A New Management Model for Higher Education in Dubai-UAE:

Quality Management in Alignment with Professional Autonomy

نموذج إدارة جديد للتعليم العالي في دبي الإمارات العربية المتحدة: إدارة الجودة في التوافق مع الحكم الذاتي للمهنية

by

Iman Rabah, Masters of Quality Management

A thesis submitted in fulfilment

of the requirements for the degree of

DOCTOR OF EDUCATION

at

The British University in Dubai

January, 2014
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ABSTRACT IN ENGLISH

Many researchers argue that the total quality management model should be modified in order to fit the higher education context, yet there is no quality management model which is truly modified to take into account the nature of higher education and the need for professional autonomy including academic freedom and peer review. The purpose of this thesis is to develop a model of TQM that doesn't damage the scholarly values of higher education and enhances professional autonomy, including academic freedom and academic quality in teaching and research. The purpose and objectives are addressed through a theoretical and analytical review of the TQM literature in higher education. In addition to this, empirical data and interpretations are collected from faculty members from a sample of two universities in Dubai in order to study academics' perceptions of TQM in higher education. The two universities have been accredited by the Ministry of Higher education in the UAE and include both a private university and a public university. The subjects are academic staff in both teaching and administrative positions. These include faculty members and senior administration deans, vice presidents, and presidents. The qualitative approach is the best approach to primarily use in this thesis based on the interpretive paradigm. The new model that the thesis attempts to build is based on TQM concepts, yet depending on the interpretations and collected data irrelevant TQM concepts will be modified using the traditional university management models in an attempt to resolve the paradox and tension between TQM and those traditional models. The methodology uses meta-analysis for the TQM literature and involves collecting interpretations and narratives from academics to study the positive and negative influences of quality management practices on research and the teaching process. The methodology also includes quantitative analysis by using the survey instrument for the purpose of triangulation. Qualitative methods including interviews, questionnaires, and documents analysis are primarily used for the interpretive paradigm.
of using social constructivism to inductively develop a theory based on the grounded theory approach.
يجادل العديد من الباحثين أن نموذج إدارة الجودة الشاملة يجب أن يتم تعديله وذلك لتناسبه سياق التعليم العالي، إلا أنه وحتى الآن لا يوجد نموذج معدل يأخذ في الاعتبار طبيعة التعليم العالي والحاجة إلى الاستقلالية المهنية بما في ذلك الحرية الأكاديمية وامتلاك الأفراد للقرارات. الغرض من الرسالة هو تطوير نموذج إدارة الجودة الشاملة كي لا يتعارض مع القيم العلمية للتعليم العالي وكي يعزز الاستقلالية المهنية بما في ذلك الحرية الأكاديمية وامتلاك الأفراد للقرارات. الغرض من الرسالة هو تطوير نموذج إدارة الجودة الشاملة كي لا يتعارض مع القيم العلمية للتعليم العالي وكي يعزز الاستقلالية المهنية بما في ذلك الحرية الأكاديمية وامتلاك الأفراد للقرارات. الغرض من الرسالة هو تطوير نموذج إدارة الجودة الشاملة كي لا يتعارض مع القيم العلمية للتعليم العالي وكي يعزز الاستقلالية المهنية بما في ذلك الحرية الأكاديمية وامتلاك الأفراد للقرارات.

الرسالة تتناول الغرض والأهداف من خلال استعراض نظري وتحليلي لأدبيات إدارة الجودة الشاملة في التعليم العالي. بالإضافة إلى ذلك، يتم جمع البيانات والتفسيرات التجريبية من أعضاء هيئة التدريس من جامعة في دبي لدراسة تصورات الأكاديميين لإدارة الجودة الشاملة في التعليم العالي. تم اعتماد الجامعات من قبل وزارة التعليم العالي في دولة الإمارات العربية المتحدة وتشمل العينة: جامعة خاصة و جامعة حكومية. المشاركين في الدراسة هم أكاديميين من هيئة التدريس والمناصب الإدارية ككبار عمداء الإدارة، ونائب الرئيس، والرؤساء. الهدف من الدراسة هو استخدام النموذج التفسيري للخرائط التي تم أخضاعها في الخطوة الأولي في هذه الأطروحة على أساس النموذج التفسيري. يستند النموذج الجديد على مصادر إدارة الجودة الشاملة، ولكن اعتمادا على التفسيرات والبيانات التي تم جمعها، سيتم تدقيق مفاهيم إدارة الجودة الشاملة بمصادر من النماذج التقليدية لإدارة الجودة. هذه الدراسات تعمل على محاولة حل التناقضات، وتوتر بين إدارة الجودة الشاملة والنموذج التقليدي.

تستخدم المنهجية التحليل التلوي لدراسة إدارة الجودة الشاملة، وعلى جمع التفسيرات والروايات من الأكاديميين لدراسة التأثيرات الإيجابية والسلبية لممارسات إدارة الجودة في مجال البحوث والأنشطة الأكاديمية. تشمل المنهجية التحليل الكمي أيضاً استخدام أداة المسح لغرض التحليل. وتستخدم الطرق النوعية بما في ذلك المقابلات، الاستبيانات، وتحليل الوثائق على أساس النموذج التفسيري باستخدام النماذج الاجتماعية لتطوير نظرية تركز على نهج نظرية الأرض.
DEDICATION

I dedicate this thesis to my husband Akram and my children Perla, Serena, and Adam. Without their sacrifice, patience, understanding, and most of all love, the completion of this work would not have been possible.

I dedicate my doctoral studies to my parents Shahla and Khaled, for their infinite love, sacrifice and vision to instil the loftiest values in me, which certainly paved the way towards higher education.
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LIST OF ABREVIATIONS

ABREVIATION

AQA: Australian Quality Award
CAA: Commission for Academic Accreditation
DQA: Dubai Quality Award
EFQM: European Foundation for Quality Management
HEI: Higher Education Institutes
ISO: International Organization for Standardization
MBNQA: Malcolm Baldridge National Quality Award
NPM: New Public Management
TQM: Total Quality Management
UAE: United Arab Emirates
Chapter One: INTRODUCTION

1.1 Background and Motivation

The concept of quality is an old one and can be traced back by historians to Ancient China and more specifically the Western Zhou Dynasty in the eleventh century B.C. as a control system for handicraft production (Juran, 1995, p. 3). One of the organizational management methods that were developed in the modern period, in the late 19th century in industry, was quality control through the detection of defects in manufacturing products in order to take corrective action, and this was expanded into quality assurance in the course of preventing errors before they occur (Evans and Lindsay, 2005).

After this, total quality management (TQM) came into prominence in the 1980s and 1990s as a response to some of the problems that arose from using mechanical ways of managing in some organizations which had led to limitations in human capacities' development and personal growth (Morgan, 2006). TQM is a management system that was initiated in Japan by the American management scholar Edward Deming (2000) in the 1980s which focuses on customers, leadership, teamwork, empowerment, corporate culture, strategic objectives, and continuous improvement. As Antony and Preece (2002) explain, TQM started in manufacturing in Japan and was gradually proliferated to the service industry with the New Public Management and then to the public sector areas like education and healthcare in developed and developing countries.

