 Octet of Quality: Factors instrumental in Quality Assurance of an Academia
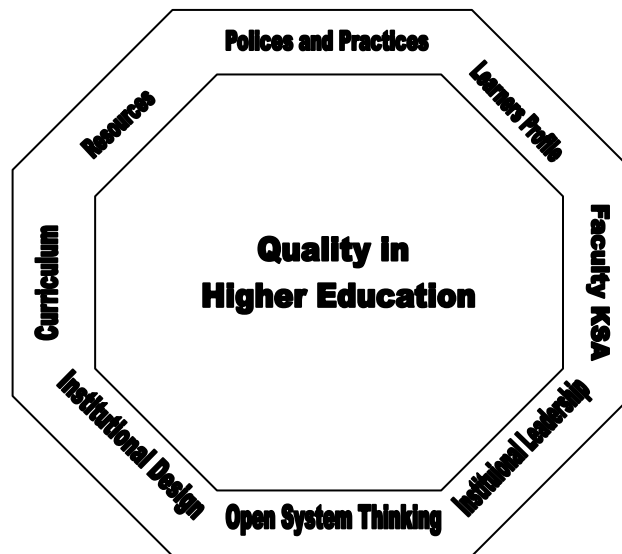
Higher Education policies and practices

Quality in education has to be the fundamental concern of all those involved with this activity and whatever happens within this domain as the act of academia. This is only possible if this characteristic is not left at the discretion of the individuals but it has to be targeted religiously as a matter of principle by the concerned authority. At higher education level, it is then the responsibility of Higher Education Commission to focus on quality as the ultimate objective and to ensure policies and practices that are governed by quality standards. The policies and practices of Higher Education should be in accordance with the global standards and must be considered as the framework and benchmark to all institutions and individuals working within the higher education. Instead of merely acting as a policy making and regulatory body , Higher Education through its policies must provide an umbrella to nurture all other quality factors and the policies should be such as to push forward the existing baseline of current quality standards and not to merely dictate a futuristic intimidating goal. Rather, policies which create a thirst amongst higher education community and a climate within academia to assess available resources, of all shapes and forms, in different areas. The present perspective of being outward looking has to be replaced with more inward looking attitude which will ensue in finding solutions to our problems, in harnessing the indigenous talent and resources, and in becoming self reliant. The HE policies and practices should be undertaken simultaneously in three areas viz. Physical, policies focusing on the infrastructure; Human Capital, policies towards faculty, administration and staff development; and Intellectual policies for improving research, curriculum etc.

Also while developing policies the academic institutions should be viewed as a dynamic body and distinctively unique with various interconnected and interdependent components including infrastructure, personnel, instructional resources, programmes, activities etc. Hence, holistic thinking also called systems thinking is needed to really expect quality as an outcome of the framed policies which are to be implemented successfully.

Resources

Another important and often neglected aspect of the quality is the availability of resources to an institution. These resources can be physical, i.e. infrastructure, building, labs, furniture, equipments, books, research journals etc,; human resource, i.e. faculty, administrative and other support staff; financial, i.e. funds available to carry on different projects and managing events or petty cash to run day to day affairs.   Adequate, continuous and timely availability and utilization of these resources assures the proper implementation of various policies that are essential to achieve quality objectively. The bleak scenario of resources, as evident from various statistics (percentage of GDP spend on higher education) in comparison with top 500 universities of the world, poses a challenge to the policy makers and creates a threat to those who implement these policies. In fact, resources within an academic setting combine all other components like: policies, curriculum, and faculty input; together to mark the presence of a system. Availability of physical and virtual resources today is a key factor in proper functioning, future growth and development and quality assurance of an academic unit, and is also catalytic in greater motivation and satisfaction of the key stakeholders: staff, faculty and students. A comprehensive planning to acquire new resources, a policy to protect and audit existing resources, and the study of cost benefit analysis of major resource planning, are essentially important for an institution of higher education to strategically utilize their resources for the competitive edge and play a pivot role in bringing quality.

Learners' Profile

The numbers of students taking part in university has increased globally especially in the last two decades this increase has been quite significant (HERO, 2007). This increase in the participants' numbers has also increased the variety of students that join higher education. The learners' profile today indicates diverse entry level qualifications, experiences, cultures, expectations, motivations (Hay and et all, 2008). Today, the learners represent "NET Generation characterized as digitally literate and connected; experiential; entrepreneurial and independent; rejecting micromanagement; and valuing empowerment, collaboration,

and immediacy (Munro, 2006). The learners' profile then interacts with all the components and factors of the education process, and influences the overall effectiveness and quality of education.

