

Implementing Total Quality Management (TQM) on the Higher Education Institutions – A Conceptual Model

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Abstract: Higher education can play a crucial role in the economic and cultural reconstruction and development of the nations. For hundreds of years, the universities and effective educational systems are development factors and agents of change in their communities. Jordan is one of the pioneer countries in higher education due to its credibility; so many students from Arab and foreign countries come to study in.

Over the last ten years, a lot of innovative experiments are being done to improve the performance and introduced several laws and constitutions for both academic and educational standards aimed to further develop and improve its ability to compete consistently by successive Jordanian governments, realizing the importance of this sector for socio-economic and cultural development and this requires an ideal governance and service delivery, but the system of higher education in Jordan must be reshaped, the strength must be maintained, but the weaknesses must be addressed and developed, to serve a new social order, to meet the pressing national needs, and to respond to a context of new realities and opportunities.

Through this piece of work, this research paper is a theoretical attempt to explain the implementation of **TQM** in higher education institutions in Jordan, and deals with issues related to quality in higher education, and identify variables influencing quality in this sector.

JEL Classification: M11

Keywords: Quality; Total Quality Management (TQM); Higher Education (HE); University; Institution; Jordan

1. Introduction

In the last decades, several factors have contributed to raising public concerns over higher education institutions quality, learning to the emergence of quality management and improvement devices such as performance indicators, accreditations, programme, and institutional assessment and quality audits, and there have been attempts to import models from the private sector in to higher education institutions (Cardoso, 2010).

This has led to the emergence of a debate on the applicability of quality management principles, methodologies, and tools to the Higher Education sector. As reported in the literature on Higher Education, several voices have been heard about the non – applicability at all of those management theories especially because they derived from industry and had nothing to do with Higher Education ethos (pratasavitskaya and Stensaker, 2010).

The overall scenario of higher education in Jordan not matches with global Quality standards. Hence, there is enough justification for increased assessment of the quality of the country's educational institutions. Traditionally, these institutions assumed that Quality could be determined

by their internal resources, viz., faculty with impressive set of degrees and experience detailed at the end of the institute's admission brochure, number of books and journals in the library, an ultra-modern campus, and size of the endowment, etc., or by its definable and assessable outputs, viz., efficient use of resources, producing uniquely educated, highly satisfied and employable graduates.

Higher Education has to be about quality and excellence, not just, it is rather the quality of effective presence they share with students, teachers, systems, and stakeholders, and the relationships they shared with each other. In many countries and many cultures the issue of quality management has been firmly on the agenda of higher education institutions (HELs) for quite some time. Higher education (HE) for the masses and a growing climate of increased accountability are frequently cited as relations for a greater emphasis on quality (Becket and Brookes, 2008).

Growing students' numbers, mass enrolment rates, and different type of program delivery, changing society structures and job descriptions produce complex question of quality in the institutions of higher education. Within the new roles and functions, higher education institutions must review their technical, managerial and social functions. The TQM evaluation model is a key tool for assessing the three-dimension function of higher education institutions (Yusof & Aspinwall, 2001).

Arab societies are currently experiencing many changes in various areas of life that requires corporate and private organizations to change their traditional administration and management styles. Thus, it is required that each organization adopt modern management concepts if they desire to achieve their objectives more readily. These changes will increase their competitive edge in the global inter-institutional productivity and rapid technological development in the world in various areas, particularly in communications, computer and laser technologies.

Improving the performance of higher education institutions is a global concern in all countries in the world. Among the most important characteristics that distinguish a community from other communities, is its ability to manage institutions and vital programs, not only effectively, but fairly innovative. Linked to the size and quality of services in the founder in HE system – management, that makes the university a letter compass movement thorough the guidelines and university ethics. Any success of its founder is a success in its management, hence the importance of management's commitment to HE institutions to improve the overall philosophy constantly in order of arrival to TQM in universities which need the participation of all to ensure survival and continuity of universities (Al- Khatib, 2011).

(UNESCO, 1998) Quality is the heart of education. It influences what students learn, how well they learn and what benefits they draw from their education. The quest to ensure that students achieve learning outcomes and acquire values and skills that help them play a positive role in their societies is an issue on the policy agenda of nearly every country.

This Paper proposes a theoretically model of TQM implementation particularly for higher education sector. The rest of this paper is structured as follows. Literatures of key TQM practices are reviewed; development of conceptual model is presented. Finally, conclusions of this paper are discussed, which is follows by challenges and recommendations for future research.

2. Implementing Quality Measures

How the faculty and administration of institute prepare for implanting total Quality management and assessment? How the introduction of quality implantations influences the goals, roles, and mission of an institute? Who are the key players and what are their individual goals and motivations? How will the culture of an institute change in an environment of increasing demand for demonstrable Quality and outcomes?

(Tewari, 2012) To answer such questions should be available in the institute. Most of the Quality standards for accreditation state that assessment principles are complementary to the institute's mission. Clearly defined mission, goals, and objectives guide faculty, administration, staff, and government bodies in making decisions related to planning, resource allocation, programs and curriculum development, and definition of program outcomes. These goals and objectives should focus on student learning, other outcomes, and institutional improvement.

3. Statement of the Problem

A number of environmental forces are driving change within and across countries and their Higher education. These changes have served to put out the issues of Quality management firmly on the agenda of many Higher Education Quality Management has been undertaken within single national context despite the fact that Higher education is increasingly viewed as an international business. This review questions whether it is time to rethink our current approaches to quality management in Higher Education.