While many researchers argue that the total quality management model should be modified in order to fit the higher education context (example, Antony and Pierce, 2002; Evans and Lindsay, 2005;
Michael, Sower, and Motwani, 1997; Milakovich, 2006; McCulloch, 1993), there is no quality management model that is truly modified to take into account the nature of higher education and the need for professional autonomy, including academic freedom and peer review. Antony and Preece (2002), through a review of TQM cases in higher education institutes (HEIs), deduce that:

...there is a need for development of suitable TQM model for HEIs that incorporates various critical success factors. The existing models in the literature are difficult to apply, partly because they do not emphasize the principles and assumptions that make up TQM. In addition, they do not incorporate the critical success factors that affect TQM outcomes. The other shortcomings of these models are: (1) although it is claimed that they are successful, they have not been validated by suitable data, and (2) most models have been developed by institutions to serve their particular needs and may not be suitable for use by other institutions. (Antony and Preece, 2002, p. 138)

1.2 Problem Description

TQM is one of the forms associated with the concepts of New Public Management that proliferated into the public sectors in a number of countries based on a business management model that shifted the social and conservative government principles (Aucoin, 1995; Boston, 1991). According to Samier, "Since the late 1970s, public bureaucracies in a number of industrialized countries, predominantly the UK, New Zealand, Canada, Australia and, to a lesser extent the US, have undergone a number of structural and managerial changes inspired by private-sector practices, generally referred to as the New Public Management (NPM)" (2001, p. 235). The new public management concept is an administrative ideology that was applied from the private sector to the public sector, thus changing public organizations that adopt it including higher education to allow them to be run on market theories (Samier, 2001; Savoie, 1994).

According to Wright, Manigault, and Black (2004), some social phenomena in public administration are ambiguous such as employee motivation and organizational effectiveness, while
other phenomena are contentious such as measuring the quality of outcomes in education and the effectiveness of the programs. Using a case study of an academic department in a public university in New Zealand, Houston, Robertson and Prebble (2008) demonstrated that audit processes and other quality models do not give enough attention to processes, educational theories, and student learning. These issues and other problems caused by new public management such as teaching overload and administrative tasks that prevent the faculty from researching and applying their scholarly activities are explored in this thesis.

This thesis examines a number of issues that are caused when any particular form of quality management is embedded in relation to higher education, including neoliberalism, the market model, commercialisation of education, corporatisation of the university, academic labour and capitalism in addition to globalization and the university (Dunleavy et al, 2006; Haque 2001; Hood 1991; Thompson, 2006). Many of these items also relate to the New Public Management which is the public administration ideology under neoliberalism (Savoie, 1994). According to Clarke (2004), attempts to marketise and privatise the public sector are facing a lot of resistance, and this suggests that the outcomes do not match what neo-liberal assumptions imagine the world to be like.

In the 1980s and 1990s the expansion of university systems to accommodate a larger percentage of the population going to university and the increase in technology expenses accompanied with the financial constrictions and the confused relationship between universities and governments all reduced the self-confidence of the academic profession in its dedication to its calling (Shils, 1997, p.7). Those changes had a great impact on the management systems in the universities, thus leading to the erosion of the collegial model including shared governance, academic freedom, professional autonomy, and academic tenure. Suddenly, new management concepts emerged like productivity,
revenues, employment flexibility, moderate evaluation of students, pedagogical issues and many others (Richford, 2003). The change from a collegial model to business models was not the choice of higher education. When public funds were restricted, universities had to use marketing strategies to attract funds. Accordingly the collegial model was gradually ignored, and business models like TQM took place. The designed management model which is the result of this thesis takes into consideration the issues caused by TQM as a form of new public management, including overload in teaching, administrative tasks, faculty turnover and the reasons behind this along with the quality of teaching and research.

1.3 Purpose and Objectives

The purpose of this thesis is to develop a model of TQM that does not damage the scholarly values of higher education and which enhances professional autonomy, including academic freedom and academic quality in teaching and research. The characteristics of the TQM model may damage the scholarly values of higher education if not modified. Those characteristics include the focus on customers, defining the customer and considering him as always right, standardization of all processes, continuous assessment, quality reporting, quality control and continuous quality monitoring. The main research question of this thesis is as follows: Is there a form of TQM model that is suitable for universities and includes academic values involved in scholarship and teaching to suit the higher education and academic nature of universities in Dubai, UAE? The main research question is answered through three sub-questions: What are the reasons that lead to successful cases of implementing quality management in higher education? What are the reasons that lead to the failure of quality management in some cases of higher education? How can a quality management model be designed on a basis of autonomous professionalism in higher education?
The main research question and the objectives of the thesis are addressed through a theoretical and analytical review of the TQM literature in higher education. In addition, empirical data is collected from faculty members from a sample of two universities, including one public university and one private university in Dubai, in order to study academics' perceptions of TQM in higher education.

The theoretical framework includes an interpretive study that examines the functional, structural, and cultural aspects of implementing TQM concepts in higher education and the concepts that should be modified. Inapplicable TQM concepts will be modified based on traditional university management models in order to fit the higher educational context, taking into account higher education leadership and the cross-cultural context that universities operate in especially in Dubai. Figure 1 summarizes the theoretical framework of this thesis.
The traditional management university systems literature is reviewed in order to check management in higher education in early universities including collegiality, academic freedom, and academic tenure (Birnbaum, 1988; Brewster, 1972; and Giamatti, 1988). The changes that happened in higher education had both a direct and indirect impact on the morale of the academic profession (Deem, 1998; Shils, 1997; Rochford, 2003). The TQM literature includes the foundation of TQM, the literature that defends TQM in higher education, and the literature that considers it as a failure in this context. The literature of higher education leadership that is integrated in the new model of this thesis includes the role of leaders in supporting faculty in a unique context that requires unique leadership skills (Ramsden, 1998). The literature of cross-cultural management in higher education...
includes the roles of leaders, faculty and all individuals for appropriate communication in a cross-cultural context like that found in Dubai, UAE.

1.4 Scope and Significance of the Study

The scope of the new total quality management model applies to any university that aims to support and motivates faculty members in order to deliver a high-quality of teaching and produce a high quality of research, however this model specifically focuses on the academic departments and on leading faculty members.

The significance of this study is found by building a new total quality management model within the cross-cultural context of Dubai universities. This model is built based on a study of Dubai universities and is applicable to universities in the Arab world and other countries of the world especially those functioning in a cross-cultural context, as in Dubai where globalization is a strong force. The contribution of this model to the TQM models is taking into account the unique nature of higher education where professional autonomy and academic freedom in teaching and research are key success factors that the model focuses on. This model is a combination of two paradox theories: TQM as a business model and traditional university management systems like the collegial model, share governance, and academic tenure.

1.5 Definition of Terms

Some terms used in this thesis including TQM, higher education leadership, higher education leaders, quality in higher education, and academic profession are defined in this section.
• TQM refers to the quality management model which focuses on customers, leadership, teamwork, empowerment, corporate culture, strategic objectives, and continuous improvement.

• Higher education leadership refers to the role of higher education leaders in supporting faculty members and achieving benefits for the department, faculty, and students.

• Higher education leaders are referred in this thesis for presidents, vice presidents, provosts, chancellors, deans, and chairs of departments within each faculty.

• Quality in higher education refers to a high quality of both teaching and research. This includes helping students develop and mature intellectually into critically thinking democratic citizens. In addition to research, where faculty members have to update their courses' material and develop teaching methods and pedagogical research.

• Academic profession is considered in this thesis unique since it doesn't only apply knowledge like other professions, but it receives, assimilates, and discovers knowledge by methodical study and then interprets and transmits that knowledge; it transmits knowledge about the methods of discovery and especially of the validation of knowledge.

1.6 Limitations of the Study

There are three main limitations of this study. First, this study is limited to the academic departments of the universities used including the academic and administrative staff, and no other departments will be considered to study the impact of TQM practices on their performance. The focus is on faculty and staff, and students will only be considered to a limited degree.

Since this study includes a self- administered survey, it addresses a second limitation and concern of non-response bias, along with potential biases in interviews that may originate in the interviewer's
approach like the phrasing of questions. According to Wright, Manigault, and Black (2004) if measures are based on previous research they should have been effectively applied and survived in the peer review stage, or the researcher should address biases in cases where the survey is self-administered. Nevertheless, this limitation was controlled through the meta-analysis approach that is heavily used in this thesis along with the empirical study.

