

# TOTAL QUALITY MANAGEMENT IN EDUCATIONAL INSTITUTIONS: INFLUENCES ON CUSTOMER SATISFACTION

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## ABSTRACT

*The study assessed the quality management practices in the educational institutions in the Kingdom of Bahrain specifically in the areas of instruction, infrastructure, and student services. Furthermore, the study determined the level of effectiveness of the total quality management practices in instruction, infrastructure, and student services. There was no relationship between the quality of the practices of the institutions and their level of effectiveness. Furthermore, the problems in connection with the implementation of total quality management in the schools in the Kingdom of Bahrain were identified.*

*Cited by the majority of the respondents on the main problem in the area of instruction was lack of cooperation among teachers for changes in curriculum design. The majority also cited that the main problem in connection with the total quality management in the area of infrastructure was lack of concern among students for the upkeep of buildings. The main problems in connection with the total quality management practices in the area of student services were non-compliance among students with the schedule of registration, lack of enthusiasm among students for the leadership training sessions, and inadequacy of equipment for various types of athletic activity.*

*Accordingly, the researcher proposed a number of measures for improving total quality management of schools in the Kingdom of Bahrain. The proposals were expounded under three categories corresponding to the three areas of school operations.*

**Keywords:** Total Quality Management, Quality Management Practices, Customer Satisfaction, Educational Institutions, Kingdom of Bahrain

## INTRODUCTION

The educational institutions of today are concerned with quality. With the emergence of competition among schools, the identification of the academic institutions that have a high level of quality has become a crucial issue. This situation is not only taking place in the Philippines; the concern for quality is universal. For this reason, Arcaro (2002) declared that today, quality is the single most important issue in education, business, and government.

However, quality can be honored only through lip service if the concept remains an intangible, glittering generality. If quality cannot be expressed in operational, measurable terms, it can remain an abstraction and can be relegated into the status of un-attainability. For this purpose, many institutions of higher learning seek to comply with the Bologna Accord, the American Board of Engineering and Technology (ABET) criteria, the Washington Accord, the Quacquarelli Symonds (QS) Ranking of Higher Education institutions, and the internationalization of higher education institutions, to name a few quality measurement organizations.

The motivations for attaining quality are the same for almost all higher education institutions. They seek to produce students who, after graduation, are able to meet the demands of society and who become productive, useful members of society. Higher education institutions also seek to help their students develop the skills that are needed in order to survive and to be productive in a global community.

Higher education institutions face problems of decreased enrollment, student attrition, and competition. These problems have been only partly addressed because of many school administrators' sensitivity to the issue of marketing of academic institutions. Some educators view marketing of education and recruitment of students as undignified and objectionable. Other educators regard these measures as manipulative and unbecoming of higher education institutions. However, with changing student needs and societal expectations, increasing competition for scarce clientele, limited resources and unlimited financial pressures, many educators are forced to adopt strategies for making their institutions viable (Yilmaz, 2005). Confronting an era marked by dwindling support and competition, it is incumbent on administrators and higher education leaders of colleges and universities to broadcast who they are, what they do, and what makes them valuable (Anctil, 2008). Furthermore, to be viable in the modern era, today's universities must strike a balance among delivering sound academic programs, conducting and promoting research, and engaging with the community as social institutions and places of higher learning - - while also meeting the contemporary challenges of running large organizations with dwindling public support and greater competition from education sectors which are operating for profit (Anctil, 2008).

## REVIEW OF RELATED LITERATURE

### The Concept of Quality

Quality is defined in many ways. The notions of quality and quality development can meet a number of agenda simultaneously. The multi-faceted nature of quality and effectiveness suggest that the search for simplistic or reductionist views of quality and quality development is fruitless (Morrison, 2004). There are several contrasting views of quality. These views can be synthesized into: 1) quality as that which the clientele define as quality; 2) quality as reliability; 3) quality as excellence; 4) quality as the extent to which predefined objectives have been met; 5) quality as fitness for purpose; 6) quality as conformance to specifications; 7) quality control; 8) quality assurance; and 9) total quality management (Morrison, 2004).

The concept of quality as that which the clients define as quality is was advanced Feigenbaum (2001), who believed in staying close to the clientele. Quality is what the clientele say it is. Bank (2001) argues that the clientele are the most important people in any business and that the organization depends on them rather than vice versa. And people do the school the favor by sending their children to a specific school to acquire an education rather than the schools doing a favor by teaching them.