The educational system organizes methods, modalities and means for the acquisition of adequate competencies, the provision of equal opportunities, and fair encouragement of excellence, as part of its core activity of preparing young people to contribute to their professions and to take active part in the growth of their nation. Hence, the educational curriculum needs to be devised so as to involve the affective, spiritual, societal, psychological and cognitive personality traits of the learners and practicable in diverse pedagogical settings inside the class and the workplace, through appropriate pedagogical actions. The academic programmes which learners take up at Higher Education level should introduce admission profiles, and an adequate system of consultation and orientation based on true and fair treatment of learners' abilities and dispositions; and more importantly the needs of the employment world are incorporated. As regards access to higher education, the learners should be trained to gain the admission profile required by its various institutions, and acquainted by their programmes and horizons in their relation to the training of middle and upper positions and careers in the social, economic, cultural and artistic fields, on the one hand, and scientific research development, on the other.

Curriculum

Curriculum is the road map which identifies the direction in which the journey has to be made and also ensures the manner in which it has to be completed. Quality in education heavily rests with the quality of the curriculum in terms of the objectives and outcomes, contents and credits, materials and methods and assessment and audio-visual aids. Curriculum development process and the final product is influenced by the facts that curriculum change is the normal expected consequence of changes in the environment; curriculum development is perceived as a multilevel, multi-sector process and as a collaborative effort; curriculum workers have the responsibility to seek ways of making continuous improvement in the curriculum; curriculum possesses an organized set of principles, a body of knowledge and skills for which training is needed and its theoreticians and practitioners; curriculum planning begins with empirical study of the needs of students, society and the disciplines and curriculum planners should conduct systematic needs assessment to identify the discrepancies between desired and actual student performance (Oliva, 1997; Oliver, 1977; Taba, 1962). Incorporating the theory and practice of career development, the curriculum at higher education should be developed using the standard curriculum development models and approaches, and the curriculum in each discipline should accomplish the national objectives while addressing the local and global needs, this desired attribute is validated by P.F. Oliva in these words "A holistic approach to curriculum development begins with an examination of the aims of education in society. Aims are perceived as the broad purposes of education that are national and, on occasion, international scope" (p 195). The international standards and the changing trends within the subject domain should remain major influences affecting the curriculum; also the focus on knowledge and skill building through theory and applications should be decided on realistic needs of the actual world settings for which the students are groomed using the curriculum. However, contemporary curriculum development practices reflect that the curriculum process is carried out ignoring the technical steps of the activity; furthermore, the curriculum development is undertaken by individuals who do not possess this specialized expertise. This, then, results in the production of a document with a list of topics to be taught without mentioning the instructional objectives or learning outcomes, standards or benchmarks, instructional and assessment plans and procedures, and materials essential and supplemental. This vague document then takes the teaching learning in altogether different directions, ultimately the quality issues creep in and the basic purpose of the education is lost.

Faculty KSA

Educational institutions are also called human systems since the process is carried out by faculty, the primary input, and is enacted on students, the products or the output of the entire effort. Faculty knowledge, skills and abilities (KSA) are vital to bring quality in higher education. In fact, they are seen as the principal agents of inducing quality in education (Zaki, 2006). Policies, curriculum, socioeconomic

factors can improve academia only if the teachers are armed with the knowledge, skills and supports, quality is directly proportional to the quality of teachers, what students learn is directly related to what and how teachers teach; and what and how teachers teach depend on the knowledge, skills and commitments they bring to their teaching (Nemser, 2001; National Commission on Teaching and America's Future, 1996; Darling-Hammond, 2000; Reeves 2000). Faculty is no longer the mere transporters of information and knowledge from curriculum to learners; but they translate and give forms and meanings to the curriculum so that it becomes meaningful and beneficial to the learners and through them to all other stake holders. With the onset of knowledge based economy, the faculty KSA attains even greater significance and to achieve the desired impact on quality faculty should be equipped with latest knowledge in their respective disciplines. With the changes in the market demand and also with the changes taking place in the environment, it is expected that the teachers are constantly updating themselves with the current knowledge and skills. The knowledge and skills that were required to become a teacher at higher education have considerably changed largely due to knowledge explosion in different disciplines owing to extensive research and technological advancements and with the advent of ICT, consequently teachers are required to continually upgrade their sets of knowledge and skills to effectively execute their responsibilities and to strengthen the quality factor. Faculty should be encouraged to engage in their growth and development activities alongside providing training and development opportunities as part of their work assignments. Besides opportunities for further education and research engagements, both pre-service and in-service trainings could be arranged to work on faculty KSA. Training and development should be planned in three areas viz. subject domain, education psychology, modern teaching methods. One extremely desirable trait, which is simply missing in our academic settings generally, is the professional attitude of the faculty which renders all attempts towards quality completely ineffective. There is dire need to work on the attitudes of faculty and to improve their professional outlook.