The third limitation is what Glesne (2002) refers to as "backyard research" or researching in my own organization since I am a member of the two universities in the study. According to Glesne (2002), the "backyard research" issue usually creates confusion for the researcher who is a worker in the organization at the same time as negotiations with colleagues may include more than the data collection requires. Glesne (2002) explains that in backyard research dangerous information may be uncovered through interviews, document analysis or any other data collection methods. The issue of "backyard research" was controlled through what Glesne (2002) suggested, which is the continuous protection of confidentiality through a supporting group who was reviewing the analysis and findings of the research.

In conclusion of this chapter, given that qualitative research is endlessly interpretive and creative as discussed by Denzin and Lincoln (2008, p. 34), this thesis attempts to make sense of my findings as per the fifth phase of qualitative research designed by Denzin and Lincoln (2008) through collecting the interpretations and information from the empirical study together with a meta-analysis of TQM literature in order to build a model of TQM for academic departments of higher education.

Therefore, this thesis makes sense of findings first through a meta-analysis of literature with and against TQM in higher education. The thesis then uses an empirical study with different data
collection methods in order to collect interpretations from faculty on TQM in higher education, and then meta-analysis and the empirical study lead to the new TQM model that the paper attempts to build based on the constructivism grounded theory. The inapplicable TQM concepts are modified using the traditional higher education management systems reviewed literature. Finally, the cross-cultural management and leadership in higher education reviewed literature adds input to the model in an attempt to create a new TQM model that takes professional autonomy and academic freedom into account in Dubai as the context of the study. Figure 11 concludes what this thesis attempts to add to the TQM literature.

1.7 Thesis Organization

Chapter one illustrates the background and motivation for this thesis, the description of the problem, the research objective, and the scope and the significance of the study.

Chapter two presents the literature review that discusses the areas of literature relevant to the thesis topic. This consists of five main sections: traditional management university systems, changes in the university context, total quality management in higher education, higher educational leadership, and higher education cross-cultural management.

The third chapter consists of the approach and methodology of the research. The thesis selects the social constructivism interpretive paradigm in order to collect data and information from participants and interpret meanings by creating a new management model using the grounded theory approach as the research strategy. The method of data collection and analysis includes
document analysis, a survey, and semi-structured interviews where the findings are interpreted based on the constructivism paradigm and combined with meta-analysis to build the model.

In chapter four the thesis presents the results starting with a qualitative meta-analysis and followed by the results of the empirical study.

Chapter five is the conclusion of the thesis, which is a new management model for higher education in Dubai, UAE.
Chapter Two: LITERATURE REVIEW

This thesis is based on five main bodies of literature: traditional university management systems, changing management systems in higher education, higher education total quality management, higher education leadership, and higher education cross-cultural management. The literature on the traditional university management system is traced back to the collegial model and to the period before new public management. The literature of changing management systems in higher education is included in order to study the private sector management practices applied to the university under neoliberalism, the new public management, and the globalization that caused dramatic changes to university management systems. The higher education total quality management model and its impact on the university including professional autonomy and scholarly activities are examined in order to study its positive and negative effects. The new management model that the thesis proposes is a quality management model that preserves academic values and freedom. Since higher educational leadership has a significant role in university management systems, the thesis reviews higher education leadership literature and includes leaders' roles in the new management model. This model takes into account the cross-cultural context that higher education operates in, especially in Dubai, as the context of the study and therefore reviews the main theories of higher education cross-cultural management.

This chapter first reviews the traditional management university systems, and especially the collegial model which was in place before the new public management and many other business management models crept into university governance. This governance gave the universities a unique context based on academic freedom and shared governance discussed by Birnbaum (1988).
and Giamatti (1988), and academic tenure in its relationship to collegiality as discussed by Brewster (1972) and their impact on teaching and research. This chapter reviews an extensive body of literature which is available on the changes that happened to the structure and administration of the university in the last few decades and which led to a great impact on the management systems, and consequently on teaching and research. It reviews the positive and negative influences in the university context. The main changes are represented by the universities losing academic freedom, shared governance, collegiality, academic tenure, and professional autonomy (Deem, 1998; Shils, 1997). Within those changes the universities have witnessed the birth of new concepts which are basically derived from neoliberalism and a business management model including productivity, revenue gains, employment flexibility, and which focuses on students' choices and many other new concepts (Rochford, 2003).

The literature review also includes TQM in higher education. In order to understand TQM principles and its applicability or inapplicability to the higher education context, the TQM principles are studied as developed by the main TQM scholars, including the 'zero defects' and 'doing it right the first time' concepts of Crosby (1979), Deming's (1966; 1986; 2000) 'plan-do-check-act' cycle, his 14 management points and the system of profound knowledge for managers, the quality control and quality management of Feigenbaum (1961); the 'Gemba Keizen' philosophy of Imai (1986; 1996; 1997), the 'cause and effect diagram' of Ishikawa (1985; 1990), the quality trilogy of Juran (1995; 1999; 2004), and the statistical quality methods of Taguchi (1997). The founders of TQM basically initiated it in manufacturing, yet this thesis studies this literature in order to give a comprehensive picture of TQM so as to make its principles clear for the sake of studying its implementation in higher education. This chapter also reviews the literature of TQM implementation in higher education, and this literature is divided among scholars who defend TQM

The higher education leadership section in this chapter reviews the literature of appropriate leadership in higher education as a unique context where top administrators need to support faculty members and empower them in order to achieve a high quality of teaching and research. In addition to this, leaders should know how to deal with politics in higher education since they have to keep it away from the university in many cases, and they should use it in other cases to bring resources to the university and create opportunities for faculty members (Ramsden, 1998). Creating a vision and working to achieve it is another essential role for higher education leaders in order to provide a high quality of teaching and research (Ramsden, 1998). The last section of this chapter reviews the literature of cross-cultural management, including Hofstede's (1984; 1986; 1991) discussions about the importance of leaders in achieving a successful cross-cultural context and Trompenaars (1993), who differentiates between inner-directed people and outer-directed people and the impact on their careers and working environments. In this section there is also a review focusing on the Arab cultural characteristics and expatriates cultural characteristics like the American, British, Spanish, French etc. cultures based on Hofstede's (1991) cultural dimensions model as Dubai includes expatriates from those countries and many more. This section adds a lot of value to the management model that the thesis builds through taking the cultural diversity in Dubai into consideration.

2.1 Traditional University Management Systems
Traditional management systems in universities and the unique features of higher education which are classified by Giamatti (1988) as one of the 'Helping Professions' like healthcare and social services is the focus of discussion in this section. The purpose of this section is to trace back the traditional form of university management in relation to faculty members’ teaching and scholarship in order to determine what changes are brought through the implementation of TQM concepts in higher education. This literature adds a lot of value to this thesis, where the new higher education quality management model that is the result of the thesis replaces the inapplicable concepts of TQM by using traditional management concepts of the university in order to preserve professional autonomy and academic freedom.

This section is divided into four subsections. Firstly, it illustrates the university uniqueness that makes management systems very different from any other kind of organizations due to the uniqueness of the university context and the unique features of the faculty members' profession. Shils (1997) argues that the academic profession is unique and different from any other profession like law, medicine, or engineering. Secondly, this section reviews the collegial model that is based on academic freedom in teaching and research and consensual decision-making. According to Birnbaum (1988), the collegial model is based on trust between all members of higher education including not only faculty members and top administrators but also students and administrative staff. Thirdly, this section reviews another model of traditional management university systems: the shared governance model where differences are put aside for the sake of creating a common vision and where subordinates may be just as experienced and expert or even more so than their leaders. Giamatti (1988) focuses on the importance of shared governance within a university management system and explains that leaders in higher education should sacrifice authority for the sake of the
university's culture and academic quality. Finally, this section reviews the literature of academic tenure that has had an impact on academic freedom and is part of the collegial model. According to Brewster (1972), academic tenure is an unexceptional tool that keeps faculty members in their positions until retirement which adds a lot of value to the higher education quality and improvement since it increases commitment to the university community that faculty members belong to.