Morrison (2004) commented that this new concept of quality does not necessarily mean high quality. The clientele may not wish to have or be able to afford quality education. Hence, meeting the clientele's needs may not ensure that a high quality education is provided. The clientele may be perfectly happy or have to put up with mediocrity and low cost. Whether this is a view that one would wish to promote in education is questionable.

Another concept advanced by experts is quality as reliability. High reliability organizations and institutions involve high-risk operations that are not permitted to fail because of disastrous consequences. Their functions should be one hundred percent reliable and error is not permitted.

Bierly and Spender (2002) emphasized that attention be directed to investment in effective initial and post-initial training and continuous development, the clarification of a limited number of core tasks and purposes, with agreement on how these requirements will be addressed, whole school policies for all major operations and contingencies, together with strong adherence to these policies, attention to the best means for ensuring that these operations are practiced, and agreement on the major ways of working, teaching/learning in the school and adherence to these ways, and constant identification of the possible weaknesses of the school in order to solve them.

Reynolds (2002) stressed that high-reliability schools conduct open discussion and agreement of actions to be taken so that consistency is ensured. In these schools, resources and technology are as high quality, well kept and up-to-date as possible. High-reliability schools identify all their major networks and ensure that they are in harmony with one another to improve consistently high standards of education and achievement. In these schools, information is centrally held and there is clear leadership from the senior management. Appointment and recruitment practices are rigorous so that the most appropriate staff is appointed. Monitoring, evaluation, performance indicators, data bases and appraisal systems are used constantly and demonstrate a high fitness for purpose. Standards are made clear and operational.

Stringfield (2001) declared that in high-reliability schools, there are support networks and systems for developing effective education both within and outside the school. Communication, both formal and informal, is extensive. The staff is aware of the seriousness of, and accountability for, their responsibilities. Staff is accountable to each other and to outside entities. Short term innovations and improvements are set in the context of the schools' long-term development and improvement. Immediate interventions and strategies are in place in case problems arise.

High reliability organizations take care to build out human frailty and any differences that are contingent on human characteristics; schools develop the personalities and abilities of individuals. The prospect of schools as stifling or sacrificing humanity, individualism, creativity, personality, relationships, and emotions in the instrumentality of high reliability is

To ensure high-reliability in its operations, a school can use a number of strategies such as collecting and keeping data on student performance across a range of abilities from the time of the student's entry into school; formulating a full range of policies to ensure consistency in the aspects of curriculum and whole-school issue, operationalizing its policies into concrete performance indicators, detailing specific, measurable practices and success criteria; having detailed and agreed strategies for dealing with critical events such as disruptive students, irate parents, tardiness, accidents, and emergencies; using appraisal and mentoring for professional development and action planning; and having set action plans for departments, faculties, and the whole school, set within the school's overall department plans, aims, and objectives. To become a high-reliability organization, a school must ensure that a minimum required level of consistency of practice and philosophy is addressed in order to ensure the smooth functioning of the school while enabling acceptable variability to meet individual autonomy, professional judgment, and differentiation for the students' differing needs (Morrison, 2004).

A third concept of quality is excellence. The concept of quality as excellence is associated with cost and effectiveness, such as in the case of an exclusive school which is expensive (Morrison, 2004). However, the school effectiveness and improvement movements suggest that high quality should be available to all students regardless of background.

Attached to the notion of quality as excellence is the question of status. Young (2000) indicates that high status attaches to academic subjects, curricula that are organized into subjects and taught to the most able students in homogeneous ability groups, unrelated to everyday life and vocational groups work, and is not formally assessed.

Kanter (1999) identifies several elements of the excellent organization. These elements include clear, vision-driven management and effective leadership; keeping the goals of the organization limited and ensuring that these schools are addressed; making standards explicit and operational; introducing continuous change, improvement and innovation; building in high-involvement, commitment, participation, ownership, and empowerment of colleagues; scrupulous attention to the clientele; informed and pro-active leadership; devolution of responsibility to autonomous teams; the use of management information systems to monitor and measure activities and outcomes; and the development of creativity through problem-solving approaches and reward systems.

Quality is also regarded as the extent to which predefined objectives have been met. The introduction of ideas and terms such as target-setting, action planning, specification of intended learning outcomes, target-oriented curricula, outcome-based education, and attainment targets combines to place the notion of objectives-based view of quality high on the educational agenda. The organization sets out its mission and then, at a suitable time, assesses their achievement (Frazer, 2002). Vision and mission statements provide direction and something to return to in case one senses that one is blown off-course.