Institutional Design and Strategy

An education institution provides the underpinning to implement the policies and strategies designed to achieve quality education. This institution can have several dimensions and designs of structure; however, two broad dimensions viz. structural dimension and contextual dimension are considered significant (Daft, 2001). The structural dimensions provide labels to describe internal characteristics and create the basis of measuring and comparing the institutions; while the contextual dimensions characterise whole organization, including its size, technology, environment, and goals, these dimensions describe the settings that influences and shape the structural dimension. Structural dimensions include formalization, specialization, hierarchy of authority, centralization, and professionalism, whereas contextual dimensions include size, organizational technology, environment, goals and strategy and culture (Greenberg and Baron, 2003). The organizational design interacts with various other factors like faculty KSA, curriculum, and transferring of knowledge. An effective design enhances the quality and helps in achieving the desired results. It also provides the basis of setting up various quality metrics to quantify and measure the 'quality on continuous basis. An effective and efficient lean structure of administrative hierarchy helps to execute the policies swiftly to get desired results, while a bureaucratic structure hampers the efficiency. The higher educational policies and institutional structure are interdependent, for example introducing the research culture at higher education level requires a good technological blend and infrastructure that can provide the ease in managing resources. Policy alone cannot work in a vacuum where all other essential elements are missing.

Institutional Leadership

Leadership is a distinct trait exhibited through special characteristics of the individuals, and the kinds of activities they envisage and carry out for leading their organization and the people who are to follow them. House et al. (1999) defined leadership as "the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the organization…." (as described Yukl, 2006). The concept of leadership also includes the ability to "envision strategic contingencies" (Daft, 2001, p. 453), to implement dynamic decision making, to counter uncertainty, and to organize inter

dependencies and networks (Daft, 2001). Drawing on the theory and practices of leadership, the leadership of an academic institution will provide guidance and direction to implement the set policies, to achieve the identified objectives, and to set forth 'quality'. The prevailing influence of the leader helps to optimize the organizational resources, and motivate the faculty to produce the best within them. A proactive leader may perceive the upcoming challenges and opportunities; hence prepare its institution to confront these challenges and opportunities effectively and efficiently. The challenges and opportunities can be, either changing workplace requirements, upgrading of curriculum, faculty hiring, training, and retaining, or setting the performance benchmarks in every aspect and measuring them effectively. A successful leader not just provides the clear vision and competitive strategies to achieve ambitious goals, but also enhances the institutional image and credibility among faculty and students in particular and society in general. A leader also works to prepare its successor for the survival of the institution and promote others to work in environment conducive to teaching and learning with open thinking.

Open-System Thinking and Change

Quality is primarily a concern of a conscientious organization that is determined to continuous growth and development. Such organizations reflect a culture of experimentation and adaptation, and are seen revisiting their systems and processes in order to avoid stagnation. Today, an academia must exhibit the norms of a learning organization which will replace the existing culture of stagnation due to conventional pedagogical approach and long established systems and procedures.

Open system thinking is required for creating learning organizations (Senge, 1990). Learning organizations can cope effectively with rapidly changing environmental demands (French and Bell, 1999). Senge (1990...) believes that five disciplines must be mastered to create a learning organization: personal mastery, mental models, building shared vision, team learning, and system thinking. Hence, higher education institution must have open system thinking that will enable them to cope with emergent challenges and changes in educational leadership and management, specific subject domain, and teaching and learning models, educational technologies. This will also bridge the gap among industrial demand, academic policies, social and environmental needs, and students' choice towards a specific career.

Universities and higher learning seats require a cohesive vision that must be shared with all stake holders, and must be agreed upon to accomplish the specific goals like high standard research, quality education, and building moral and ethical values among the students. Also, the teams that are working to achieve these goals must possess the attitude and the skills to accommodate the changes affecting the streams of activities within the higher education including teaching, learning, research, and other support activities (Singh, 2003).

2. Conclusion

Quality in Higher Education is an established notion which is described vividly in terms of desirable characteristics of the activities undertaken, individuals involved, and infrastructure needed. For the higher education scenario in the local context, quality is achievable if the factors influencing quality are identified and then consciously manipulating these will allow quality to be induced in the education system in our country. The given framework is an attempt to consciously identify factors that are instrumental in the effective functioning of academia and their success in achieving the main objectives of the educational activity.