2.1.1 Uniqueness of the Traditional University Management Systems

The literature review of traditional management systems in higher education is based mostly on the Humboldt model from Berlin and in parts of North America and the Scottish model at the University of Edinburgh and reveals a common argument between scholars that the systems are unique due to the uniqueness of the university context in general and the faculty members' profession specifically. Each part of the reviewed literature gives an explanation about the reasons that made traditional management systems in the university unique. Shils (1997, p. 3) argues that the main task of universities is "the methodical discovery and the teaching of truths about serious and important things. Part of the task is to enhance the students' understanding and to train them in the attitudes and methods of critical assessment and testing of beliefs so that they can make what they believe as free from error as possible". Similarly, Crebert (2000) explains that the distinctive task of the academic profession is to discover and transmit the truth, where the truth of a proposition is independent of the political orientation and the social position of the person affirming it. Shils (1997, p.10) states that the occupation of academics is called a profession because it has distinctive privileges, but also special obligations. He explains that some occupations like engineering, medicine, and law are also considered professions, however those professions apply knowledge whereas the academic profession "receives, assimilates, and discovers knowledge by methodical
study and then interprets and transmits that knowledge; it transmits knowledge about the methods of
discovery and especially of the validation of knowledge" (Shils, 1997, p. 10).

Traditional university management systems' literature is focused on the unique nature that research
gives to the profession of academics since research is the foundation of the academic profession,
and therefore faculty members should base their teaching on what they find in their research or in
research done by other scholars in their field (Jary and Parker, 1994; Maringe and Foskett, 2010;
Rosovsky, 1990; Shils, 1997; Whitehead, 1950). According to Whitehead (1950, p. 139-140), "The
justification for a university is that it preserves the connection between knowledge and the zest of
life, by uniting the young and old in the imaginative consideration of learning…the task of a
university is to weld together imagination and experience". Boyer (1990, p. 43) states that the
quality of scholarship is dependent, above all else, on the vitality of each professor. Traditional
university management systems are called governance in most circumstances instead of
management as traditional systems in universities are based on the collegial relationship between
deans and top administrators from one side and faculty members from the other side instead of a
management relationship (Abbott-Chapman, 2005; Birnbaum, 1988; Boyer, 1990; Brewster, 1972;
Campbell, 2000; Crebert, 2000; Giamatti, 1988).

2.1.2 The Collegial Model

Until the 1980s the collegial model was the prominent university management model in western
countries, in which the role of deans was to advocate academics and represent their interests within
a self-governance organizational structure (Abbott-Chapman, 2005; Crebert 2000). According to
Birnbaum (1988), the collegial model is based on slow deliberate change and consensual decision-
making where responsibility is common between academics and administrators. There are three issues in higher education management that make it unique and suitable for the collegial model: understanding what academic freedom is the relationship between universities and the government, and the appointing criteria of faculty to academic positions (Crebert, 2000). The first, according to Shils (1997, p. 11), is a privilege of academic freedom and university autonomy in the academic profession. This includes autonomy of decision-making in hiring and promotion, in teaching methods, in designing courses syllabi, and examination criteria in addition to the freedom in research initiatives and topics. Many scholars like Aucoin (1995), Boston (1991), and Savoie (1994) argue that academic freedom is the essential principle of the collegial model. The term 'academic freedom' is used in this thesis to refer to what has been defined since medieval times as the freedom of academics to teach in their area of expertise according to the criteria of their discipline, and it includes the freedom of students to learn (Altbach, 2001). In the early 19th century and with the rise of the research from Humboldtian University, the definition of academic freedom was modified to include professional autonomy in teaching and research (Altbach, 2001). According to Menand (1996), "academic freedoms are socially engineered spaces in which parties engaged in specified pursuits enjoy protection from parties who would naturally seek to interfere in those pursuits" (p.3). The term 'academic freedom' has been defined since medieval times as the freedom of academics to teach in their area of expertise according to the criteria of their discipline, and it includes the obligations and responsibilities of academics (Altbach, 2001). According to Landler (2000), academic freedom is the major legitimating concept of the whole university, and it lies at the core of political battles in the future of higher education to defend non interference in the academics’ search for knowledge. Consequently, this concept justifies the preservation of universities' autonomy and academics’ autonomy within their universities (Rochford, 2003). As a result, this "embodies an
acceptance by academics of the need to encourage openness and flexibility in academic work, and of their accountability to each other and to society in general” (Tight, 1988, p. 132).

Through the collegial model faculty members hire other faculty members through representative committees. The purpose of self-referential hiring is to preserve the values and vision of higher education (Birnbaum, 1988). This model is based on trust - as a major value of the institutional culture - among all parties of higher education, including faculty members, administrators, students and bargaining units (Birnbaum, 1988). Trust is the essential component of the higher education culture in order to lead to the success of self governance, and this differs from bureaucratic models that are based on distrust where administrative agendas and careers are more important than institutional life (Campbell, 2000). Collegial governance still operates to varying degrees in major universities, in Canada, the U.S, and European countries under the universities legislation at either the national, state or provincial level where senior administrators play the role of agents for faculties with a shared power between governors, administrators, and faculty by creating a rich academic community that has same values which are purely serving academia in opposition to management (Birnbaum, 1988; Giamatti, 1988; Jary and Parker, 1994; Maringe and Foskett, 2010; Rosovsky, 1990; Shils, 1997; Whitehead, 1950).

2.1.3 The Shared Governance Model

The shared governance model is another traditional university management system discussed within the reviewed literature. Giamatti (1988) argues that in a shared governance model there is an effective decision making process due to motivation and power and the need to attain communality that makes all members focus on the university's benefits in decision making instead of individual
benefits, even though there is always politics in a university and conflict among academic members. Differences are put aside that help in creating a common vision for the institution with a broad-based level of acceptance focusing on collectivism as a main source of effective responsibility and authority (Birnbaum, 1988; Boyer, 1990; Brewster, 1972; Campbell, 2000; Crebert, 2000; Giamatti, 1988). Practicing democracy and commitment to it is essential in the shared governance model, and it is understood by seniors and all decision makers who "work to create, promote, and live democratic ideals and values, such as equality, common goals, respect, and participatory decision-making" (Miller and Katz, 2004, p. 85). Miller and Katz (2004) explain that the belief system governing the culture of the university is based on this fundamental assumption in which "shared governance assumes that legally protected rights and responsibilities are brokered among decision-making bodies, and that one body might voluntarily share a legally granted right for the welfare of an institution" (p. 86). For example, even curricular content is the responsibility of the academic administrative bodies like the senate in some universities, and collaborate with faculty to determine the content. Academic administrators within the shared governance model are aware that sacrificing authority and adopting a consensual decision making process to achieve clearly defined outcomes leads to quality improvement of the university culture (Giamatti, 1988). This model is not based on silos decision-making by academic administrators focusing on single criteria like efficiency, productivity, effectiveness, and cost (Giamatti, 1988). However, in a shared governance model "all college and university employees-top tenured faculty, junior faculty, temporary and part-time/adjunct faculty, graduate teaching and research assistants, professional staff with and without faculty rank, the classified and support staff who keep the educational enterprise going- should have a guaranteed voice in decision-making, a role in shaping policy in the areas of their expertise…" (American Federation of Teachers, 2002, p. 3).
2.1.4 Academic Tenure