The use of objectives involves using the “countenance” model in evaluating educational change, as it charts the degree of congruence or distance between objectives and actuality in respect to antecedents, transactions, and outcomes. This model is useful in two ways: First, it requires users to specify the success criteria in operational terms - the actual concrete practices or evidence – that will be used to judge the extent to which objectives have been met (Morrison, 2004). Secondly, it can be used as a springboard to development of teachers then ask for explanations of, or causes for, the extent of the congruence between intentions and actuality if the results are used formatively. Schools can address a view of quality as the extent to which predefined objectives have been met by the degree of the students’ success in achieving intended learning outcomes, resource availability and utilization; determining the extent to which differentiation, progression, and continuity have been successful; assessment programs and results, and determination of the students’ progress and achievement (Morrison, 2004).

Another strategy for attaining a high level of school operations is quality assurance. This concept attempts to build an organization in quality and prevents failures from arising at all. It is essentially a “process” matter that is active before the product is complete. It prevents mistakes from occurring and plans proactively for quality as a built-in feature rather than as the result of inspection. The argument for quality assurance is that it is cheaper and more efficient to build out waste and error rather than to correct them (Morrison, 2004)

This model avoids having “rejects” and failures; it focuses on prevention; it is more humanistic and collegial; it enables people to understand their work better, therefore it is empowering and allows flexibility. Unlike quality control which is aimed at a single need, quality assurance is aimed at diverse needs; it encourages innovation and development; it has long-term benefits; it is more supportive and less coercive; it is rooted inside an institution; it builds in the practice of *kaizen*—continuous improvement, particularly through teamwork and the notion of small-scale incremental change; it makes for higher motivation; it respects professionalism and professional development; it looks at strength and build on these—not simply focusing on negatives; it is a continuous rather than “one-off” process; it promotes

teamwork, and people are more accepting of advice and criticism: it is a “bottom-up” process, it replaces the reporting/description of successes and failures with the explanation for successes and failures. Quality assurance has three elements (Dean and Evans, 2000). The first element is that everyone in the enterprise has a responsibility for maintaining and enhancing the quality of the product or service. The second element is that everyone in the enterprise understands uses and feels ownership of the systems that are in place for maintaining and enhancing quality. The third element is that management and sometimes the client regularly checks the validity and reliability of the systems for checking quality (Morrison, 2004).

Quality and effectiveness are concerned with harnessing and developing the inbuilt potentials and qualities people in an institution possess. Change, development, and effectiveness come from within rather than from without, leading to and building on the empowerment of all participants in an institution. Quality assurance is concerned with people and individual needs.

### **The Concept of Quality Management**

The attainment of quality is made possible through the successful management of change, Much of contemporary thinking on this aspect focuses on total quality management (TQM). Total quality management is a philosophy that is driven by the constant attainment of client satisfaction through the continuous improvement of all organizational processes (Robbins, 2003). In the school setting, students and their parents should attain satisfaction from educational services. The services in school should be rendered with the perspective that the students are paying for the services that are provided by the school. For this reason, total quality management should be implemented in the school system. The concept of total quality management can be understood better in the context of the fourteen points of total quality that has been advanced as a framework by W. Edwards Deming. The fourteen points of Deming can be applied in the university setting. The fourteen points of Deming in Walton (2002) are the following: 1) The creation of constancy of purpose by developing a mission statement on the goals and objectives of the educational process; 2) The adoption of a new philosophy, which provides for quality in all aspects of institutional operations, such as classroom instruction, bookstore service, campus safety and security, maintenance of sanitation, and emphasis on cooperation as opposed to competition; 3) Cessation of dependence on mass inspection by focusing on the product or service process instead of depending on audits, or inspection to build quality; 4) Ending the practice of conducting business on cost alone, since the lowest bid does not result in the lowest life cycle cost; 5) Constant improvement of process for the satisfaction of students and their future employers and the happiness of the administration, the employers, and suppliers of the institution; 6) The institution of training in order to help the members of the academic community perform their duties and responsibilities better; 7) The institution of leadership rather than management with emphasis on what Senge (2000) regards as leadership in the sense of being a designer and the creator of the environment; 8) The elimination of fear, which is often an important factor in student and faculty performance; 9) The demolition of barriers by encouraging cooperation, not competition through encouraging the formation of cross-functional teams to address problems and process improvements; 10) Avoidance of obsession with goals and slogans, since telling someone to do good is meaningless without the means to achieve that goal; 11) Elimination of numerical quotas, such as the number of papers or number of enrollment per major, since these concerns tend to reduce quality; 12) Removal of barriers to pride of workmanship that flows from having a part in the development of programs; 13) Organization-wide involvement, in which everyone in the institution must be



included in the educational process and be aware of and concerned with the students, and 14) Definition of management responsibilities in order to make it happen in such a manner that every level must take and show pride in adopting the total quality management philosophy (Winn and Green, 2002).

