

ANOTHER PERSPECTIVE OF QUALITY DIMENSIONS IN EDUCATION

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Abstract

Like any other businesses, education needs quality. In the name of quality interest an organization is guaranteed be able to improve the effectiveness, efficiency, cohesiveness, flexibility, and competitiveness of its business as a whole. In the last few years there have been ever-increasing efforts devoted to the evaluation of quality and standards in education and other public services. Quality in education may even be more difficult to define than in most other sectors. In the past decade, following rapid economic development, the education systems of most countries or areas in the Asia-Pacific region have been expanded quickly. Currently, the people in this region are concerned with not only education quantity but also education quality. The indicators of education quality are often the satisfaction of students, teachers, parents, administrators, the education authority, the management committee, alumni, et cetera. This article gives another perspective of measuring educational management quality.

Key Words : education quality

A. Problem Background

No-one who works in education can be unaware of the profound changes which have occurred in the 1990s. These include:

1. increase in size and diversity of the student population;
2. increased expectations of quality by stakeholders;
3. greater accountability of academic functions, e.g. research and teaching; and
4. increased emphasis on efficient and effective management (Partington and Brown, 1997).

Since they were introduced in 1987 to alleviate pressures for formalized quality assurance, ISO 9000 standards have caused a business revolution. Today, more than 350,000 organizations worldwide are registered to these standards. Since they were introduced in 1987 to alleviate pressures for formalized quality assurance, ISO 9000 standards have caused a business revolution. Today, more than 350,000 organizations worldwide are registered to these standards.

Like any other businesses, education needs quality. Total Quality Management (TQM) is a way of managing to improve the effectiveness, efficiency, cohesiveness, flexibility, and competitiveness of a business as a whole. As defined by ISO 9004 (BSI, 1993), TQM is a management philosophy and company practices which aim to harness the human and material

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resources of an organization in the most effective way to achieve the objectives of the organization (Ho and Wearn, 1996).

As a good example, Taiwan where almost all polytechnics are registered. In the United Kingdom and Australia, where governments also place a high emphasis on quality assurance, several universities (for instance Wolverhampton and the Royal Melbourne Institute of Technology) have been operating for five or more years with ISO 9000 quality systems. On the other side of the spectrum is North America, where the number of registered engineering educational institutions can be counted with the fingers of a single hand, and any concerns about quality assurance are promptly set aside under the banner of program accreditation. For instance, the Canadian Engineering Accreditation Board (CEAB) approves engineering programs across the country by visiting and examining each school every six years. Accredited schools (virtually all in Canada) can then claim that they provide "quality education" since they are accredited.

The situation is similar in the United States, where accreditation is performed by the Accreditation Board for Engineering and Technology (ABET). While it is clear that such accreditation schemes provide some degree of confidence in the quality of education, the looming question becomes: "Is this enough?" In other words, do we need to employ additional methods and efforts to assure interested parties that our students will have adequate knowledge when they graduate, that they will be able to find good jobs and excel in their careers? (Stanislav, 2001).

The indicators of education quality are often the satisfaction of students, teachers, parents, administrators, the education authority, the management committee, alumni, et cetera. (Cheng et. al, 1997). In the last few years there have been ever-increasing efforts devoted to the evaluation of quality and standards in education and other public services. In the past decade, following rapid economic development, the education systems of most countries or areas in the Asia-Pacific region have been expanded quickly. Currently, the people in this region are concerned with not only education quantity but also education quality.

Matthews (1993) cites the following four critical barriers to the utilization of TQM in academia (Jitesh Thakkar et. al, 2006):

1. the highly generic, and inappropriate nature of an average institution mission;
2. a lack of agreement within the academic environment as to the meaning or implications of "quality and excellence";
3. the independence of key individuals within the academic environment; and
4. the reluctance of college or university leaders to play an aggressive and creative role in TQM implementation.