The traditional university governance systems focus on academic tenure which is not necessarily available or applied for faculty members in contemporary universities or at least not in all universities. Brewster (1972) defines academic tenure as "[t]he practical fact in most places, and the unexceptional rule …. A guarantee of appointment until retirement age" (p. 12). Another definition from Van Alstyne (1971) is: "Tenure, accurately and unequivocally defined, lays no claim whatever to a guarantee of lifetime employment. Rather, tenure provides only that no person continuously retained as a full-time faculty member beyond a specified lengthy period of probationary service may thereafter be dismissed without adequate cause" (p: 329). Therefore academic tenure, whether it is defined from a realistic observer point of view or from a cautious scholar perspective, is one of the main characteristics of traditional academic governance in universities which existed for decades. The declaration of principles of the American Association of University Professors (AAUP) committee on academic tenure and academic freedom declared in its practical proposal in 1915 that:

[i]n every institution there should be an unequivocal understanding as to the term of each appointment; and the tenure of professorships and associate professorships, and of all positions above the grade of instructor after ten years of service, should be permanent subject to the provisions hereinafter given for removal upon charges. (AAUP, 1915, p. 405)

Academic tenure was then developed in 1940 when the statement of principles on academic tenure and freedom included that:

[t]enure is a means to certain ends; specifically: (1) Freedom of teaching and research and of extramural activities and (2) a sufficient degree of economic security to make the profession attractive to men and women of ability. Freedom and economic security, hence, are indispensable to the success of an institution in fulfilling its obligations to its students and to society. (AAUP, 1940, p. 407)
In comparison, the 1915 declaration was the result of a committee of professors, however the 1940 declaration was the result of a committee including professors together with presidents from colleges and universities. This brings to our attention the fact that the 1940 declaration that focuses on academic freedom whether in teaching and research and also gender among faculty members was introduced with the committee including presidents or top academic administrators who were supporting academic freedom and academic tenure which may not be the case nowadays. It can be deduced that academic tenure is part of the collegial model where senior academic administrators like deans and presidents who represented faculty or were agents for them as mentioned above used to stay in their positions for a few years and then go back to their academic positions. This is an important factor that may have encouraged presidents to defend academic freedom in teaching and research, such as in the 1940 declaration of principles of the American Association of University Professors (AAUP). As Rosovsky (1990) argues, tenure includes less interference with one's work, a learning environment of professors from the two genders, a guarantee from age discrimination, and a social contract.

The argument of this thesis is based on this literature that discusses the uniqueness of the higher education context that requires a unique management system for academics. The thesis uses the literature of traditional university management systems that is basically focused on the collegial model, academic freedom, tenure, and shared governance, concepts to modify irrelevant TQM concepts to higher education in order to build the new model. Most of this literature regards university management as a system of roles, responsibilities and obligations in which all maintain quality of teaching and research. It can be recognized that the characteristics of traditional management university systems are all interrelated: academic tenure came about not to guarantee a job for life, but it means that the political or religious realm cannot get rid of a professor for holding
a critical view, and this- is linked with academic freedom because tenure as a social contract makes a favourable climate of academic freedom in addition to a commitment to long term plans. Tenure also has a major positive impact on shared governance because senior professors do not feel threatened by bringing able faculty members to the university. Carmichael (1988, p. 453) argues that "tenure is necessary, because without it incumbents would never be willing to hire people who might turn out to be better than themselves". Rosovsky (1990) also links tenure with collegiality by arguing that collegiality develops gradually and requires time to build, and tenure is one of the major reasons to build collegiality where people belong to one community that they care about, and therefore commitment needs a powerful tool, which in this case is tenure.

2.2 Changes in Traditional University Management Systems

This section reviews the literature on changes that have taken place in the university system within the proliferation of business management models to its context. All of the traditional management university characteristics that are discussed in the first section of this chapter are reviewed in terms of the changes that they encountered within the increase of the university's size, the dwindling of public funds, and the application of business management models in a higher educational context. The purpose of this section is to show what traditional management characteristics were eroded and what new management characteristics emerged when the university gave its collegial model up, in order to bring the characteristics of the collegial model within a new total quality management model that would preserve the university's professional autonomy and academic freedom back to life. Globalization, marketisation, corporatization, cultural restructuring, using business management models, and all of the accompanied changes and problems that higher education
witnesses are taken into consideration in designing the new quality management model of this thesis in an attempt to preserve the unique nature of universities.

This section is divided into two subsections. Firstly, it illustrates the introduction of managerialism into university administration and presents the literature that considers managerialism as an effective model within the new context of the university. For example, Richford (2003) considers that some terms like productivity, revenue gain, and employment flexibility are now very familiar in the university context as it shifts from a unique governance system into an organization that applies many of the business management models that would be considered most appropriate to serve its financial objectives. Secondly, this section presents the opposite view of the literature which considers that the erosion of the collegial model had a negative impact on higher education. For instance and according to Deem (1988), bureaucratic consistency erodes professional autonomy and replaces collegiality with regulations and control.

2.2.1 Introduction of Managerialism into University Administration

In 1970, and as a response to stagflation or inflation accompanied by the rise of unemployment, former U.S. President Ronald Reagan and former UK Prime Minister Margaret Thatcher were the first to advocate the neoliberalism creed (Friedman, 2002; Harvey, 2005). Neoliberalism rapidly spread across the seven wealthiest countries on earth: Japan, Canada, Italy, Germany, France, the UK, and the US, and then continued to developing countries including most of South America, Poland, and Iraq (Harvey, 2005; Taylor and Jordan, 2009). Neoliberalism involved political-economic practices of deregulation and privatization besides the promotion of free trade and free markets (Friedman, 2002; Harvey, 2005; Schumpeter, 1996; Taylor and Jordan, 2009). It had a
great impact on higher education due to minimal interference of governments as this ideology states restraining public funds (Harvey, 2005; Schumpeter, 1996). For example, in 1992 in Australia, in order to reduce future government liability for old age pensions and to increase national savings the financing of universities was deregulated (Harvey, 2000). Students were required to contribute to university fees through the Higher Education Contribution Scheme (HECS), which is a repayable loan system, and universities were encouraged to increase income by admitting full-fee-paying students including foreign students (Harvey, 2000). Consequently, this led to increase in the number of students and therefore university expansion and the increasing diversity of students due to international student mobility from less developed and poor countries to developed and richer countries (Maringe and Foskett, 2010). Maringe and Foskett (2010) discuss changes in universities due to the increase in the international mobility of graduates and academic staff within the graduate labour market. Currently, heterogeneous global systems have a great impact on universities where higher education is subject to international laws and covenants, and international organizations like UNESCO and the World Bank are exporting practices from the west to the east where political validity of this perspective is questioned (Menand, 1996). Universities are facing an increasing competition for funding, staff resources, and student tuition resources as a result of the decline in public funding, and this is causing universities to focus on global citizenship (Menand, 1996). For example, in order to encourage a more educated workforce, the UK government has increased the competition between institutions in order to expand the number of participants, and this has led to the marketisation of higher education and redefined students as consumers (Molesworth, Scullion, and Nixon, 2011). The new environment of higher education forces universities to set marketing and investing strategies (Rochford, 2003). The new corporate style of university governance also has a great influence on the relationship of universities with their students, staff, and faculty members.
According to some scholars (Bastedo, 2012; De Bary, 2010; Maringe and Foskett, 2010; Menand, 1996; Molesworth, Scullion and Nixon, 2011; Schrecker, 2010; Wildavsky, 2012), the relationship between the university and the society and between the university and students had to take a new form along with the changes affecting the university by shifting from the collegial model to a more managerial model. According to Richford (2003, p. 257), "it appears likely that the responsibility to society to educate its students is to be mediated and measured by the concepts of the market, which requires the mechanism of contract law to facilitate its transactions". Davis, Sullivan, and Yeatman (1997, p. 2) explain that “[t]he development of contract law has been important in the economic world because of its capacity to support complex market exchanges”. Nonetheless, “contracts are a device, sometimes useful, sometimes not, in promoting mutually beneficial relations” (Davis, Sullivan, and Yeatman, 1997, p. 27). The idea of contractualism is a direct reason for a new management system in the university known as ‘New Public Management’ (Davis, Sullivan, and Yeatman, 1997). The main characteristics of ‘New Public Management’ are: determination to manage, defined criteria of performance assessment, lack of resources accompanied with cost-cutting strategies, disaggregation of public sector departments leading to competition within the public sector, and stress placed on industry management models (Davis, Sullivan, and Yeatman, 1997).