Bonstingl (2001) stressed that whatever might be the view that one takes of total quality management, the concept can best be understood as an integral set of fundamental tenets which he called The Four Pillars of Total Quality Management. The first among the fundamental tenets is that the organization must focus, first and foremost, on the suppliers and the customers. In a TQM organization, everyone is both a customer and a supplier. It is essential to identify one's roles in the two capacities to better understand the systemic nature of the work in which all are involved. In the classroom, teacher-student teams are the equivalent of the front-line workers in industry. The product of their successful work together is the development of the students' capabilities, interests, and character. In one sense, the student is the teacher's customer, as the recipient of educational services provided for the student's growth and improvement. Viewed in this way, the teacher and the school are suppliers of effective learning tools, environment, and systems to the student who is the school's primary customer. The school is responsible for providing the long-term educational welfare of students by teaching them how to learn and communicate in high-quality ways, how to assess quality in their own work and in that of others, and how to invest in their lifelong and life-wide learning processes by maximizing opportunities for growth in every aspect of daily life.

The second fundamental tenet pertaining to total quality management is that everyone in the organization must be dedicated to continuous improvement, personally and collectively. As Senge (2000) has suggested, those organizations which are most capable of surviving and prospering are "learning organizations" where people, processes and systems are dedicated to continuous improvement personally and collectively. In order to be true learning organizations, schools must be afforded the resources, especially time and money, needed for training, quality circles, research, and communication with the school's stakeholders—the business organizations, colleges, community residents, and taxpayers. Schools must also rethink practices that focus narrowly on students' limitations rather than their range of innate strengths. Howard Gardner (2001) has pointed out the self-defeating nature of a narrow academic focus, encouraging educators to acknowledge the existence of multiple intelligences and potentials within each student and to help students develop their much intelligence more fully day by day. True dedication to the improvement of all students will require educators to reexamine current practices of grading and assessment. Educators must examine the wide range of effects that externally imposed assessment has on students' capacities to grow, to learn, and to assess the quality of their own work as well as the work of others. Many schools are already implementing new assessment strategies as part of their total quality plan, including process portfolios, exhibitions, and celebrations of students' progress throughout the year.

The third fundamental tenet is that the organization must be viewed as a system and the work people do within the system must be seen as ongoing processes (Deming in Walton, 2002) suggests that more than 85 percent of all things that go wrong in any organization are directly attributable to how the organization's system and processes are set up. Individual teachers and students then, are less to blame for failure than is the system—the seemingly immutable patterns of expectations, activities, perceptions, resource allocations, power structures, values, and the traditional school culture in general. In total quality management, attention is given to the system more than anything else. In the new paradigm of education, continual

improvement of learning processes will replace the “teach and test” mode of instruction. The quality of teaching-learning processes is reflected in learning outcomes (Bonstingl, 2000).

The fourth fundamental tenet is that the success of Total Quality Management is the responsibility of top management. Without concerted, visible, and constant dedication to making TQM principles and practices part of the deep culture of the organization, efforts are bound to fail. School leaders must focus on establishing the context in which students can best achieve their potential through the continuous improvement of products and services. Teachers must focus on establishing the context in which students can best achieve their potential through the continuous improvement of teachers’ and students’ work together. Educational leaders who create total quality school environments know that improving test scores and assessment symbols is less important than the progress inherent in the learning processes of students, teachers, administrators, and all of the school’s stakeholders (Bonstingl, 2000).