In seeking to design instruments to measure the quality of education, it is important to appreciate the complexities associated with measuring and enhancing quality in education; the central role of perceptions and expectations and the complexity of the contributions of the different types of customer, in evaluating and determining the nature of and resources available to create the educational experience. Service contracts, in the first instance with students, which embrace formal, informal and psychological elements, offer one approach to managing expectations and perceptions in such a way as to generate more positive quality judgments. This article explores some aspects related to the measuring of service quality in education. This article will be divided in three parts, that are quality concept, education quality, and model of quality in education.

B. Quality Concept

There are a number of well-known quality definitions: "the totality of features and characteristics of a product or service that bears on its ability to meet a stated or implied need"; "conformance to requirement" (Crosby, 1979); and "fitness for use". Japanese companies find the old suggestion of quality, "the degree of conformance to a standard", too narrow and, consequently, have started to use a new definition of quality of "customer satisfaction" (Wayne, 1983).

Quality is one of the many concepts in the social sciences that is extremely difficult to define. Rather than trying to find a set definition, it might be useful to create an insight into the many dimensions that form a fuzzy entity referred to as quality through social consensus (Gummesson via Stefan et.al, 2004). Based on a thorough literature review, Garvin (via Stefan et.al, 2004) has classified the definitions of quality into five major groups.

1. Transcendent definitions. These definitions are subjective and personal. They are eternal but go beyond measurement and logical description. They are related to concepts such as beauty and love.
2. Product-based definitions. Quality is seen as a measurable variable. The bases for measurement are objective attributes of the product.
3. User-based definitions. Quality is a means for customer satisfaction. This makes these definitions individual and partly subjective.
4. Manufacturing-based definitions. Quality is seen as conformance to requirements and specifications.
5. Value-based definitions. These definitions define quality in relation to costs. Quality is seen as providing good value for costs.

Rowley (1997) concluded that the dimensions of quality initially included:

1. Reliability - the service is carried out in the way it is promised.
2. Responsiveness - services are carried out promptly according to the needs of the customers.
3. Competence - the staff of the service provider have the knowledge and skills required for delivering the service in a proper way.
4. Access - concerns, e.g. opening hours, physical location, etc.
5. Courtesy - the staff are polite, friendly, respectful, etc.
6. Communication - keeping the customers informed in a language that they can understand and listening to them.
7. Credibility - the service provider is trustworthy, believable and honest.
8. Security - freedom from danger, risk or doubt.
9. Understanding the customer - the service provider makes an effort to understand the needs and wants of the individual customers.
10. Tangibles - physical objects that are needed for carrying out the service such as facilities, equipment, etc.

C. Education Quality

Quality in education may even be more difficult to define than in most other sectors. Frazer (via Rowley, 1997) argues that a first important step would be to agree internationally on terms such as levels, standards, effectiveness and efficiency. Such agreement on basic factors is also an objective for the so-called "Bologna process" of integration currently taking place in Europe. Martens and Presser (via Rowley, 1997) emphasise the importance of quality learning, which should be focused on meaning and not on reproduction. Discussing quality in education, Harvey and Green (via Rowley, 1997) propose five discrete but interrelated ways of thinking about quality:

1. Quality as exceptional. Quality is regarded in terms of excellence, which means something special or exceptional. High standards are exceeded.
2. Quality as perfection or consistency. The focus is on processes and specifications that are aimed to be perfectly met. Excellence, in this case, means "zero defects", i.e. perfection.
3. Quality as fitness for purpose. Quality has meaning only in relation to the purpose of the product. In traditional quality management, the "fitness for purpose" notion is related to the customers (Quran, 1988). In education, however, Harvey and Green see the view of quality as "meeting customer requirements" as problematic due to the contentiousness of the notion of "customer" and the difficulty for, e.g. students to specify what is required.
4. Quality as value for money. Quality is equated with levels of specifications and is directly related to costs.
5. Quality as transformation. The process should ideally bring about a qualitative change, a fundamental change of form such as the phase transition when water transforms into ice as the temperature is lowered. This view can be found in the thinking of major Western philosophers as well as in Eastern philosophies. In education, the transformation can take the form of enhancement and empowerment.