Alford and O’Neill (1994) explain that a contract is “one in which activity previously subject to some form of organizational hierarchy is governed by contracts (or quasi-contracts) between buyers and sellers, either inside or outside the public sector”. Rochford (2003, p. 252) explains that "pressures to move to fixed term contracts rather than to maintain the idea of tenure, change the language used to describe the university, allowing presumptions of strict market conditions and
contract based relationships to be normalized”. Meek and Wood (1997) considers that when higher education organizations shifted from a few elite universities into a mass system of universities the collegial model of universities was challenged to manage more effectively. According to Meek and Wood (1997), along with the developing environment for universities, traditional governance forms may no longer be effective. Accordingly, many universities considered the collegial model to be constraining to their development and success. Alford and O’Neill (1994) argue that participatory decision making and the collegial model was incompatible with the increased focus on student choice and the need to keep pace with business and industrial development. Inevitably, many universities were not able to ignore those suggestions and the criticism of their collegial model, especially with the pressures to attract non-government funding sources, and consequently they shifted to management systems which are adopted from industry.

Some scholars created the concept of ‘soft managerialism’ like Trow (1994, p. 11) who views "higher education as an autonomous activity, governed by its own norms and traditions, with a more effective and rationalized management still serving functions defined by the academic community itself”. Contrary to, the ‘hard managerialism that was especially adopted in Australia and the UK according to Trow (1994, p. 12), “the activities of [the academic] community through funding formulas and other mechanisms of accountability imposed from outside the academic community, management mechanisms created and largely shaped for application to large commercial enterprises”.

2.2.2 Changes in the Nature of the Professoriate
Funding restraints and massification are the major characteristics that changed the traditional universities, causing a great pressure on its traditional methods of academic governance (Bargh, Scott, and Smith, 1996; Kelsey, 1998). During the last two decades a critical debate was raised among scholars about a suitable management system for higher education. The combat is mainly between managerialism and academia. Many scholars like Aucoin (1995), Boston (1991), Samier (2001); and Savoie (1994) agree that when business management models were used in public organizations under the administrative ideology that is known as new public management the collegial model was eroded and the universities lost some of their traditional principles like professional autonomy and scholarly values in teaching and research. Shils (1997, p. 13) explains how the academic ethos developed from old Medieval traditions and early modern European practices that were influenced by the main Arab universities. He traces back its origins to the time before the establishment of official universities, when there were educated people who enquired about fundamental and reliable knowledge. Academic ethics representing academic professionalism was viewed as being self-evident to academics until the first quarter of the twentieth century, but universities are changing with the changes to the societies they are situated in. Universities are larger now, more administrative duties are required from academics, and administrators have more financial demand, and this has affected the morale of the academic profession (Agovino, 2000; Altbach, 2001; Landler, 2000; Sachs, 2000).

Although the central value of higher education in traditional management systems is academic freedom as analyzed in the first section of the literature review, this is ignored by many universities and governments in western countries and the Middle East and is attacked in many instances. For example, many Siberian academics were arrested for publications that criticize the regime (Agovino, 2000), an academic researcher was warned by his university's president in Hong Kong...
not to conduct studies against the region's chief executive (Landler, 2000), and a well-known scholar was arrested in Egypt for 'defaming' the country (Sachs, 2000). Some topics are taboo for publications and research in Malaysia and Singapore because of government pressure (Altbach, 2001).

At the beginning of the current century Russia and Eastern and Central Europe countries accomplished reasonable levels but not the full range of academic freedom (Altbach, 2001). In fact, many countries recognize academic freedom and convey a commitment to it, but this is not enough because academic freedom is the core value of the university's mission, and it is by no means secure in the whole world. According to those beliefs, academics have a duty to speak out on the governance of their universities and of their communities, however universities are worried about research and especially political research conducted by their academics and therefore establish and implement policies to control what they say since it may have counter effects on their reputation and thus hinder their marketing strategies. Rochford (2003, p.252) states that "the temptation to exercise that control grows with the growing value of the university name as a reputational asset".

One of the major principles of academic freedom is the participation of academics in university governance. According to the Development in the Law-Academic Freedom (1968, p. 1049), "By obtaining a voice in decisions of academic policy, faculty members are able to secure an area in which scholarship can thrive free from administrative restraint". Nevertheless, those traditional methods of academic governance have changed dramatically in many western and eastern universities. According to the American Federation of Teachers (AFT, 2002, p. 9), "[i]increased workloads, restrictive tenure standards, pressures to incorporate new technologies in teaching and demoralization resulting from top-level assertions of power have had the predictable, if perverse,
effect of decreasing the willingness of faculty and staff to participate in the shared governance of their institutions”.

By adopting business management models, universities created a new type of relationship with academics, it is now and in most circumstances an employment relationship between higher education institutes as a corporate entity more than the collegial community of academics. This new relationship created hierarchical structures where faculty members have a subordinate role that is clearly identified based on 'contractualism' in which universities are employers looking after their investments (Rochford, 2003, p. 254). Many universities now apply more control over faculty members about the topics and the release of research results and research material through intellectual property policies (Monotti, 2000). Even the curriculum and course syllabus can be constrained by legal regimes that have control over universities and their 'employees'. For example "if the administrative requirements of the university necessitate the publication of the subject syllabus in promotional documentation the academic is constrained by consumer protection statutes governing misleading and deceptive conduct to teach to that syllabus" (Rochford, 2003, p. 256). Consequently, universities implement further constraints on students' assessment levels like moderate evaluation and make all information available to students, which then hinder students' scepticism, critical thinking, and knowledge searching. According to the American Federation of Teachers (AFT, 2002, p. 10), university systems are changing curriculum from "a broad-based liberal arts curriculum intended to help students develop and mature intellectually into critically thinking democratic citizens" to a curriculum that places students as trainees for the real world. National and international accreditation bodies forced academics to teach content, "[i]f the course or subject has been accredited, and this fact is promoted to students or employers, an additional constraint applies to the academic teaching the subject… [t]hese restrictions are a far cry from the
German concept of Lehrfreiheit—freedom to teach—by which the professor was free in his or her choice of what to discuss in the classroom” (Rochford, 2003, p. 256). As a result of this and due to the proliferation of commercial principles in university administration, the academics’ role has changed and was identified by their value as instructors in courses that generate income, scholars who publish research that attracts funds and serve the reputation of the university, and maybe nothing more than being a consultant in university services (Menand, 1996). The contemporary relationship between the university and students experienced a new form so that:

[i]n the light of these changes, it is evident that a rational theory of the legal relationship between the student and the university can only develop within the context of the university as an instrument of society. In this concept, student-university relationships cease to be the private affairs the university has long considered them. The university’s responsibility to its students is a responsibility to society. (Furay, 1970, p. 245)

According to Deem (1998), professional autonomy is being eroded since business plans and hard data have replaced trust between staff for the sake of bureaucratic consistency and the form-filling of processes in higher education. In his view administrators put pressure on faculty such as curriculum managers who force faculty to teach a large number of students with few resources, thus creating pedagogical issues. This is also seen among some faculty themselves who have administrative roles like department chairs or deans where they need to follow specific policies and procedures that make them put pressure on other faculty and on themselves for the purpose of better quality in teaching and research as they assume. As a result, academic collegiality is replaced by regulations and control (Ainley & Bailey 1997; Prichard et al, 1998; Randle & Brady, 1997).