### **TQM Philosophy**

Three authorities on Total Quality Management, namely, W. Edward Deming, J. M. Juran, and Kaoru Ishikawa share the same view on the primary purpose of an organization, which is to remain in business so that it can aid community stability, offer useful products and services that meet customer needs, and foster the work satisfaction and growth of organization members. Although there are differences on a number of points, they provide a reasonable basis for identifying the assumptions underlying the TQM philosophy. These assumptions are the following:

#### ***Quality Is Less Costly Than Poor Workmanship***

A basic assumption of TQM is that the costs of poor quality such as inspection, rework, high scrap rates, lost customers and related factors greatly exceed the costs of producing high quality products and services (costs such as training, proper equipment and tools, improving processes and related factors).

#### ***Employees Will Naturally Try To Improve Quality As Long As They Have Appropriate Support***

A second assumption of TQM is that employees will willingly stake quality improvements as long as they are given the tools and training necessary to do so. A related prerequisite is that management needs to be willing to learn to the idea of employees.

#### ***Serious Quality Improvement Requires Cross-Functional Effort***

A third assumption of TQM is that most quality problems do not fit neatly within functional areas. For example, to produce high-quality products efficiently, design specialists need to confer closely with manufacturing specialists during the design phase itself.

#### ***Quality Improvement Requires the Strong Commitment Of Top Management***

The reasoning behind this fourth assumption of TQM is that upper-level managers ultimately are responsible for the organizational systems within which products and services are designed and produced. Employees’ ability to perform high-quality work, therefore, is a direct function of the quality of the systems that managers create (Bartol and Martin, 2000).

### **TQM Intervention Techniques**

In the implementation of change principles, various TQM advocates use various intervention techniques. Some of the important techniques are discussed here.

#### ***Cost of Quality Analysis***

Cost of quality analysis *is* used to evaluate the potential cost savings associated with doing the work right for the first time. This analysis involves quantifying the costs associated with maintaining quality at the desired level, such as cost of preventing quality problems, against the costs of poor quality. Cost of quality analysis helps to earmark areas where improving quality would lead to significant savings (Evans and Lindsay, 1996).

### ***Quality Improvement Teams***

Quality improvement teams are small groups of employees who work on solving specific problems related to quality and productivity, often with stated targets for improvement. Typically, teams consist of individuals who are responsible for the work areas that are the target of quality improvement efforts. Such teams are frequently cross-functional. Problems to be addressed may be identified by management as well as workers, and the group often sets specific improvement goals and competes with one another.

### ***Training***

Training is also an important intervention technique used in implementing TQM. This technique is in accordance with the TQM emphasis on developing the competence of employees to produce goods and services with high quality levels.

### ***Benchmarking***

Benchmarking is a tool toward the attainment of effectiveness in operations. Scott (2003) stated the reason why schools have not used benchmarking as a quality tool. He declared that whereas a business can measure its effectiveness by reference to the profits that it makes or fails to make a school or college is a more difficult enterprise in which to gauge the extent to which the institution has achieved its aims. The distinction between for-profit and not-for-profit organizations is more obvious when it comes to measuring effectiveness. The free market links the interests of the organization with those of the customer and the shareholder in such a way that the business does not prosper (or even survive) unless the interests of both are served (Scott, 2003). In such an environment, effectiveness is largely determined by customers.

Not-for-profit organizations, on the other hand, lack clear-cut market-driven measurements of effectiveness, due to the absence of a customer-controlled free market. It is more difficult to select criteria for setting standards, and it is more difficult to select indicators for evaluating performance in the absence of such a market, but it is not impossible.

Practitioners and academicians disagree regarding the measurement of school effectiveness, but benchmarking does not engage in this dispute. Benchmarking is a process which involves making comparisons within an organization or another organization. Using similar points of reference, benchmarking involves examining the critical activities of one institution and comparing its performance in critical areas with the performance of another institution. The purpose is to improve performance and therefore increase effectiveness. Since institutions are continuously changing, benchmarking is a continuous process rather than a once-off comparison with a competitor (Kelly, 2006).

Williams (2005) emphasized that the benchmarking process consists of identifying outstanding practices, processes, and standards in other organizations and adapting them to one's own organization. The measures used are mainly quantitative. Benchmarking, however does not involve chasing the best practices of others but consists in identifying the core competencies of one's own organization that can add value to the improvement process (Cook and Hunsaker, 2004). The basic idea behind benchmarking is that managers can improve quality by analyzing and then copying the methods of the leaders in various fields



(Robbins and Coulter, 2009). The benchmarking process follows four steps, such as (1) Forming a planning team, which initially identifies what is to be benchmarked, identifies comparative organizations, and determine data collection methods; (2) Collecting data internally on its own work methods and externally from other organizations; (3) Analyzing the data to identify performance gaps and the cause of differences; and (4) Formulating and implementing an action plan that will result in meeting or exceeding the standards of others.