Doherty (1997) developed six aspects of subject provision in quality assessment. Those aspects are curriculum design, content and organization, teaching, learning and assessment, student progression and achievement, student support and guidance, learning resources, quality assurance and enhancement. They are elaborated in more indicators as follows:

1. the currency and relevance of curricula;
2. the fitness of curricula, teaching, assessment, support and guidance to the student profile;
3. the links between staff interests, research, expertise and curriculum content and teaching methods;
4. the acquisition of transferable skills;
5. the level of academic achievement in the light of entry qualifications;
6. success in gaining employment and/or access to qualifications and research;
7. the effectiveness of academic and pastoral guidance;
8. the fitness to purpose of learning resources and the extent to which they are effectively used by the subject-provider;
9. the effectiveness of the subject provider in the context of institutional quality assurance systems and procedures;
10. the effectiveness of the subject-provider's quality enhancement strategies in the development of both human and physical resources.

The construct of quality as conceptualized in the services literature centers on perceived quality. Perceived quality is defined as the consumer's judgment about an entity's overall excellence or superiority (Zeithaml via Rowley, 1997). Perceived quality is a form of attitude, related to, but not the same as, satisfaction, and resulting from a comparison of expectations with perceptions of performance.

Oliver's summary of the nature of satisfaction confirms the transaction-specific nature of satisfaction, and differentiates it from attitude, thus attitude is the consumer's relatively enduring affective orientation for a product, store or process (e.g. customer service) while satisfaction is the emotional reaction following a disconfirmation experience which acts on the base attitude level and is consumption-specific. Students are the main customer of the service (Ho, and Wearn, 1996).

Attitude is therefore measured in terms more general to product or store and is less situationally oriented (Rowley, 1997). Perceived service quality, then, is a global judgement, whereas satisfaction is related to a specific transaction. Many authors (Gronroos, 1988;

Lehtinen and Lehtinen, 1982; Parasuraman et al., 1985; Sasser et al. 1978) support the notion that service quality as perceived by customers stems from a comparison of what they feel that service organizations should offer (i.e. from their expectations) with their perception of the performance of organizations providing the services (Rowley, 1997):

$$\text{Quality} = \text{customer's perception} - \text{customer's expectations}$$

It is important to note that the term "expectations" is used differently in the consumer satisfaction literature and in the service quality literature, since this is a significant source of potential confusion. Specifically, in the satisfaction literature, expectations are viewed as predictions made by consumers about what is likely to happen during an impending transaction or exchange. On the other hand, in the service quality literature expectations are viewed as desires or wants of consumers, or what they feel a service should offer rather than would offer (Rowley, 1997).

The terms "quality" and "standards" are used rather loosely in the UK. Part of the looseness arises because various interested parties bring different perspectives to bear. The definition of quality that is given in the quality vocabulary of ISO 8042: "the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs" (Mantz, 1999).

Rowley (1997) wrote that education quality related to the success with which an institution provides educational environments which enable students effectively to achieve worthwhile learning goals including appropriate academic standards. The focus in this definition is clearly on the learning experience. Work on the evaluation of the student experience can be divided into two overlapping categories:

- (1). research that focuses on assessing teaching and learning, and
- (2). research that seeks to assess the quality of the total student experience

Related to the previous indicators, Wilkinson (2007) formulated key quality indicators to education in a below model:



Partington and Brown (1997) cited that, four key components considered to validate institutions quality are:

1. student achievement;
2. teaching and learning;
3. assessment and feedback of and about teaching and learning; and
4. course or programme design and curriculum.

The five indicators used to reach a judgment are:

1. students' experience or qualifications on entry;
2. availability and use of resources, including accommodation;
3. staffing, including staff development;
4. student support and guidance; and
5. completion rates and qualifications achieved.