Indisputably, there is a great contradiction between the new bureaucratic techniques and establishing professionalism in higher education (Jary & Parker, 1994). Therefore, faculty members who usually work autonomously cannot accept the erosion of their professional autonomy and work for the quantity of their publications in order to pass research evaluations (Kogan and Henkel,
Research, which was once a symbol of freedom, is now exploited to assess academic performance for the sake of retaining credibility (Morgan, 2006). According to the American Federation of Teachers (AFT, 2002), the corporatized model of college governance is threatening the meaning of research and higher education through outsourcing teaching jobs, graduate research and teaching assistants, and adjunct faculty with no academic freedom, low pay, and little security instead of dedicated full-time professionals. As a result, research and teaching have changed their meanings among academics in some cases where faculty members accepted the erosion of collegiality, and in other cases these changes and the increase of control is faced with resistance (Schrecker, 2010).

This section impacts the argument of the study through showing what traditional management characteristics were eroded and what new management characteristics emerged when the university gave its collegial model up, in order to bring the characteristics of the collegial model within a new total quality management model that would preserve the university's professional autonomy and academic freedom back to life. This section views the literature of changes that happened in the higher education management context which were mainly caused by the increase in the number of students in the university and the decrease of public funds, both of which happened simultaneously (Deems, 1998; Shils, 1997). Those changes had a great impact on the management systems in the university and led to the erosion of the collegial model including the loss of some if not a large part of academic freedom, professional autonomy, and academic tenure in many cases (see Figure 2). New management concepts emerged like productivity, revenues, employment flexibility, moderate evaluation of students, pedagogical issues and many others (see Figure 3).
Larger universities 
More service required from academics 
Financial demands 
Attack of academic freedom 
Universities became worried about their marketing strategies 
Fixed term contracts 
Funding restrains/ massification 
Administrative restrains 
Business plans/ hard data 
Bureaucratic consistency/ form-filling process 
Moral of academic profession eroded 
Academic freedom eroded 
University autonomy eroded 
Academic tenure eroded 
Shared governance eroded 
Trust eroded 
Collegial model eroded 
Collegial model was ineffective for success & development 
Policies to control research topics 

Figure 2: Change in HE eroding traditional management concepts and impacting research negatively
Figure 3: Changes in higher education emerging new management concepts and negatively impacting teaching
2.3 **Total Quality Management in Higher Education**

Some scholars argue that TQM can be taken from the business sector and be implemented in the same way in higher education. For example, Tuttle (1994) argues that the same reasons that led industry and the government which were using old management systems that cannot work in this changing and competitive world also led education to adopt TQM. On the other hand, TQM opponents like Kosh (2004) conducted a study 10 years after Tuttle's which insists that TQM did not work in higher education and was just a fad whose time had passed very quickly because it does not take the intellectual property into consideration. The purpose of this section is to review the TQM concepts that can be applied in the academic department of higher education in order to build a new management model that aids universities to maintain professional autonomy and scholarly values.

This section is divided into four sub-sections. Firstly, it presents the literature of the founders of TQM including Crosby (1979), Deming (1966; 1986; 2000), Feigenbaum (1961), Imai (1986; 1996; 1997), Ishikawa (1985; 1990), Juran (1995; 1999; 2004), and Taguchi (1997). Secondly, it views the literature of scholars who argue that TQM can be implemented in higher education like Aly and Akpovi (2001), Antony and Preece (2002), Kluse (2009), Moon and Smith (1998), Roettger, Roettger and Walugembe (2007), and Sousa (2006). Thirdly, it discusses the reasons that made other scholars argue that TQM cannot suit higher education especially in the academic department like Brown and Koenig (1993), Entin (1993), Kosh (2003), Mehralizadeh and Safaeemoghaddam (2009), and Sirvanci (2004). Finally, it discusses the arguments of some scholars about the need to modify the TQM model to fit the higher education context like Bailey and Bennett (1996), Ensby and Mahmoodi (1997), McCulloch (1993), Padro (2009), and Stensaker (2008).
2.3.1 Founders of the Total Quality Management Principles

The TQM movement started prior to World War II in order to achieve quality as an outcome of organized processes of planning and implementation. The quality movement was based on Deming's Plan-Do-Check-Act Shewhart cycle, his fourteen points, and Juran's Trilogy of quality control, quality plan, and quality improvement (Deming, 2000; Juran 1999). The quality leading experts Deming and Juran helped Japanese business men to pursue quality in 1950 and 1954 (Flores-Molina, 2011). Quality concepts were first implemented in the manufacturing industry in Japan using data and statistical quality control. Another expert of quality management is Ishikawa who used the seven quality tools that can be used at the shop floor level (Ishikawa, 1985), Ishikawa also introduced quality circles that included operators and engineers, and this was successful in manufacturing organizations in Japan. According to Imai (1997, p. 43), total quality management requires its own culture where people understand it and gain the required skills gradually over time and this should be done through the Japanese Gemba Keizen concept. 'Gemba' in Japanese means 'the workplace' and 'Keizen' means 'continuous improvement,' which is a method of management based on changing one thing at a time (Imai, 1997, p. 43). On the other hand, according to the theorists Jary and Parker (1994), changing one thing has a minor impact on everything when assuming a machine system rather that a human 'system' that is interconnected and interdependent. In fact, the terms Total Quality Control, Total Quality Management, and Quality Systems were coined by Feigenbaum who moved the quality concept from technical methods into a business management strategy (Feigenbaum, 1961). As a result some service companies, marketing, sales, logistics, and customer service agencies adopted the total quality management model. International Quality awards like ISO 9000, The European Foundation for Quality Management (EFQM) and Baldridge Malcolm National Quality Award (MBNQA), Six Sigma, and Eight Sigma were
extended from manufacturing and service organizations to the government sector, and then moved on to other public organizations like healthcare and education (Evans and Lindsay, 2005). Some public organizations and universities modified this model in order to suit them by doing things like changing the concept of customers and clients to stakeholders as this involves a wider focus of good performance (Evans and Lindsay, 2005).


William Edwards Deming was an American consultant, lecturer, author, professor, and statistician (Andrea, 1992). He is best known for the 'plan-do-check-act' cycle that was named as Deming's cycle (Harold, 1993). From 1950 onwards he moved to Japan as a consultant who taught top managers how to improve sales, testing, products' quality, services, and design through quality control and statistical methods (Virginia, 1993). Deming is known as the man who had the greatest impact on Japan's business and manufacturing, he contributed to its economic power and to the high quality of its products (Harold 1993). It took a long time for Deming to win recognition in his home country even though he was considered a hero in Japan (Virginia, 1993). Deming was awarded the National Medal of Technology by President Reagan in 1987, and received the 'Distinguished Career in Science Award' from the National Academy of Science in 1988 (Andrea, 1992). According to Deming's philosophy, when organizations adopt appropriate principles of management, they can reduce litigation, staff attrition, rework, and waste and therefore cost, and as a result they simultaneously increase quality and customer loyalty (Deming, 1986). Deming argues that the key is continuous improvement and viewing manufacturing as a system instead of bits and pieces
(Deming, 1966). In 1970 Deming's Japanese proponents summarized his philosophy through a comparison of 'A' versus 'B'. A: when organizations and people focus mainly on quality defined as quality = results of work efforts/total costs- quality increases and cost decreases. B: when organizations and people focus mainly on costs- quality decreases and cost increases (Andrea, 1992).

According to Deming (1986), each manager should have a system of profound knowledge as summarized in four points in Table 1.