Zairi and Leonard (2004) explained that benchmarking begins by identifying and measuring performance levels, then finding benchmark organizations or work units to compare these data. Benchmarked partners may include other operating units within the organization (internal benchmarking), other organizations that compete on the same service market (competitive benchmarking), or other organizations that are the best in a particular functional process whether or not they are competitors (functional benchmarking). Benchmarking usually involves visiting a benchmarked partner to observe how a product is made or a service provided. Benchmarking can also take place without the target company's knowledge. One common practice is reverse engineering, in which a competitor's product is taken apart and analyzed.

The history of benchmarking was traced by McShane and Von Glinow (2006), who declared that benchmarking was developed by Xerox in 1949 and has been widely adopted by others. There are four reasons for its popularity. First, benchmarking is consistent with performance measurement and fact-based management. It provides objective rather than subjective standards against which to evaluate one's own organization. Second, benchmarking is a form of goal setting with continually moving targets. For this reason, corporate leaders sometimes refer to benchmarked information as *stretch goals*. Third, benchmarking is part of the continuous learning process and is consistent with the philosophy of knowledge management. By visiting other firms, employees learn new practices through observation. This practice encourages them to continually question their current work practices and to seek out new practices. Fourth, benchmarking reduces employee resistance to change because the benchmarks companies provide visible evidence that a higher standard of performance is both necessary and achievable (McShane and Von Glinow, 2006).

Benchmarking is not just about researching what another institution does. It seeks to make contemporaneous comparisons in specific areas - - an outcome more easily achieved in today's information age than was the case in the past. Society is moving inexorably towards a state of perfect and complete information, where, not only is information more expensive and more readily available but it is in real time and instantaneous. All organizations must have the willingness and the expertise to access this information and use it (Kelly, 2006). Benchmarking attempts to answer the following question: How is the organization doing in terms of strategy, quality of product, compensation program, job design, or teamwork? (Gibson, Ivancevick and Donnelly, 2004).

While benchmarking in manufacturing and service sector businesses is well established, the process is little understood in schools and colleges and where the term is used, it is used in a different sense (Gaun, 2003). Schools are complex organizations with many different ways of measuring effectiveness. Those most easily measured include examination success, inspection reports, enrolment trends, and exclusion rates, among other things. It is more difficult to compare measurements of other aspects of school life such as parental perception, pastoral care effectiveness, and the professional satisfaction of staff. Yet all these manifestations are assumed to be worth measuring because they are believed to reflect fundamental processes essential to what is believed makes for good practice: good quality

and consistent teaching, pro-active management, institutional responsiveness, caring discipline, and on-going professional development (Gaun, 2003).

### **Quality as a Measure of Effectiveness in Education**

Kelly (2002) declared that effectiveness is taken as a reflection of something being done well within the institution. For this reason, effectiveness has come to be regarded as a planned result rather than an accidental outcome, and it is this concept which sustains the belief that good practice can be analyzed within and across institutions and shared among practitioners.

Effectiveness is necessarily associated with the notion of quality. Quality is a perfection standard by which an organization decides whether its practices conform to its objectives and strategies in a way that meets the clientele's need (Bone and Griggs, 2008).

The dimensions of quality are divided into two categories: product quality and service quality. The product quality dimensions include performance or operating characteristics, features or important special characteristics, flexibility or the capability to meet operating specifications over some period of time, durability or the amount of use before performance deteriorates, conformance or consistency with pre-established standards, serviceability or ease and speed of repair or normal service, aesthetics or the appearance of the product, and the perceived characteristics or subjective assessment of the product image. The service quality dimensions are timeliness or performance in the stipulated time period, courtesy or cheerful performance, consistency or the similarity of experiences of the clientele, convenience or accessibility to customers, completeness or full service according to requirements, and accuracy or correct performance in each instance of service (Hitt, Ireland and Hoskisson, 2005).