In order to compete effectively in the marketplace, an educational institution needs to differentiate itself from competitors. The use of marketing in this context could be very beneficial to educational institutions, but one of the major problems that educational institutions face when attempting to introduce marketing is the negative attitude that some educators and members of the public have towards marketing.

There were a number of recommendations pertaining to faculty advisorship that have been incorporated into the guidelines document produced by that particular workshop working group. The seven recommendations are:

1. Classroom allocation should be decentralized.
2. More classrooms, particularly small seminar rooms, should be built.
3. The Regional Computer Center and the Center for Library and Information Resources should be restructured so that they work alongside faculty to provide better student services (like the Center for Language and Educational Technology has done).
4. An orientation program is needed for new faculty, to include an element on examinations.
5. We should continue to try to attract good students, as institutions are judged mainly by their "best" alumni.
6. Faculty professional development is a key issue which is not receiving enough attention at AIT at the moment.
7. Entry procedures should be changed so that more students can take advantage of AIT's pre-study language and academic programs (Connelly, 1997).

Jitesh, et. al. (2006) wrote some components in quality assurance in education that should really exist. The components are depicted in tables below:

Table 1. Quality Indicators

Broad classification	Codes	Detailed requirements	Importance rating
Infrastructural requirements (A)	A1	College building and premises	7
	A2	Availability of sufficient space for various laboratories and classrooms	8
	A3	Seminar halls	4
	A4	Auditorium	4
	A5	Hostel and messing facility	6
	A6	Quality and standard of the equipment available in laboratories	8
	A7	Sports complex	4
	A8	Transportation facility	4
	A9	Research facility	8
Teaching standard (B)	B1	Qualifications of teaching staff	10
	B2	Teaching experience of staff	9
	B3	Industry experience of staff	7
	B4	Research work and publications by the faculty members	6
	B5	Method and quality of teaching	7
Overall working culture of institute (C)	C1	Respect for each one another	6
	C2	Attitude of teachers to students	5
	C3	Attitude of students to teachers	7
	C4	Number of activities arranged by faculty members for the overall development of students	8
	C5	Number of initiatives taken by the students in extra curricular activities along with studies	6
	C6	Support of administrative staff to students and faculty members	5
	C7	Directions and promptness from the head of the institution	9
Opportunities provided by institute (D)	D1	Student participation in intercollegiate and state or national level competitions	6
	D2	Number of students recruited by the campus interview	10
Industry-institute interaction (E)	E1	Number of industry visits arranged by the institution	7
	E2	Number of industry projects undertaken by institute	6
Students' involvement in institute activity (F)	F1	Selection of student representatives and their importance and involvement in some joint ventures	4
Institute-institute interaction (G)	G1	Number of combined projects handled with other institutions	5
	G2	Involvement of experts of other colleges in examination-evaluation process	6
Exposure to global standards (H)	H1	Interactions with well established institutions	7
	H2	Visits to some advanced multinational organizations	7
	H3	Access to internet facility	9

(continued)

Broad classification	Codes	Detailed requirements	Importance rating
Policy of fairness (I)	I1	Transparency in evaluation	9
	I2	Timely assessment and declaration of results	8
	I3	Fees charged to students and variations in the same	7
Faculty development (J)	J1	Number of training programmes conducted for the faculty development	6
	J2	Number of faculty members sent for higher studies	6
Library standards (K)	K1	Number of books available	7
	K2	Standard of available books	9
	K3	Number of national and international journals subscribed	7

(Jitesh, et. al., 2006)

Based on his research, Mathew (2005) concluded that there were several aspects of quality education measurement. Those aspects were presented in 2 tables below:

