TOTAL QUALITY MANAGEMENT IN EDUCATION: PROSPECTS, ISSUES AND CHALLENGES

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Abstract
The quality of education is becoming increasingly important for those who are involved in it either directly or indirectly, and for those who use its services. Access to education and quality education are to be regarded as mutually dependent and indivisible needs and rights. This is primarily achieved by developing creativity, civic and democratic values, as well as by knowledge, abilities and skills needed for everyday and professional life. On the other hand, for the last few years, TQM has been applied in the education industry and most of the applications have been in the administrative side of the institutions, but presently some schools have applied TQM to their curriculum development. Quality management in education plays a vital role in achieving quality goals through planning, monitoring, assuring and improving quality too. Involving all members of the organization makes total quality control better (Total Quality Management, TQM). Efficient Total quality management system in organization can facilitate a challenge in world market and realize target and mission in education of young generation. TQM also upgrades management quality and quality of work in educational institutions in general. Having this as the backdrop, the present paper focuses on the prospects, issues and challenges pertaining to Total Quality Management in Education.

Key Words: Total Quality Management, Quality Indicators, Continuous improvement, Educational system

Introduction
Total Quality Management (TQM) is a management philosophy which aims at the effective use of the material and human resources of an organization. The TQM philosophy helps an organization to achieve its objectives. Although TQM was developed for industrial purposes, after the 1990’s, TQM began to attract the attention of academicians in higher education who saw its potential to increase the efficiency of the education offered in Universities and Colleges. Total Quality Management (TQM) is a topic of great consequence in business and academic circles too. At the beginning the philosophy of TQM was developed by W. Edwards Deming to improve the efficiency of flexible work teams in US industry before the Second World War.

Although TQM was originally intended for the development of industrial sector, Deming expressed that the management principles could be applied equally to the service sector, which also includes education. On the other hand, education quality is becoming increasingly important for those who are involved in it either directly or indirectly, and for
those who use its services. Therefore, TQM approach in education involves not only achieving high quality but also influencing all segments of the educational process: organization, management, interpersonal relations, material and human resources, etc.

Definition of TQM

TQM is an evolving concept that changes as new concepts and methods which develops. According to Strickland and Wither the most comprehensive definitions of TQM is: TQM is both a philosophy and set of guiding principles that represent the foundation of continuously improving organization. TQM is the application of quantitative method and human resources to improve the materializing services supplied to an organization, all the process in an organization, and the degree to which the needs of the consumer are met, now and in the future.

According to Wither's the different functions for each word in TQM is:
- **Total** - Every person in the firm is involved (including the customer and supplier);
- **Quality** - Customer requirements are met exactly;
- **Management** - Senior executives are fully committed.

Principles of TQM

TQM relies on soft concepts like leadership, respect, integrity, trust, honesty, commitment, customer satisfaction, openness and high ethics, clarity of vision, problem solving, continuous improvement, total involvement, training and education, ownership of problems, reward and recognition, error prevention, team work, instinct motivation, consistency and good communications. While reviewing the literature one can see that there are many principles or concepts, sometimes with different words explaining the same idea. The British Quality Foundation developed a list of 16 core principles to represent the TQM initiatives. But here, these concepts are classified into three core principles. These core principles are customer focus, participation and team work and continuous improvement and learning. These core principles are customer focus, participation and team work and continuous improvement and learning.

Focus on the Customer

The modern definition of quality centers on meeting or exceeding customer expectation. Thus, the customer is the principal judge of quality.

Participation and Team Work

Full use of the knowledge and creativity of the entire workforce has to be deployed for quality achievement. Studies have shown that those people who have participated in the project are most positive, but those who have not had the possibility to participate may show negativity. To increase employee participation in projects it is necessary to establish an effective communication network system. Delivering TQM depends on all member parts of the organization working together. Another important element of TQM is teamwork.
provides everyone with an opportunity to be part of a team. Teamwork focuses attention on customer-supplier relation and encourages the involvement of the total workforce in attacking systematic problems, particularly those that cross functional boundaries. Actually, TQM encourages people to educate and develop themselves to work in teams, to think for themselves and believe that things can be continually improved.