References

AKU- IED (2006), Quality in Education: Teaching and Leadership in Challenging Times, International Conference on Quality in Education, AKU-IED, Karachi.

Bonser, C.F. (1992), Total Quality Education, *Public Administration Review*, 52(5).

Crawford, L.E.D. and P. Shutler (1999), Total quality management in Education: Problems and Issues for Classroom Teachers, *The International Journal of Educational Management*, 13 (2)

Crosby, P.B. (1979), *Quality is Free: Art of Making Quality Certain*, McGraw Hill, New York.

Daft, R. L. (2001), *Organization Theory and Design* (Seventh Edition), South Western Thomson Learning Inc., USA.

Darling – Hammond, L. (2000), Teacher Quality and Student Achievement: A Review of State Policy Evidence", *Education Policy Analysis Archives*, 8(1), Retrieved September 2003 from http://epaa.asu.edu/epaa/v8n1/

Feigenbaum, A.V. (1983), *Total quality Control*, McGraw Hill, New York.

French, W. L, and Cecil, H. B. (1999), *Organization Development: Behaviour Science Interventions for Organization Improvement* (Sixth edition), Prentice Hall, India.

Greenberg, J. and Baron R. A. (2003), *Behaviour in Organizations: Understanding and Managing the Human Side of Work*, Prentice-Hall India, New Delhi.

Hay, D. and et all. (2008), Making Learning Visible: The Role of Concept Mapping in Higher Education, *Studies in Higher Education*, 33(3), pp 295-311.

HERO (2007), The website of Higher Education and Research Opportunities in the UK. http://www.hero.ac.uk/uk/inside_he/higher_education_statistics6763.cfm retrieved 14 February 2007

Holt, M. (2000), The Concept of Quality in Education, in C.Hoy,C. Byane-Jardine, and M.Wood (eds), *Improving Quality in Education*, Falmer Press, London.

Juran, J.M. and F.M. Gryna, Jr.(eds) (1988), *Juran's Quality Control Handbook*(Fourth Edition), McGraw Hill, New York.

Munro, C. R. (2006), Transitioning from Traditional Classroom Training to Laptop-Facilitated Learning: Responding to the orientations and Preferences of the Net Generation, *College Quarterly*, Winter 9(1) retrieved from http:// www.senecac.on.ca/quarterly/2006-vol09-num01-winter/munro.htmlon 15 July 2008.

National Commission on Teaching on America's Future. (1996), *What Matters Most: Teaching for America's Future.* Author, New York.

Navaratnam, K. K. (1997), Quality Management in Education Must be a Never-ending Journey, in K. Watson, C.Modgil and S. Modgil (eds), Educational Dilemmas: Debate and Diversity, Vol VI: *Quality in Education*, Cassell, London.

Nemser, S. F. (2001), From Preparation to Practice: Designing a Continuum to Strengthen and Sustain Teaching, *Teachers College Record*. 103(6), 1013-1055.

Oliva, P. F. (1997), *Developing the Curriculum* (Fourth Edition), Addison Wesley Longman, New York.

Oliver, A. I. (1977), *Curriculum Improvement* (Second Edition), Harper and Row, New York.

Peters, T.J. and R.H. Waterman, Jr. (1982), *In Search of Excellence*, Harper and Row, New York.

Reeves, D. B. (2000), *Accountability in Action: A Blue Print for Learning Organizations*. Advanced Learning Press, Denver.

Senge, P.M. (1990), *The Fifth Discipline: The Art and Practice of the Learning Organizations*, Doubleday, New York.

Seymour, D. (1992), *On Q: Causing quality in Higher Education*, Macmillan, New York.

Singh, N. (2003), *Organizational Behaviour: Concepts, Theory, and Practices*, Deep and Deep Publications, New Delhi.

Taba, H. (1962), *Curriculum Development: Theory and Practice*, Harcourt Brace Jovanovich, New York.

UNESCO (1996), Learning: The Treasure Within, Report to UNESCO of the International Commission on Education in the 21st Century, UNESCO, Paris.

Yukl, G. (2007), *Leadership in Organizations*, (6th ed.), Pearson Education, India.

Zaki, S. (2006), "Rethinking Quality through Components of Teaching Process in Teacher Education." Paper presented at "International Conference on Quality in Education", AKU-IED, Karachi, proceedings pp 746-755.