Table 2. Importance Performance

Category	(1) Importance (mean)	(2) Performance (mean)	(1)-(2) Importance- performance
Location of the university	4.1344	4.0615	-0.0729
Size of the student population	4.1367	2.6879	-1.4488
Attractive campus	4.4123	4.1913	-0.221
Safety on campus	4.5558	4.1503	-0.4055
Smaller classes for better learning	4.6196	3.6310	-0.9886
Excellent education at a reasonable cost	4.6196	3.6310	-0.9886
Offer a variety of scholarships	4.4875	3.3166	-1.1709
Have a well-known academic reputation	4.2916	3.6264	-0.6652
Reputation of the program of study	4.3326	3.7950	-0.5376
Provide a well-rounded education	4.4556	4.0410	-0.4176
Provide clean and safe accommodations	4.6310	3.1982	-1.4328
Clean, spacious, well-equipped classes	4.6264	4.0501	-0.5763
Library with wide range of resources	4.6073	3.6287	-0.9786
Accessible, up-to-date computer labs	4.6788	3.8405	-0.8383
Dining-hall with good hours, menu, and food	4.4875	2.9453	-1.5422
Bookstore conveniently located/stocked	4.5535	3.7631	-0.7904
Provide recreational facilities/programs	4.3576	3.4989	-1.0546
Helpful first year orientation program	4.3144	3.4123	-0.9021
Fast, hassle-free registration process	4.6310	3.4214	-1.2096
Academic staff approachable/informed	4.7153	3.8793	-0.836
Administrative staff approachable	4.6811	3.7563	-0.9248
Advisors are accessible and informed	4.7540	3.6765	-1.0775
Offer wide range of degrees/majors	4.6173	3.6287	-0.9886
Provide multiple scheduling for classes	4.8975	3.5194	-1.3781
Provide sports teams for entertainment	4.1667	3.6644	-0.5023
Provide student participation in sports	4.2597	3.7900	-0.4697
Offer student activities outside class	4.2847	3.9635	-0.3212
Offer student organizations outside class	4.2831	3.9703	-0.3128
Social activities/night life	3.7153	2.8950	-0.8203
Family advice	3.4647	2.7352	-0.7295
Friends' advice	3.1025	3.4772	0.3747
Provide variety of internships/practicum programs	4.3964	3.4840	-0.9124