Continuous Improvement and Learning

Continuous improvement and learning should be an integral part of a whole system and its processes. Continuous improvement refers to those improvements which may be either small, gradual or large. Improvement may take forms such as, enhancing value to customers, reducing errors, waste and cost, improving productivity, effective use of all resources and improving responsiveness. Major improvements in response times may require simplification of work processes and a simultaneous improvement in quality and productivity may also occur. Therefore, learning is a lifelong process and a goal directed activity which experiences change and successful learning brings continuous improvement.

Other aspects of TQM

Active Leadership: Active Leadership or good leadership, combined with the participation of everyone in the team, is the key success factor of TQM. The concept of TQM leadership is different from traditional concepts of leadership. TQM leadership is distributive leadership, and should be shared throughout all levels of an educational institution, that is from the top to the base of the organizational hierarchy. Leadership must make any program attractive and necessary for all employees.

Top Management Commitment: The TQM approach is human resources oriented management. All employees must be totally committed to TQM, from the highest level of management to the lowest strata of the workforce. For the successful implementation of TQM the total commitment of top management is necessary.

TQM and Education

Total Quality Management in Education

The concept of total quality was introduced by Prof. W. Edwards Deming in the year 1950, can be applied to almost every organization up to a certain level. The term stands for the process of shifting the focus of the organization towards a superior quality of products and services. TQM approach in education involves not only achieving high quality but also influencing all segments of the educational process such as organization, management, interpersonal relations, material and human resources, etc. The introduction of total quality management requires a number of changes in educational institutions. The first changes have to occur in the attitudes and activities of the management, in the organization and monitoring of the educational process, in the evaluation of its results, in the culture of communication, in the school atmosphere, and especially in the area of interpersonal relations. TQM stands for a way of life of the organization, which introduces
constant improvement of education on all levels and activities, creating the appropriate environment through collaborative work, trust and respect. It approaches the processes in a systematic, consistent and organized way and applies total quality management techniques. If an institution is constantly willing to direct its efforts towards education improvement, the principles presented above can lead to excellence in quality. The success of total quality management depends on its eight components are ethics, integrity, trust, education, teamwork, leadership, recognisability and communication.

**TQM Pertaining to Higher Education**

There is a nine step TQM model for higher educational institutions with some recommendations, but every higher educational institution can design its own model according to its own circumstances. It is not necessary to introduce TQM across the whole institution.

![Fig. 1 Conceptual TQM Model for Education](image)

<table>
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<th>Stage 1</th>
<th>Identification</th>
<th>Explore TQM and justify the requirement for TQM</th>
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<td>Deciding</td>
<td>Obtain the top management commitment – Determine mission/ vision statement</td>
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<td>Stage 3</td>
<td>Preparing</td>
<td>Determine main customer - Conduct customer surveys and the customer needs - Establish objectives and goals - Establish an implementation team - Provide education to key personnel - Design a documented implementation plan</td>
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<td>Stage 4</td>
<td>Education &amp; Training</td>
<td>Name the program – State purpose - Provide training all level</td>
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<td>Stage 5</td>
<td>Initiation</td>
<td>Choose a pilot project - Formulate a pilot team and/or a quality circle - Perform benchmarking - Establish measurement criteria and quality Indicators</td>
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<td>Stage 6</td>
<td>Expansion</td>
<td>Provide ongoing education and training - Forming new teams and departments through the organization</td>
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<td>Stage 7</td>
<td>Recognition/ Reward Success</td>
<td>Recognize and reward success</td>
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<td>Stage 8</td>
<td>Evolution</td>
<td>Evaluate the program - Identify the problems and obstacles - Try consensus building</td>
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<td>Stage 9</td>
<td>Continuous Improvement</td>
<td>- Take corrective action to narrow the gap between current situation and goals - Assessment of progress - Report the progress and disseminate all levels - Develop a plan for continuous improvement and learning about stake holders needs - Go on education and training of all personal</td>
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TQM: Prospects in Higher Education

The TQM concept applied to higher education embraces all fields and levels of education and has an effect on the following: Education plays a vital part in a person’s achievement, apart from inborn talent. Education will mold and guide a person to be what they want to be. Of course, if discussing education, teachers will play a very important role. Teacher has many responsibilities not only to the students but also to the society. Now in the 21st century, a time when technology is at its peak, education faced a deep challenge to adopt on fast paced world. Changes in global educational settings have compelled the institutions of higher learning to revolutionize its activity. Teachers must follow through in learning new techniques or methods in their teaching for the benefit of the students and society as a whole. Sangeeta et al. (2004) regards education system as a development process consisting of observations of students, instructors, administrative staff, physical facilities and procedures. The procedures compose of teaching, learning, and administration. While, output consists of examination outcome, employment, profit, and satisfaction. According to Roffe (1998), because of an open competition, students are now turning more to customers as well as consumers and anticipate to pay an increasing due of education cost. This resulted to competition causing generating different programmers for different student groups.