Quality is an important issue for managers because it is important to global competitive success. Managers must plan, organize, lead, and control for quality. They should successfully implement a quality program in the organization. The steps in the implementation of a quality program are the following: 1) Ensure that top management is committed to the program and has dedicated sufficient resources to the efforts; 2) Establish a reward and recognition program for quality-related activities; 3) Provide training for all employees on the quality process; (4) Recognize that quality is every employee's job; 5) Establish a communication programs, internal and external, that supports the quality program; 6) Establish minimum standards for each functional department, where each department should identify and monitor key processes and create control charts, tracking indicators over time; 7) Develop feedback systems to increase understanding of what is valued by the clientele; 8) When opportunities for improvement are identified, develop an action plan, implement it; check to see if the actions resulted in the desired improvements, and incorporate the change into the process or continue to improve; and 9) Celebrate successes and efforts made by employees to improve quality. These steps were outlined by Deborah Barnhart, Director, Medical Management Support, St. John's Health System, Springfield, Massachusetts (Robbins and Coulter, 2009).

Quality in higher education is defined by the World Conference on Higher Education in the Twenty-First Century (1998). Article II, which is on qualitative evaluation of education states that quality in higher education is a multidimensional concept which should embrace all its functions, and activities: teaching and academic programmes, research and scholarship, staffing, students, buildings, facilities, equipment, services to the community and the academic environment. Internal self-evaluation and external review, conducted openly by independent specialists, if possible with international expertise, are vital for enhancing quality. Independent national bodies should be established, and comparative standards of

quality, recognized international level, should be defined. Due attention should be paid to specific institutional, national, and regional contexts in order to take into account diversity and to avoid uniformity. Stakeholders should be an integral part of the institutional evaluation process. Quality also requires that higher education should be characterized by its international dimension, exchange of knowledge, interactive networking, mobility of teachers and students, and international research projects, while taking into account the national cultural values and circumstances. To attain and sustain national, regional, or international quality, certain components are particularly relevant, notably careful selection of staff and continuous staff development, in particular through the promotion of appropriate programmes for academic staff development including teaching/learning methodology and mobility between countries, between higher education institutions, and between higher education institutions and the world of work, as well as student mobility within and between countries. The new information technologies are an important tool in this process, owing to their impact on the acquisition of knowledge and know-how (World Conference on Higher Education in the Twenty-First Century, 1998).

### **Related Studies**

Enriching this study further are the studies which are related to this investigation. These studies are reviewed in order to establish their relationship to this investigation.

A study which is related to this investigation is that of Doherty (1993) conducted a case study of the implementation of total quality management in higher education in the University of Wolverhampton. The case study generated a conclusion which generalized that total quality management brought about culture change in the hearts and minds of the employees. Implementing quality with what the university already had rather than waiting for hand-outs stimulated the employees to “think quality” and to be proud of what they were capable of achieving. It was also revealed that the Total Quality Management philosophy was entirely compatible with the aims and aspirations of any educational organization regardless of whether it is a university or a school offering basic education.

A study on integrated Total Quality Management practices in technical institutions from the students’ perspective was conducted by Pandi, Rao, and Jeyathilagar (2009). They revealed that total quality management in the aspects of top management commitment, system approach to management, customer satisfaction, employee involvement, training, teamwork, and continuous improvement were given equal importance in the technical institutions under study. However, as revealed by the students, top management commitment and teamwork were not given attention in the various technical institutions that were studied. It was clear that there was a need to place emphasis on the seven critical factors of total quality management in order that the schools could impart world class education.

Ramadhan (2005) rendered an investigation of quality management by Bahraini companies through qualifying for certification with the International Standardization Organization (ISO), and the measuring and reporting of cost of quality. The study examined the motivation behind quality certification and the extent to which Bahraini firms measure and report quality costs. A sample of 100 companies was selected at random from the Directory of the Ministry of Commerce. Eighty-one companies responded to the study. Out of these companies, 47 were ISO certified. The reasons for ISO certification were to improve the firms’ competitive advantage, to respond to customer demands, and to reduce costs. Cost of quality reporting was adopted by 40 firms comprising 49.4 percent, 22 companies indicated that they planned to implement cost of quality reporting, and the remaining 14 companies had no plans to implement cost of quality reporting. The most important uses of a quality cost report were product cost information, quality cost planning, and targeting areas for process and product

improvement. The main reason for not measuring quality costs were the extensive use of non-financial measures, and quality had been a part of the firms' culture.

The studies which have been reviewed bear some relationship to this study in the sense that the concern for quality predominated in these studies. However, the first two studies involved an evaluation of the implementation of total quality management after an intervention had been introduced. The third study was concerned with quality management through ISO certification. This study is concerned with quality management in educational institutions. Thus, the study conducted by this research does not duplicate any of the studies which have been reviewed.