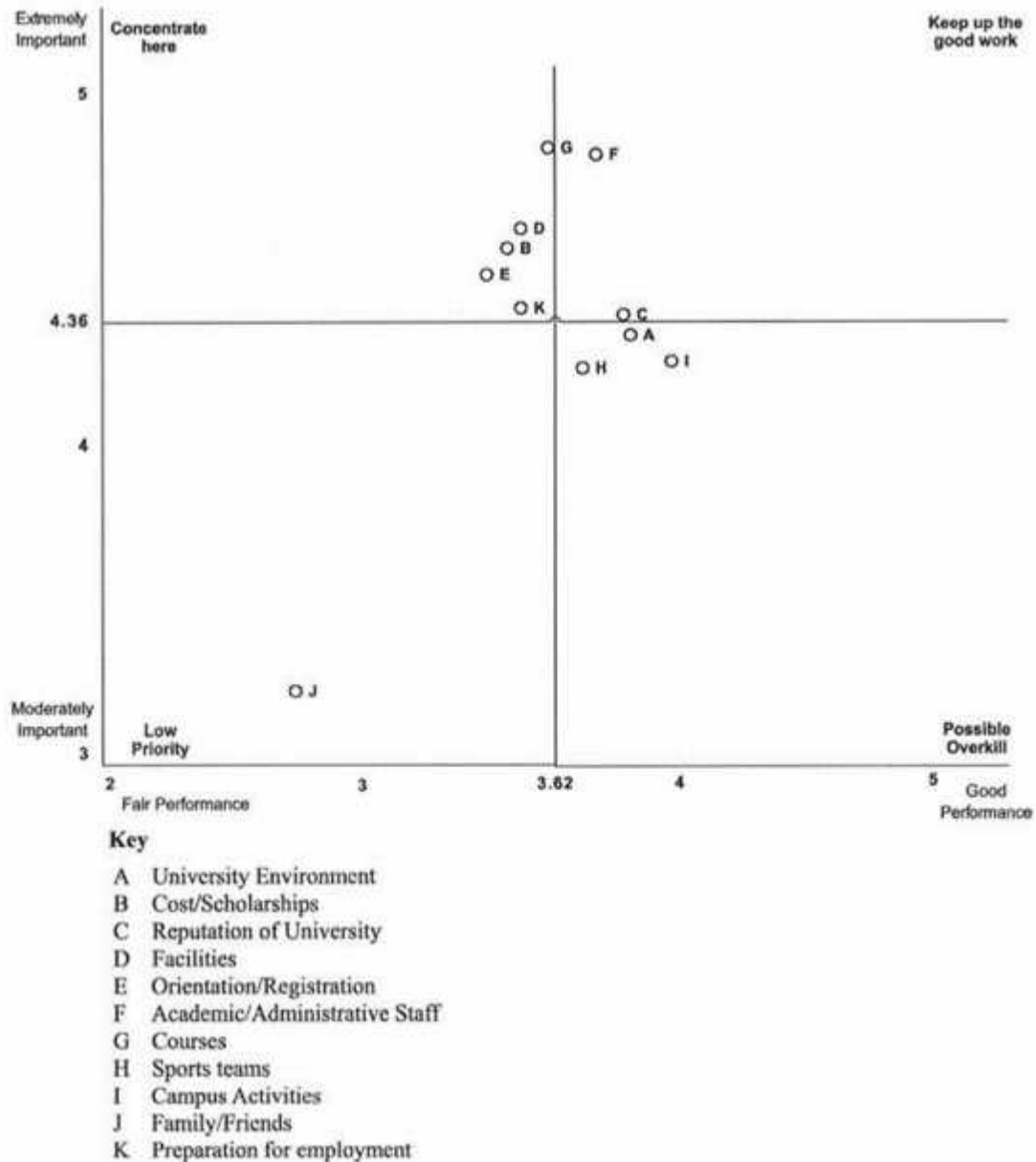


Figure 1. Importance/ performance grid

D. Models of Quality in education

In order to understand the complex nature of education quality and to develop management strategies for achieving it, it should be necessary to review the different conceptions or models of education quality explicitly or implicitly held by concerned constituencies in practice or by scholars in research. In the past decades, research on organizational effectiveness and school effectiveness has brought forth fruitful results and has guided many of the improvement endeavors, yet relatively little research has been done on the topic of education quality. If we believe that both effectiveness and quality are the concepts

used to understand performance of an education institution in providing educational services, we can expect that the literature of effectiveness may be borrowed to understand and conceptualize quality in education institutions.

Based on the models of organizational effectiveness and school effectiveness summarized by Cameron and Whetten and Cheng (via Cheng and Tam, 1997), seven models of education quality can be proposed to illustrate the different conceptions that can be used to deepen understanding and develop management strategies.

1. The goal and specification model

This model sees education quality as achievement of stated goals and conformance to given specifications. The goal and specification model is often used in the assessment of education quality of individual institutions or education systems in a country. It assumes that there are clear, enduring, normative and well-accepted goals and specifications as indicators and standards for education institutions or education systems to pursue or conform to.

An education institution is deemed to be of good education quality if it has achieved the stated goals or conformed to the specifications listed in the institutional plan or programme plans. Typical examples of quality indicators may include students' academic achievements, attendance rate, dropout rate, and personal developments, number of graduates enrolled in universities or graduate schools, professional qualifications of staff, etc. This model is useful if the goals and specifications used for judging education quality are clear and accepted by all involved constituencies, and that there are appropriate indicators which one can use to evaluate whether the institutions have attained the prescribed education standards. An advantage of this model of education quality is that it enables the institution management to focus attention on key components of education programmes.