The study uses analytical descriptive approach which based on analysis of the literature and administrative thought in the area of TQM for higher education institutions and supports the implementation of TQM concepts in higher education institutions in Jordan as well. Specially, it is hoped that this study will provide an answers to the following inquiries:

1. Just what is meant by TQM in Higher Education?
2. What are these factors appear associated with TQM?
3. What are the primary issues of resistance to TQM?

4. Purpose – Objectives

The background to this paper is the extensive changes in Jordan's higher education since 1989, which have brought 'quality' sharply into prominence. Although the issue of quality has been given considerable attention in industry/commerce, quality in higher education is underdeveloped as a concept. This paper offers an elaboration which may help those with an interest in the management of quality systems and the evaluation of educational programs, and concludes by discussing the development of a quality system for the unified higher education sector in Jordan.

There is still no consensus on how best to measure and manage quality within higher education institutions, in spite of many approaches and models have been adopted, because quality is dependent process and the success of any process is dependent on how others are working well, it's more effective to judge quality through a systematic assessment. Correctly manage and implementing the TQM concepts and indicators is one of such measures, which will go a long way in revolutionized the Jordanian HE sector. Thus, through this study we hope to achieve the following objectives:

1. Provide irrefutable evidence that excellence and quality in HE institutions achieved only with high level Total Quality Managements standards and indicators.
2. Identify the challenges in TQM implementation in HE Institutions.

5. Significance of the Study

TQM received a considerable attention from the administrative leadership and academic researchers. Different views about possibility of adoption in higher education institutions between

supporters and opponents. Despite many successes achieved by TQM implementation in some of higher educational institutions in Jordan, and several researches and studies around, it still just a slogan and did not find the correct way for the proper and effective application. Especially as these institutions facing many socio-economic changes over the last two decades, which reflect negatively on professional; institutional; and holistic level of the education system which faced increasing pressures and challenges.

The very reason for conceiving this research paper is to help HE institutions to implement the concepts of Total Quality Management (TQM), that is when applied, with strong leadership support, TQM leads to continuous improvement in management systems, processes, products and services, and results in delighted customers and stakeholders. The output of this research paper is geared towards acquainting Higher Education Institutions how to use basic quality tools to manage and improve processes. Once the basic tools are mastered, Higher Education Institutions are able to determine if their processes are capable of meeting customer requirements. If processes are capable, Higher Education Institutions know how standardize the process to assure stable and capable performance. If processes are found to be not, then Higher Education Institutions will know how to use TQM model to being improving the processes so that they meet customer requirements (Dimaano, 2009). Findings of this dissertation will specifically be addressed for benefit of the following individuals and sectors.

5.1 Accreditation

The wide use of quality management systems paves the way to accreditation and then to world rankings and competitiveness in higher education. The implementation of TQM in higher education institutions will come in contact with all body of accreditation: universities, community colleges, and joint programs.

5.2 Administrators

Understanding how to use basic quality tools, allows administrators in the organization to take responsibility for the processes they manage. In general, TQM will allow administrators to understand and continuously improve the processes they manage. Administrators' use of the TQM proposed model will enable them to forecast the possible success and failure lines in the course of the organizational operations thereby helping organizations to achieve breakthrough process improvement.

5.3 Employees

Presence and sustainable implementation of TQM will provide venue for employees to attune themselves in the genre of the highly globalize environment. With TQM employees are given the chance to exploit their potentials to fullest possible way to being conscious enough in working with quality and producing quality outputs. Application of the employee aware of the amount of his/her contribution to the present productivity level of the concerned higher education institutions and became more motivated, as expected, to hasten his/her workability to increase the efficiency and effectiveness level of the organization.

5.4 Research

Research focuses on exploration of the knowledge. In an educational system research has been stereotyped to be part of higher education system. (Jordan, 2010) The Jordan Scientific Research Fund (SRSF) was established in 2007 to fulfill the higher education and scientific research is responsible for encouraging and supporting scientific research in the kingdom. This highly specialized research Fund undertaking will provision of financial support to scientific research

project, support technical problems, enabling the utilization of science and knowledge, provide researchers the idea to come up with studies of novelty value such as model building other than conventional descriptive surveys. It will also open windows for the researchers to widen their research horizon at the expense of exploiting the available research techniques, particularly on the use of highly sophisticated and robust statistical tools like regression techniques, which establish higher level of confidence for validity and generalizability of findings and conclusions.

5.5 Commission on Higher Education (CHED)

The socio-cultural foundations of education and its effects on individuals and societies. The Commission on Higher Education (CHED) needs to successfully achieve its goal of upgrading; TQM in selected industries shall also be adopted and applied in higher education institutions. Results of this research paper will provide baseline data for Commission on Higher Education to account on the organizational quality of the Higher Education Institutions in Jordan and beginning assessing them against Commission on Higher Education standards. Moreover, the findings can also be used by Commission on Higher Education as a measure in determining organizational capability of the Higher Education Institutions as prospective recipients of the Center of Excellence and Center of Development grants.

6. Brief on Higher Education Sector in Jordan

(MOHE, 2011) The sector of higher education in Jordan plays a key remarkable role in the process of comprehensive development at various levels and areas. That is, during the last ten years (in the reign of his Majesty King Abdullah II), higher education in Jordan witnessed a significant progress in terms of diversity of study programs, patterns of teaching and learning that control both the quality and quantity and expansion of higher education institutions .