## RESEARCH METHODOLOGY

### Research Design

The descriptive-survey method of research was used in this study. This method was appropriate since the respondents or subjects were taken as specific groups falling in the same category. In the descriptive-survey method, inferences and generalizations were made about groups falling under the same category rather than the individuals comprising the groups.

### Population and Samples

The study samples comprised 55 professionals, 40 of whom were from the Manama area, and 15 of whom were from the Salmabad area. There were 200 students with 100 students from each of the two areas. The data on the respondents are shown in Table 1.

The purposive sampling technique was used. The criteria used for choosing the samples were: their being either enrolled, having graduated, or being affiliated with schools having linkages with institutions in English speaking countries, their being in the Manama and Salmabad areas, and their willingness to be involved in the study. Table 1 presents the data on the respondents.

**Table 1. Data on Respondents N=255**

<i>Category</i>	<i>F</i>	<i>%</i>
Professionals	55	21.57
Students	200	78.43
Total	255	100.00

### Research Instrument and Validity

The questionnaire is used as the main instrument of data collection in this study. In order to determine the validity of the questionnaire as an instrument of data collection, the researcher will conduct a pretesting of the instrument in the Business Department of AMA International University. Thirty students who will not be included in the actual study will be selected as the pretest respondents. Copies of the questionnaire will be distributed among them. They will be allowed to respond to the questions at their own pace. The responses will be tallied and tabulated. An item analysis of the responses will be conducted. The incidence of non-response to any question and the range of variation of responses will be noted. If at least sixty percent of the pretest respondents will be able to answer the questions with a reasonable range of variation, the questionnaire will be finalized.

## Data Gathering Procedure

The researcher arranged appointments with students in the two areas of study and met the professionals separately in order to administer the questionnaires. The researcher explained the procedures for accomplishing the questionnaire in order to avoid misinterpretations. He was available for the respondents who might ask questions.

## FINDINGS

The study revealed that in the area of instruction, the total quality management practices of the schools were perceived as very good by the professionals and the students. The total quality management practices pertaining to infrastructure in the schools were perceived as excellent by the professionals and very good by the students. In the area of student services, the total quality management practices were perceived as very good by the professionals and excellent by the students.

The total quality management practices of the schools in the Kingdom of Bahrain were perceived to have a high level of effectiveness. The practices in connection with instruction were perceived as having a high level of effectiveness by the faculty and a very high level of effectiveness by the students. The total quality management practices in the area of infrastructure were perceived as having a high level of effectiveness by the professionals and the students, while the practices in connection with student services were perceived by the professionals to have a high level of effectiveness and by the students to have a very high level of effectiveness. There was generally no significant relationship between the total quality management practices and their level of effectiveness.

Problems in connection with total quality management practices in the school were identified. Cited by the majority of the respondents as the main problem in the area of instruction was lack of cooperation among teachers for changes in curriculum design. The majority also cited that the main problem in connection with the total quality management in the area of infrastructure was lack of concern among students for the upkeep of buildings. The main problems in connection with the total quality management practices in the area of student services were non-compliance among students with the schedule of registration, lack of enthusiasm among students for the leadership training sessions, and inadequacy of equipment for various types of athletic activity.

Accordingly, the researcher proposed a number of measures for improving total quality management of schools in the Kingdom of Bahrain. The proposals were expounded under three categories corresponding to the three areas of school operations.

## CONCLUSION AND RECOMMENDATIONS

In the context of the findings of the study, the researcher concludes that while the total quality management practices of the schools in the Kingdom of Bahrain ranged from very good to excellent, the levels of effectiveness ranged from average to very high, resulting in the acceptance of the hypothesis. Still to a very good extent, the schools could cope with the demands of global competitiveness and were capable of continuous improvement of their operations.

Taking into account the findings of the study, the researcher recommends:

1. That the schools in the Kingdom of Bahrain consider implementation the proposals presented by this researcher.



2. That the quality of instruction in the schools be measured according to the outcomes of their learning such as the students' performance in the certification examinations for courses in which certification is required.
3. That the students be trained to maintain cleanliness in the areas in the school which they are using and to take care of the fixtures in order to preserve their usefulness for a reasonable period of time.
4. That the students be acquainted with the emergency exits that should be adequately marked.
5. That a layout the school campus be provided for every classroom and that the diagram be placed in the entrance to each classroom.

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