2. The resource-input model

Here education quality is regarded as the natural result of achievement of quality resources and inputs for the institution. Because of the pressure of diverse expectations of multiple constituencies, an education institution may be required to pursue different goals and conform to diverse specifications and standards. The resource-input model assumes that scarce and quality resources are necessary for education institutions to achieve diverse objectives and provide quality services in a short time. Therefore, education quality is assumed to be the natural result of achievement of scarce resources and inputs for the institution.

The education quality indicators may include high quality student intake, more qualified staff recruited, better facilities and equipment, better staff-student ratio, and more financial support procured from the central education authority, alumni, parents, sponsoring body or any outside agents.

This model is useful if the connections between quality of inputs and outputs are clear and the resources are very limited for education institutions to achieve stated goals or conform to given specifications. In some Asian countries and cities (e.g. Hong Kong), quality student input is often seen as an important indicator of an education institution's success. Attraction of high quality student input seems to be a "necessary" condition for some institutions to become successful or achieve high academic performance in examinations.

It is often believed that students from low socio-economic status families may bring a lot of behavioral and criminal problems from the community, which seriously hinder the educational process. In order to help problem students, more resources are needed, if they are not reallocated from other institutional purposes. The capacity of acquiring scarce and quality

resources represents the potential of an education institution that can promise high education quality particularly in a context of great resource competition.

Obviously, this model has its defects because its overemphasis only on acquisition of inputs may reduce the institutional effort put into educational processes and outputs. The acquired resources may become wastage if they cannot be used efficiently to enhance quality of process and outcomes.

3. The process model

In this model education quality is seen as smooth and healthy internal process and fruitful learning experiences. The process in an education institution is a transformational process which converts inputs into performance and output. A smooth internal institutional process enables staff to perform the teaching task effectively and students to gain fruitful learning experiences easily. The nature and quality of the institution of process often determine the quality of output and the degree to which the planned goals can be achieved.

Particularly in education, experience in process is often taken as a form of educational aims and outcomes. Therefore, the process model assumes that an educational institution is of high education quality if its internal functioning is smooth and "healthy". Important internal activities or practices in the educational institution are often taken as the important indicators of education. Leadership, communication channels, participation, co-ordination, adaptability, planning, decision making, social interactions, social climate, teaching methods, classroom management, learning strategies, and learning experiences are often used as indicators of education quality. The process in an educational institution generally includes management process, teaching process, and learning process.

Thus the selection of indicators may be based on these processes, classified as management quality indicators (e.g. leadership, decision making), teaching quality indicators (e.g. teaching efficacy, teaching methods), and learning quality indicators (e.g. learning attitudes, attendance rate).

4. The satisfaction model

According to this model education quality is defined as the satisfaction of strategic constituencies. The satisfaction model assumes that the satisfaction of strategic constituencies of an educational institution is critical to its survival and therefore education quality should be determined by the extent to which the performance of an educational institution can satisfy the needs and expectations of its powerful constituencies. In the school setting, the powerful constituencies may include teachers, management board members, parents, students, alumni, and officers at the education department.

Education quality may be a relative concept, depending on the expectations of concerned constituencies or parties. If expected education quality is high and diverse, it will be difficult for institutions to achieve it and satisfy the needs of multiple constituencies. If expected education quality is low and simple, of course it will be easier for educational institutions to achieve it and satisfy the expectations of constituencies so that educational institutions may be perceived as high quality more easily. Furthermore, the objective measurement of quality achievement is often technically difficult and conceptually controversial. Therefore satisfaction of powerful constituencies is often used instead of some objective indicators as the critical element to assess quality in education institution. This model emphasizing satisfaction of clients or conformance to clients' expectations or specifications is the very popular model used in the business sector to assess quality.

5. The legitimacy model

Education quality is regarded here as the achievement of an education institution's legitimate position or reputation. In the past, when the educational environment changed slowly and educational institutions received relatively few external challenges, survival of educational institutions might be guaranteed by the central education authority. There seemed little need for the education institutions to ensure any legitimacy for their survival. But now, under the impact of rapid changes and developments, the educational environment becomes more challenging and competitive.