Higher Education in Jordan commenced by the establishment of Teachers House 'Dar Al-Mu'lemeen' in 1958, with level of two years aiming at preparing qualified teachers to work at schools which belong to the ministry of higher education. Afterwards, establishment of teachers' houses has succeeded and became known as 'Teachers Institute' which has been developed for 'Community Colleges' in seventies. As for university education, it commenced by establishment of the University of Jordan in 1962, followed by the establishment of Al-Ahliyya Amman University in 1989 as the first private university in Jordan.

His Majesty King Abdulla II has paid a special attention to the higher education as he steered his successive government to shed more light on higher education and its development. Thus, during his Majesty's reign, many public and private universities were established, this is in addition to foreign universities operating in Jordan, the programs emanated from cooperation agreements between Jordan and foreign universities and the programs of the Jordanian universities of the neighboring Arab countries.

During the last two decades, the sector of higher education in Jordan witnessed a prominent development as well as progress evidenced by the increasing number of institutions of higher education, enrolled students, faculty members, administrative and academic members; size of expenditure and the financial government support to this significant education sector.

The number of public universities as a result has reached (10), besides (17) universities that are private and (51) community colleges, this is in addition to the World Islamic Sciences and Education University. This progress in numbers of universities accomplished by significant increase in number of students enrolled to study in these universities, where the number of enrolled students in both public and private universities is estimated at nearly (236) thousands; (28)thousand out of the total are from Arab or foreign nationalities. Thus, the pride created by this development as well

as progress puts us face-to-face with various challenges, the thing which leads us to pay more efforts in order to overcome the difficulties and obstacles stand before us, to realize a balance between the spread of higher education and its establishment from one side, and its level and quality by other.

As a result of the development that occurred in this sector and in order to maintain the quality of higher education, the next phase required a reconsideration of the law that governs public and private universities as well as the higher education. Therefore, by the issuance of the new "Law of Higher Education No. (23), for the year 2009" and "The Jordanian Universities Law No. (20), for the year 2009", the Jordanian universities have to become more independent in managing the administrative as well as financial matters, and by virtue of the new law, the following units agreed to be developed within the ministry's organizational structure:

- The Policy Analysis and Planning Unit which assumes, by virtue of the new law, the responsibilities of collecting data and information on higher education sector; conducting studies in order to support the work of Higher Education Council (which comprises the Higher committee for Scientific Research) and any other tasks stated in the law .
- The Unified Admission Coordination Unit which assumes the responsibility of student's admission in to public universities according to the principles approved by the Council of Higher Education.

The ministry has paid a special attention to higher education in order to have it at the top of our national priorities. Attention, here in has been mostly focused on monitoring and evaluation of the strategy of higher education and scientific research for the years (2007 – 2012) to maintain a shiny image of higher education and scientific research, its outputs, competitive capabilities; and to admit the largest possible number of our young people into our Jordanian universities according to goals system that is in line with our national goals.

Despite the big challenges that higher education faced, Jordan was capable to realize quantitative and qualitative achievements in this sector. That is, appropriate procedures aiming at improving its role were developed in order to achieve a quantum leap with a high quantity and to catch up with recent developments applied by the Jordanian institutions of higher education. All those were due to the various initiatives that worked on limit in the power of these challenges, weakling and processing them for sake of realizing a comprehensive national strategy for the sector of higher education in Jordan.

(Jordan, 2010) The key performance indicators of the strategy of higher education appear clearly through: Percentages of (1) males and female's enrollment into regular admission programs and parallel programs; (2) the steady increase in faculty members; (3) financial government support for institutions of higher education; (4)turnout the burden and responsibilities of education with the public sector; (5) the Higher Education Accreditation Commission that supervises on quality assurance at both public and private institutions for higher education to be consistent with the international standards; (6)updating libraries of universities and linking all institutions of higher education to the electronic periodicals and universities networks; (7) the Scientific Research Support Fund that finances projects with national priorities, offering grants for outstanding graduates, granting the outstanding research prize, the outstanding researcher prize and the outstanding student prize; (8) and finally according the TOEFL certificate as an admission certificate for joining master and PHD programs.

(MOHE, 2011) The future strategic goals for the Ministry of Higher Education and Scientific Research is: Improving HE Sector Management; Improving the quality of HE environment; Enhancing scientific research quality and the role of higher institutions; and Providing national quality databases and periodic studies on the HE sector and scientific research in accordance with international best practices. To this end, Jordan has been effecting continuous changes,

transformations and developments of HE sector with the aim of achieving quality and distinction. Over the year, HE institutions in Jordan have attempted to strike a balance between academic and vocational education.

7. Quality

Quality is an exclusive term, as many people have argued, for example, Quality can be defined taking into consideration the degree in which an assembly of characteristic meets the requirements. In higher education, its beneficiary's requirements can be expressed in terms like: what should a graduate know and do in a certain domain?

Quality is notoriously elusive of perception, and no easier even to describe and discuss than deliver in practice (Gibson, 1986). It has several variants as a dictionary term and has been constructed in a wide variety of ways when linked to evaluation of higher education. The word "quality" is divided from Latin word *quails* which means "what kind of ". It connotes a variety of meanings and implies different things to different people. There are some people who suggest that quality in relation to higher education is too complex to define. However, they still want to measure this indefinable concept. There have been those who imply that quality is something one knows when one sees it or experiences. This, though, defines quality in terms of an individual's implicit subjective criteria.

"Quality", according to Ali *et al.* (2010), the word "Quality" represents the properties of products and/or services that are valuable by the customer. "Quality" is the ongoing process of building and sustaining relationships by assessing, anticipating, and fulfilling stated and implied needs (Koch, 2003).