Indicators of TQM in Education

The system of indicators of quality in education, as well as the quality criteria associated with the indicators, help schools to point out the important areas of their own activities - their own advantages and disadvantages and development opportunities. School quality team can debate about representation and development of particular indicator aspect and search for method for upgrade and meliorate indicator representation in specify school circumstances. The indicators are grouped into seven areas with specific topics:

Curricular Aspects
- Curricular design and development
- Academic flexibility
- Feedback on curriculum
- Curriculum update
- Best Practices in curricular aspects

Teaching-Learning and Evaluation
- Admission process and student profile
- Catering to diverse needs
- Teaching-Learning process
- Teacher quality
- Evaluation process and reforms
- Best Practices in teaching, learning and evaluation
Research, Consultancy and Extension
- Promotion of research
- Research and publication output
- Consultancy
- Extension activities
- Collaborations
- Best Practices in research, consultancy and extension

Infrastructure and Learning Resources
- Physical facilities
- Maintenance of infrastructure
- Library as a learning resource
- ICT as learning resources
- Best practices in the development of infrastructure and learning resources

Student Support and Progression
- Students’ personal, social and spiritual growth
- Progress and achievement monitoring
- Support in all aspects of learning, progress, students’ and teachers’ personal development

Governance and Leadership
- Institutional vision and leadership
- Organizational arrangements
- Strategy development and deployment
- Human resource management
- Financial management and resource mobilization
- Best practices in Governance and leadership

Innovative Practices
- Internal quality assurance system
- Inclusive practices
- Stakeholder relationships

Application of TQM in Educational Process
In order to assess the efficiency of total quality management in education, many research were carried out. These research covered the following areas: education quality based on total quality management, the assessment of quality applying the Standards for quality management in education, NUKO 9001:2007 and the relation between total quality management and the efficiency of education. The study also aimed at determining the
opinions of the participants on the management, the managing and directing of the
employees professional potential, on the policy and strategy, on resources, key processes,
user satisfaction, social reputation and the key results of institutions before and after the
application of total quality management based on the Standards for quality management in
education NUKO 9001:2007. The research results show that by using total quality
management, educational institutions successfully distribute their accumulated knowledge
and increase their efficiency. Total quality management helps achieving the goals and tasks
of education of young generations. TQM not only improves the quality of management but
also of the entire educational institution.

Challenges in Implementing TQM

Some researchers are skeptical about the success of TQM in higher education. For
example, Chaston has identified some obstacles, such as insufficient trust between
departments and faculty members’ low confidence level of ability to manage the process of
TQM. There are other questions regarding the applicability of this method to educational
institutions. First, many institutions generally do not accept the need for change. Second,
TQM’s requirement that students are involved as customers and part of the ‘teamwork’, are
accepted as a threat to the faculty’s autonomy. Faculties balk at the idea of having a
student as a customer, as in the “the customer is always right” type of scenario. Hence
faculties and administrators tend to hold the belief that they know what the students need.

Discussion & Conclusion

Total quality management urges for long term planning which is also dynamic, since
the plan is subject to continuous review and revision. It is important to ensure acceptance
and inter-nationalization of the concept of TQM, and its theoretical constructs. Total
quality can only be achieved by establishing an innovative organization, one that is flexible,
which can adjust quickly to changes in its environment and is capable of learning.
To improve education quality, an essential factor of economic and social development in
the 21st century, it is crucial to reduce the huge amount of knowledge students are
supposed to master, focusing their attention to a system of basic knowledge, on creativity,
problem-solving and lifelong learning. Educational institutions play an important role in the
development of the national economy, of the society as a whole and of its individual
members through high quality educational services. Thus, TQM in education is for the
development of ‘total quality mind’ and provides an important opportunity to look at the
quality in a holistic fashion and also provides instrumentalities for managing quality.

References