Educational institutions have to compete seriously for resources and overcome internal barriers, and on the other hand, they have to face the external challenges and demands for accountability and "value for money". It is hardly possible for educational institutions to continue or survive without ensuring legitimacy in the community. In order to gain legitimacy for survival and to acquire critical resource, educational institutions have to win the support of the community, build up good public image and show evidence of accountability.

The legitimacy model assumes that an educational institution needs to be accepted and supported by the community in order to survive and achieve its mission. Along this line of thinking, the indicators of education quality are often related to the activities and achievements of public relations and marketing, accountability, public image, reputation, or status in the community, etc. Educational institutions should operate educational programs which conform to the ethical and moral norms of the community in order to gain legitimacy. They also need to promote their own image, in such ways as participating in district-wide contests, organizing exhibitions of students' work, maintaining a good relationship with district leaders, etc.

6. The absence of problems model

According to this model education quality means the absence of problems and troubles. Borrowing the idea of the ineffectiveness model, it is often easier to recognize problems in an institution than to identify its quality because appropriate indicators and measurement techniques which can provide concrete evidence of quality are often difficult to obtain. Hence, instead of looking for quality in an education program, one inspects the educational institution to check whether problems exist.

This is perhaps the oldest concept of quality in use in industry. Quality control experts tend to look at quality as meaning less scrap, rework, warranty costs, etc., for the final product. The management team of an educational institution may set up stringent quality assurance and monitoring system in order to ensure a deficiency-free environment.

Identifying strategies for the improvement of an educational institution can be more precisely done by analyzing problems and defects as opposed to education quality. Therefore, this model is useful particularly when the criteria of education quality are really unclear but strategies for improvement are needed. In general, many education institutions, particularly new ones, are more concerned with overcoming obstacles to basic school functioning than with pursuing excellent quality.

7. The organizational learning model

Here education quality is considered to mean continuous development and improvement. The changing educational environment is producing great impacts on nearly every aspect of functioning in education institutions. There seems to be no static factor or single practice that contributes to education quality for ever. Some practices may be good at a certain time but not at another. Therefore, how to deal with environmental impacts and internal

process problems is an key issue in assessing whether an educational institution can provide quality service continuously.

The organizational learning model assumes that education quality is a dynamic concept involving continuous improvement and development of members, practices, process, and outcomes of an educational institution. A number of researchers have indicated that organizations, like human beings, can be empowered to learn and innovate to provide quality services.

The indicators of education quality may include awareness of community needs and changes, internal process monitoring, program evaluation, environmental analysis, development planning, etc. Obviously, the usefulness of this model will be limited if the connection between organizational learning process and educational outcomes is not clear. For example, some old educational institutions have their prestige traditions that can attract a high quality student input. Even though they may lack organizational learning, they can still win relatively high student achievement and high status in the community.

E. Conclusion

Based on theoretical description above, it can be outlined some critical points as follows:

1. This article is related to the concept of total quality management (TQM) because Ho and Wearn (1996) cited that TQM is totality of features and characteristics of a product or service that bears on its ability to meet a stated or implied need and conformance to requirement.
2. It is often difficult for an education institution to meet all the expectations or needs at the same time. Therefore, it is not rare that the education quality in an education institution is high to the perceptions of some constituencies but not to others, or that some aspects of an education institution may be of high quality but other aspects may be of low quality.
3. For assessing education quality, different indicators may be developed to give information about the performance of an education institution in different aspects of input, process, and outcome. The difference in the choice of and the emphasis on indicators may reflect the diverse interests and expectations among the concerned constituencies and also the different management strategies used to achieve education quality under certain environmental constraints within a certain time frame. In other words, based on different conceptions of education quality and different concerns about achievement of education quality, different people may use different indicators to assess education quality and different strategies to achieve education quality.

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