Harvey and Green (1993) in their pioneering paper explored the nature of quality in relation to HE: "Quality" is often referred to as a relative concept. In other views, quality is judged in terms of absolute thresholds that have to exceed to obtain a quality rating, for example, the output has to meet a pre-determined national standard. In other conceptualizations, however, there is no threshold by which quality is judged, rather quality is relative to the process that result in the desired outcomes.

(Vlasceanu *et al.*, 2007) The UNESCO definition is lengthy, it states: Quality (Academic): quality in higher education is multi-dimensional, multi-level, and dynamic concept that relates to the contextual settings of an educational model, to the institutional mission and objectives, as well as to specific standards within a given system, institution, programme, or discipline. Quality may thus take different meanings depending on: (1) the understandings of various interests of different constituencies or stakeholders in higher education (quality requirements set by student; university; discipline; labour market; society and government); (2) its references: inputs, processes, outputs, missions, objectives, etc.; (3) the attributes or characteristics of the academic world which are worth evaluating; and (4) the historical period in the development of higher education.

Based on the above literature, the term "quality in higher education" remains a position of controversy in terms of the precise definition and academics and researchers, and it is difficult to discuss in a concrete way and there is no specific definition that encompasses objectives within these institutions, also it contains a wide range of attributes and many possibilities to assess. Since it is almost always related to some specific goals that can involve an argument about whether such goals are achieved or not.

8. Dimensions of Quality in Higher Education

- **Fitness of purpose:** fulfilling a customer's requirements, needs or desires. Evaluates whether the quality-related intensions of an organization are adequate. In education, fitness of

purpose is usually based on the ability of an institution to fulfil its mission or a program of study to fulfil its aims.

- **Value of Money:** return on investment. If the same outcome can be achieved at a lower cost, or a better outcome can be achieved at the same cost, then the customer has a quality product or service. The growing tendency for governments to require accountability from higher education reflects a value-for-money approach. Increasingly students require value-for-money for the increasing cost to them of higher education. The demand for higher education is also influenced by the ability of the customers in terms of his ability to pay. In all countries; the price is an important issue in determining as to have access to higher education. In this context most of the universities and public funded institutions are playing a positive role in controlling the cost escalation and providing higher education to the economically unprivileged ones at a reasonable cost.
- **Transformation:** the process of changing from one qualitative state to another. In educational terms, it refers to the enhancement and empowerment of students or the development of new knowledge.
- **Excellence:** the degree of excellence of the entire educational experience. The quality of student's life; the adequacy of university or college finances; the breadth and modes of learning offered; and student access to tenured faculty.
- **Total Quality Management (TQM):** Rosa and Amaral (2007) argue that is difficult, may be even impossible to find a unique unequivocal definition of TQM and that the better one can do is to put forward a set of principles that underlie most TQM approaches. To (Campatelli *et al.*, 2011) TQM is "approach to management characterized by the definition of some general and inspiring guiding principles and core concepts that represent the way the organization is expected to operate in order to obtain high performance".

The review indicates that a range of quality management models developed for industry have been adopted or tested within HE institutions on a global basis. Internationally, the tool most frequently drawn up is Total Quality Management (TQM) (Cruickshank, 2003), defined as: a management approach of an organization, catered on quality, based on the participation of all its members and aiming at long run resources through customer satisfaction and benefits to all members of the organization and to society (Wicklund *et al.*, 2003, 99).

Total Quality Management (TQM) is inevitably common factor that will shape the strategies of higher education institutions in their attempt to satisfy various stakeholders including students, parents, industry and society as a whole (Ali and Shastri, 2010). The concept of (TQM) management philosophy modern based on a number of concepts of modern management directed that it is based on combining means basic administrative and innovative efforts and the specialized technical skills in order to improve the level of performance and improvement and development ongoing (Al-Khatib, 1999).

TQM is defined as a management approach that aims to achieve and sustain long-time organizational success by encouraging employee and participation, satisfying customers' needs and expectations respecting societal values and beliefs, and obeying governmental statues of regulations (ISO9001, 2000).

Federal institute of management also knows TQM as performance of work properly right from the beginning glance to achieve the desired quality better and more effectively in shortest period dependence on the beneficiary to improve performance (AlQahtani, 1999) .

TQM models, based on the teachings of quality gurus, generally involve a number of principles or essential elements such as teamwork, top management leadership, customer focus, employee involvement, continuous improvement tool, training etc. TQM is a process that was applied successfully in industries in the US in the 1890s **Invalid source specified.** TQM as a total

philosophy aims at creating an organizational culture in which everyone is committed to quality and clearly understands its strategic importance in order to meet or exceed the needs of internal and external customers.

TQM is the process of changing the fundamental culture of an organization and redirecting it towards superior product or service quality (Gaither, 1996). TQM can be defined as a general management philosophy and set of tools which allow an institution improvement ascertained by customers' contentment with the services they have received (Michael *et al.*, 1997). According to Witcher (1989), TQM is composed of three terms: **Total**: meaning that every person is involved including customer and suppliers, **Quality**: implying that customer requirements are met exactly and **Management**: indicating that senior executives are committed.

- **Place and Accountability:** The location of institution is also determining factor of choice of higher education. In general students prefer institutions located in closer vicinity of their villages or towns. Moreover a system, which is more accountable to the different stakeholders of higher education, will generate better interests.

- **Delivery Mechanism:** Students also look at the mode of acquiring education in terms of accessibility and price. Generally the preference is given to full time courses. But part time learning, distance learning, correspondence learning, e-learning has proved to be a boon to those who cannot go for full time education, especially those in organized employed sector.

- **Tangible Elements & Physical Evidence:** Tangibility is related to the facilities, equipment, material and people, representing the material aspects of supplying, being perceived by the five human senses, such as visiting cards, pages on the internet, printed materials, billing documents, etc. physical evidence refers to types of services, infrastructures, and facilities often serve as a major attraction to the end user. It could be external as parking, landscaping, surroundings, external architecture, accommodation, offices, cafeteria, clinics, gymnasium and good ambience in general, and internal such as internal architecture, equipment, air quality, temperature, layout, quality classrooms and equipment, etc.

- **Raising Awareness:** All the above factors will be futile if they are not properly communicated to the stakeholders. Advertisements in the print and electronic media are being restored to for this purpose apart from official communication to the stakeholders. Institutions are also resorting to promotional methods including educational fairs to facilitate better reach amongst the stakeholders (Ali and Shastri, 2010). The goal is to find solutions for our future aims to establish a dialogue with abroad people especially with opinion leaders and decision makers to increase public understanding of the ways in which institutions serve the society, and demonstrate why public investment in higher education benefit to everyone. Colleges and universities contribute by preparing and teaching the people who find solutions to society's problems and create a better future for all of us.

9. Potential Benefits of TQM to Higher Education Institutions

Adoption of TQM will help institutions of higher education maintain their competitiveness, eliminate inefficiencies in the organization, help focus on the market needs, achieve high performance in all areas, and satisfy the needs of all stakeholders (Edwards, 1993).

In the beginning of the 21st century, most institutions of (HE) in the world are facing the same different waves of challenges represented in: low productivity; increased costs; lack of financial resources; adoption of ineffective methods to achieve its goals; low level of job satisfaction among employees; as well as, greater demand for enrollment; a diverse student body; the impact of

globalization and expanding technological demands. How can institutions of HE increase their overall capacity to meet these various challenges (Dimaano, 2009)?

To meet these challenges and overcome is very important, not only to enable these institutions in their ability to compete, but also to be able to survive and continuity. Therefore, those institutions in dire need proper application of the concept of Total Quality Management (TQM) to improve quality standards and enable them to excellence, through the achievement of several benefits such as increasing production capacity; reducing the cost of performance; and improving the quality of the product or service provided to the beneficiary. However, the traditional perceptions represented in the view that improving quality conflict with increasing productivity; contribute to further costs of performance; makes many of administrative organizations hesitate to invest in applying the concept of Total Quality Management, which leads to many managerial problems; bad service and product; and therefore not achieve customer satisfaction (Al-Alawi, 2000).

(Harris, 1994) There are three generic approaches to TQM in higher education; firstly there is a customer focus where idea of service to students is fostered through staff training and development, which promotes student's choice and autonomy. The second approach has a staff focus and is concerned to value and enhance of responsibility for action by defined working groups. The third approach focuses on service agreements stance and seeks to ensure conformity to specification at certain key measurable points of the educational processes.

In their model for TQM implementation in higher education institutions, Osseo-Asare and Longbottom (2002) propose enabler criteria, which affect performance and help organizations achieve organizational excellence. These "enabler" criteria are leadership, policy and strategy, people management, resources and partnership and processes. They also suggest "result" criteria including customer satisfaction, people satisfaction, and impact on society and key performance results for measuring the effectiveness of TQM implementation. Non-implementation of TQM was due to institutions pre occupation with funding agencies and non-embrace of continuous improvement culture. Proper education and training of those involved in the implementation process will help to mitigate this problem.

(Al-Saoud, 2002) The achievement of Total Quality Management in institutions of higher education meant the organization's ability to provide a high level of service quality excellence, and through it can meet the needs of students, faculty members, parents, employers, society, and others in a form which is consistent with their expectations and requirements of the age and the environment of scientific and technological resources, including achieving satisfaction and happiness to them. This is done through pre-established standards to assess the output, and check the status of excellence.

Roffe (1998) considers that due to open competition, students are becoming more customers as well as consumers and expected to pay a growing share of the costs of education. This deals to competitive forces that generate different programmes for different student groups. The conceptual problems include whether TQM in higher education should be people or problem oriented, difficulty introducing the application and acceptance of TQM in higher education institutions, which have not embraced tents of TQM, team V's individual orientation towards TQM, maintaining the rate of innovation amongst others.

(Al-Qaisi, 2004) It could be argued that behind the growing interest in adopting TQM in higher education institutions, number of justifications including: (1) higher education as a product of the power of human quality, a process working to satisfy the needs of the work market, qualified human powers and utilitarian value in the economy and development; (2) higher education as training in scientific research, HE works to prepare the individuals high and give them the skills of scientific research and quality is measured depending on the quality of the scientific production that is accomplished and the ability in the discovery and analysis of the facts and address the problems

and solve them; (3) HE as a matter of expanding opportunities, it means of social development and opportunities for all to contribute to the building of various institutions.

Sahney *et al.* (2004) consider education system as a transformation process comprising of inputs of students, teachers, administrative staff, physical facilities and process. The process includes teaching, learning, and administration. An output includes examination results, employment, earnings and satisfaction.

Fiengenbaum (1994) considered TQM as a management approach that could solve the problems of rising cost and pressure to provide quality education within US higher education institutions. In order to produce quality leaders for tomorrow, an institution of higher education can no longer afford to teach "one set of values [TQM] and adopting a different set for itself" (Matthews, 1993). Kanji *et al.* (1999) stated that TQM didn't take its momentum until 1993; I believe that thousands of TQM eras in Arab Higher Education Institutions are started.

10. Higher Education "Customers"

According to Spanbaour there are two types of customer: external (students, employers, taxpayers and community at large) and internal (other instructors, service department staff). In order to obtain continually improvement in higher education, universities should recognize their customers to achieve their requirements as a primary reason for their existence and do everything possible to maintain good relationship with students, staff, companies and society as a whole (Ali and Shastri, 2010).

Students: The primary customers of schools, colleges, and universities are students whom we provide information or service. According to (Srivanci, 2004), students as customers take four roles: the product in process; the internal customers for many campus facilities; the laborers of leading process; and the internal customers for delivery of course material need is determined by education mix, viz. teaching, research and extension activities.

Community: Higher educational sector does not operate in isolation. There are many interfaces including sociological, cultural, economic, technological, and political and so on. A good higher education serves to solve the problem of the society affecting these interfaces. It serves to promote local community development by involving the locals (Sahney *et al.*, 2004).

Community considered as the core of any activity, and important factor for defining and judging the quality of education as a feedback wide base for ideas and continuous improvements. Community includes stakeholders, students, parents, employers, administration, and teaching staff. Parents of students may influence their choice of profession, specialization or even university. Employers have to ingest the changes in the external environment for the betterment of the institute. In other words society may shape the mindset of prospect and current student. As a result it may eventually affect the inputs for the process of education (Cruickshank, 2003).

Companies: Education is a complex business with many interacting dimensions of quality in many varied contexts. (Tzvetlin, 2006) Companies make use of the outputs of the process of education. As a consequence of the growing needs of the market, companies seek better-educated staff at a lower price. Being pressured by competitors they hire more competent people who can meet the requirements for more than a single position. According to ISO 9001:2000 staff competence depends on four major factors—education, training, skills and experience. Education is the basis of that scheme. If a person lacks first step, it would take a lot of effort, time and money to fill that void. This is the reason schools, colleges, and universities are so important for business and industry.

Government: The state is the primary funded and responsible for education system and the supervisor of all levels and specialties. The Jordan Governments has passed several laws that facilitate the improvement of education including the law for encouragement of scientific research, the law for higher education, and the law for professional education and training. (Al-Tarawneh, 2011) Governments in Jordan realized early on the importance of empowering individuals, especially the youth, through focusing on the knowledge economy and the use of technology in planning and educational programs. To this end, Jordan has been effecting continuous changes, transformations and developments of the higher education sector with the aim of achieving quality and distinction.

Universities: TQM delivers a new conceptual framework for directing institutional activities to attract and retain its various customers. Universities should realize the benefits of this conceptual model, and extensive researches have been done in this area to investigate the university performances in relation to the quality management philosophy.

11. Literature Review

There are already some examples in literature that account for the application institutional Quality assessment models that provide integrated view on Higher Education Quality, providing frameworks for better institutional management leading to continuous Quality improvement. All these models propose to assess Higher Education institutions as a whole, including not only its teaching and research models, but also other activities, and, notably, institutional management (Sarrico *et al.*, 2010).

A numbers of Higher Education institutions have tested quality management models originally developed for industry. A key benefit of all the models is reported to be the requirement for institutions or departments to adopt a strategic approach to quality measurement and management. Largely limitations related to the applying in a Higher Education context. Continued debates on the role of the students as customer or co-producer in the higher education system, this has impact on the measurement and management of Higher education when using these models industrially developed models.

Inherent difficulty in quantifying the Higher Education for self-assessment purposes. When assessing the outputs, the models are reported to have far greater applicability in measuring administrative or service functions within Higher Education Institutions rather than the Quality of research or teaching and learning.

As the fundamental product of Higher Education is the learning of students this would appear to be a major short coming. The management of Quality needs to focus on the student learning experience.

Literature reviewed has attempted to develop models that reflect the unique characteristics of Higher Education and the importance of the student learning experience. Majority of the models presented still borrow heavily from industrial applications. Researchers are also reporting on the corporatization and managerial cultures infiltrating.

Higher Education institutions, this approach encourages academics to do more with less to meet the growing demand for Higher Education and the accountability agenda, it fails to address the learning experience of an increasingly diversified student body. Authors explicitly argue that the Quality of teaching and learning is actually decreasing under current approaches. Unless the Quality of learning for students is maintained, the economic imperatives of many national governments will not be realized.

In 2007 (Brookes and Becket, 2007) made a review of literature on Quality management in Higher Education and come to conclusion a number of environmental forces were driving within and across countries, leading to firm emergence of the quality management issue on the agenda of many Higher Education institutions. The review revealed that the most popular response Higher Education institutions gave was the testing or implementation of quality management models developed by industry. From the empirical studies reported in the literature and analyzed by the authors, benefits related to the implementation of models as well as limitations were identified. The benefits included the adoption of a strategic approach to Quality measurement, management, and the identification of Quality enhancement priorities; limitations related largely to the dilemma of applying business models to Higher Education. Furthermore the authors refer that "the models are reported to have far greater applicability in measuring administrative or service functions within Higher Education institutions rather than the quality of research or teaching and learning".

12. Discussion

This paper argued that at least in Jordan the need for Higher Education institutions to develop its own internal Quality management has become a reality. (pratasavitskaya and Stensaker, 2010) So may be its again the time to look at existent Quality management models, going beyond the debates about whether quality management is or not suited to higher education, focusing less on the label and paying more attention to the content substance of such models.

Furthermore this paper leads the author to conclude that Quality management models not only have full potential to cover the standards but additionally they may allow Higher Education institutions to go step further, opening the possibility for them to really move towards Quality enhancement.

As reviewed in literatures many of Higher Education institutions are testing or implementing Quality management models developed for industry. Benefits to be gained from using these models, such as engagement in self-assessment by academic departments and greater focus on a strategic approach to Quality management, these are related to the efficiency and effectiveness of non-academic functions. Concerns have been reported regarding use of these models in that they may encourage a culture of managing it in Higher Education institutions.

13. Critical Issues

According to Srivanci (2004), critical issues in implementation TQM in higher education include:

Leadership with lack necessary authority makes it difficult for them to deploy these values and goals through the layers of higher education institutions. The effectiveness of leadership is adversely affected by individuals among academic staff and due to absence of team working.

Cultural and Organizational Transformation: rigid department model, interdepartmental competition for resources and lack of market focus are the cultural and organizational reasons that make it difficult to tune in with TQM transformation. In adopting TQM culture, organizations move from product focus to market focus. But for faculty, particularly research faculty, primary loyalty lies on the academic field .Market requirement for their students are of secondary importance.

Customer Identification: ambiguity in customer identification is also creates hurdles in TQM implementation. Among the main groups within the higher education institutions – there is not much agreement on which the customer are. While most administrators tend to perceive students as customers of faculty in classrooms, many faculty staff resent this metaphor as being too commercial. Without well-defined customer and customer focus, quality efforts may be easily diffused.

Some educational institutions in general don't meet the expectations of their students and other public, either due to lack of resources, or simply because they are more concerned with distinct matters other than their clients satisfaction. Several departments and administrators in Higher education institutions reflect a bureaucratic mentality, operations are routine, substituting personal judgments by impersonal policy, they specialize employee to work and generate a rigorous command hierarchy, and Lack of understanding what TQM is. Highly centralized control by MOHE results in very little autonomy to universities thus stifles initiative and innovation; very limited financial support from government and other sources; slow implementation of TQM criteria. In other words, in seeking the quality perceptions and satisfactions of its customer, a higher education institution does nothing but trying to improve its service.

14. Key Challenges Facing the Implementation of TQM in Higher Education Institutions

Quality management is not a management approach easily applied to Higher Education institutions, especially because the academic culture of these organizations is quite strong and resistance to its concepts, principles and practices. And this resistance begins with terminology. Terms such as product, client, empowerment or even strategy, not to mention TQM or reengineering do not easily resonate in Higher education institutions. For Massy (2003) "the greatest resistance to quality process improvement comes from professors who think it's just another business-oriented fad. The language of some TQM advocates contributes to this view, customer, scientific method and removal of all forms of waste is sure to raise the hackles of academics".

Pratasavitskaya and Stensaker (2010) mentioned the following factors as reasons for the unsuccessful application of TQM to Higher Education: resistance to change; insufficient administration commitment; high time investment due to personal training; difficulty in applying TQM tools to the higher Education institutions environment; little experience of team leaders and staff in team-work; the concerns of Higher Education institutions have with their own results not being sufficient enough.

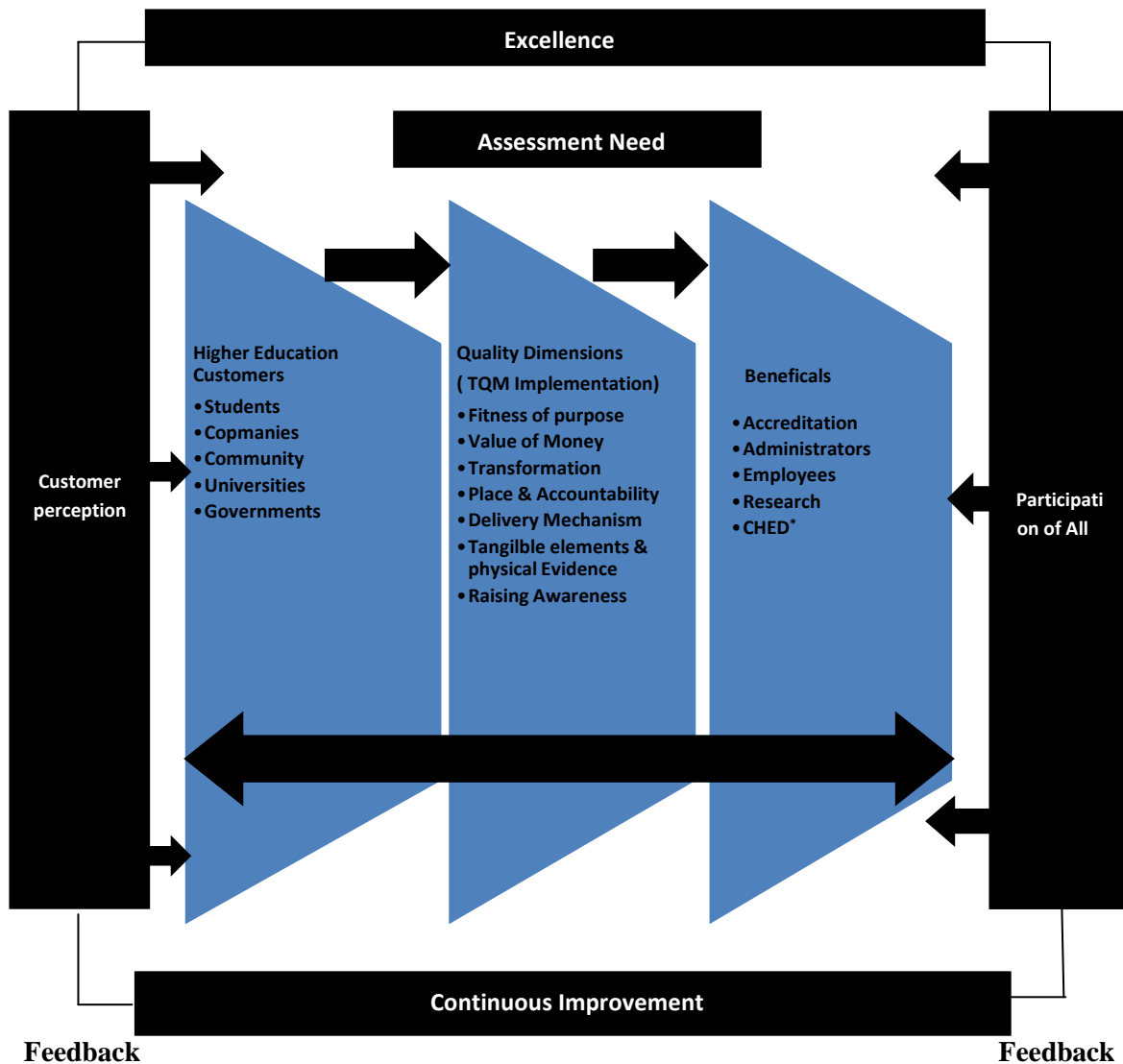
Rosa and Amaral (2007) add the absence of effective communication channels; the difficulty in measuring Higher Education institutions results; the co-existence of several purposes and objectives for Higher Education institutions; an emphases in the individualism and significant degree of internal competition; the bureaucracy decision-making circuits; and the absence of a strong leadership, highly committed to the ideas and principles it wants to implement and capable of involving all the institution's members.

Education is a service which has got clients, and that they, as in any other business, can be satisfied or not. Higher education just likes any other format of formal education as a reflection of the social context. Not surprisingly when we said that its and their institutions suffers and faced huge problems and challenges and threats seriously arose from variables that changed shape of the world and created new world order based on science and technological development acceleration basis, and comprehensive programs for development and modernization guarantees for Arab education institutions the ability to overcome its problem and weaknesses.

15. TQM Conceptual Model

To achieve the objectives of the study and relevance to the literature, proposed model was developed (**Figure 1**) that reflect the interaction between: dimensions of quality in HE, Customers of HE, results (benefits) for individuals and different sectors from implementing TQM in educational institutions, which led to students satisfaction and the educational system development.

This Model states the satisfaction of customers and employees and societal impact achieved through leadership which facilitates and simulates institutional strategies and the management of personnel, resources and processes.



* CHED: Commission on Higher Education

Figure 1. Conceptual framework

16. Conclusions

In the light of the findings of this study, the following conclusions are drawn:

- 1) Provide evidence that quality and excellent education happens in an organization with high level total quality management indicators.
- 2) TQM can be applied to higher education, but it must be modified to fully recognize some unique aspects of education viz., education is a service industry with no visible, tangible product. Benefits of TQM include heightened employee morale, better teamwork among departments, bridging faculty–staff functions, increased quality from customer viewpoint and

continuous development of every one who is part of higher education institution (Al-Tarawneh, 2011).

- 3) Quality in education is a rather complex topic .What makes it such is the number of the parties involved as well as the intensity of changes in modern life. If educators apply TQM principles they would plan more accurately, perform better, estimate their achievements and take all necessary actions in order to prosper and stay focused on excellence.

17. Recommendations

With reference to the literatures and conclusions of the study, the following recommendations are offered:

- 1) Higher education has been challenged to continue improving the quality of academics; increasing participation by all sectors of society; and by a new set of cooperative relations and partnerships between higher education and all stakeholders. Colleges and universities more concerned than others, so they must become more innovative leading to quality institutions of knowledge creation, and being to increasingly higher standards by the many groups to which they provide programs and services.
- 2) Higher education institutions should more and more take in to account customers perception, especially students on what ever offered to them, and not the long – lasting old paradigm, which frequently are just the result of a benchmarking that does not consider individually and the characteristics of each institution. In this way, it becomes clear that it's necessary to spread professional management practices in the higher education institutions, which no doubt suggests a boarder understanding concerning a service provider organizations.
- 3) Jordan needs education that envisages a new system of higher education characterized by increased effective participation by all sectors of society by greater institutional responsiveness to policy imperatives and by a new set of co–operative relations and partnerships between higher education and the boarder society.
- 4) Results that are achieved from adopting TQM often did not happen simultaneously, depended on leadership in each department. It always needed patience in reaching results of TQM application. The commitment from top management to the lower level is very important matter.
- 5) Government should enhance just practices, and eliminate nepotism, favoritism, and unethical practices which negatively affect all society members. Decision makers in both public and private sectors should internalize patriotic orientations and abandon nepotism (Fayyadh, 2010).

18. Future Research

It may be time to future rethink current approaches to Quality management in Higher education to ensure that the Quality of teaching and learning is not neglected. This proposed model in this paper should be tested to assess Quality and evaluating performance through processes, Higher Education institution, and Products (study programs, research projects, and counseling contracts).For future research related to this study, the following topic is recommended: *A comparative analysis of the Total quality Management indicators among Jordan's private and public universities institutions.*

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