<table>
<thead>
<tr>
<th>Appreciation for a system</th>
<th>Understanding variation</th>
<th>Theory of knowledge</th>
<th>Psychology</th>
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</thead>
<tbody>
<tr>
<td>Most organizational processes are cross-functional</td>
<td>Any process includes various sources of uncontrollable variation</td>
<td>Knowledge cannot exist without theory</td>
<td>People are motivated intrinsically and extrinsically; intrinsic motivation is the most powerful</td>
</tr>
<tr>
<td>Parts of a system must work together</td>
<td>Many variations cause product failures, unnecessary costs, and unhappy customers</td>
<td>Experience describes but does not establish a theory</td>
<td>Fear is de-motivating</td>
</tr>
<tr>
<td>Every system must have a purpose</td>
<td>Statistical methods lead to improvement through identification and quantification of variation.</td>
<td>Cause-and-effect relationships are shown through theory and can be used for prediction</td>
<td>Managers should develop joy and pride in work</td>
</tr>
<tr>
<td>Management must optimize the system as a whole</td>
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Table 1: Deming's System of Profound Knowledge (Deming 2000)
Deming’s (2000) system of profound knowledge is the foundation of his popular 14 points in quality management for managers in order to run an effective business. Deming does not use the term ‘total quality management’, yet those 14 points were considered to be the launch of the total quality management movement (Antony and Preece, 2002; Evans and Lindsay, 2005). They are summarized below in Table 2.

<table>
<thead>
<tr>
<th>Deming’s 14 points</th>
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<tr>
<td><strong>Point 1</strong></td>
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<td><strong>Point 14</strong></td>
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</table>

Table 2: The 14 points of Deming (Deming, 2000)

The second scholar who assisted in the foundation of TQM is Joseph Moses Juran who was a management engineer and consultant recognized as an evangelist for quality management and
quality improvement (Debbie, 2004; Nick, 2008; Selden, 1997). His quality management philosophy is known as Juran's Quality Trilogy and consists of quality planning, quality control, and quality improvement (Juran, 1995). Quality planning is the phase of meeting customers' needs through developing the required process and products, and in this phase goals and the means to reach the goals are set (Juran, 1999). Quality control is the phase where plans are executed and operations are monitored in order to detect variation between goals and actual performance (Juran 2004). Quality improvement is the last phase and consists of the improvement of planning and performance in order to fill in any gaps between goals and actual performance (Juran, 2004). Figure 4 summarizes the three phases.

Figure 4: Phases of Juran's Trilogy
Philip Bayard Crosby is also one of the main scholars who developed the concept of quality and quality management (Bill, 1994). He was an author and business man who contributed to the quality management practices and management theories through his concept of 'zero defects' (William, 1993). *Quality is Free* is the first book that Crosby published in 1979 based on the idea that organizations establishing a quality program save returns of more than what they pay off as cost for the quality program. It was very popular during the 1980s because of the crisis of North American quality where Japanese manufactures were taking North America's market shares between the 1970s and 1980s due to the better quality of Japanese products. Crosby (1979) responded with his principle of 'doing it right the first time' which consists of four major elements:

- Quality is defined as conformance to customer's and product's requirements.
- Quality is prevention
- The standard to performance relative to requirements is zero defects
- The price of non-conformance is the measurement of quality.

Masaaki Imai is a Japanese quality management consultant known as the 'Learn Guru' and the continuous improvement father. Imai is the founder of 'kaizen,' who defines it as “a problem-solving process” (Imai 1997, p. xvi). According to Imai (1997), the kaizen strategy starts and ends with people, and 'kaizen' is a culture of sustained continuous improvement, it is a systematic approach to identify, reduce and/or eliminate ‘muda’, ‘mura’ and ‘muri’. Kaizen is a Japanese word that consists of kai which means change and zen which means good-for the better, giving Kaizen which means continuous improvement. Therefore, 'kaizen' means improvement/change for the better- in personal life, home life, social life and working life and this change has to be continuous. Imai (1997) uses another Japanese word, 'gemba,' meaning the real place which is the work place or the work environment. Gemba Kaizen means continuous improvement in the work place. 'Muda' is
any wasteful activity or obstruction to the smooth flow of an activity, 'mura' is inconsistencies in the system, and 'muri' is physical strain (Imai, 1997). Gemba Kaizen simply means a process of continuously identifying, reducing, and eliminating muda, mura and muri (3 Mu) from the Gemba.

Kaizen is a daily activity that goes beyond simple productivity and improvement. It is a process that can humanize the workplace and eliminates overly hard work (both mental and physical) “muri” (Imai, 1986). The concept of kaizen covers all areas in the workplace: improving the work environment by making it more efficient and effective, creating a teamwork atmosphere, and improving everyday procedures, employee satisfaction, and job fulfilment (Imai, 1997). The key objectives of kaizen's philosophy are: eliminating waste, quality control, just-in-time delivery, standardized work and the use of efficient equipment (Imai, 1997). Kaizen methodology includes making changes and monitoring results and adjusting, and Imai (1997) suggests replacing large-scale pre-planning and extensive project scheduling by smaller experiments that can be adapted immediately as new improvements. Kaizen “covers many of the management techniques…including quality circles, total quality control, total productive maintenance, suggestion systems, just-in-time productivity improvement, robotics and automation” (Wittenburg 1994,p.14). Kaizen supports process-oriented thinking by directing management to focus on establishing reliable processes since it is considered that good results follow automatically (Kruger, 1996). Imai (1997) describes gemba as a place for “value adding activities that satisfy the customer” (p. 16). According to Imai (1996), the 'golden rules of gemba kaizen' are:

- Go to gemba when a problem arises
- Take temporary countermeasures on the spot
- Find the root cause of the problem
- Standardize to prevent recurrence.
Feigenbaum is the scholar who devised the concept of total quality control and then developed it into total quality management (Bill, 1994). According to Feigenbaum (1961), total quality control is a system of quality development, maintenance, and improvement to provide products and services that meet customer's satisfaction at the most economical levels. He argues that a lot of extra work has to be done in order to correct a mistake, which is why quality should be everyone's job, resulting in it being nobody's job if it becomes the standard that everybody works for. According to Feigenbaum and Donald (2009), there are three steps to quality:

- First, focusing on planning through quality leadership
- Second, the entire workforce involved in modern quality technology
- Third, continuous training and motivation supporting organizational commitment.

Kaoru Ishikawa was a Japanese professor in higher education and an innovator in quality management who was famously known in the U.S for the Ishikawa diagram, also known as the cause and effect diagram or fish-bone that is used in industrial processes analysis (Donald, 1988; Yoshio, 1994) (See Figure 5). In addition to product design, this diagram is commonly used for the prevention of quality defects in order to identify potential causes for a specific effect in which each cause of variation is a reason for imperfection and where factors of management, environment, material, people, processes, and equipment cause the problem and sub-causes are connected by smaller arrows to major causes (Ishikawa, 1985). Ishikawa is also known for developing the quality circle which is a group of volunteers like workers or students who have a team leader or a supervisor (Ishikawa, 1985). After being trained their job is to identify, analyze and solve problems related to their work (Ishikawa, 1985). Those solutions should be presented to their managers for the sake of improving performance and enriching the work and motivation until they become
mature and self-managing after gaining management confidence (Ishikawa, 1985). The term quality circle is derived from Deming's 'plan-do-check-act' cycle (Greg, 2004). Quality circles are free to discuss any topic other than members' salaries or topics related to work terms and conditions (Ishikawa, 1985). Quality circles have a continuous responsibility and they keep moving from one project to another (Ishikawa, 1990). Ishikawa had an important role in developing Japanese quality strategies; he influenced participative approaches that involve all employees and advocated using simple statistical techniques and visual tools (Greg, 2004).

![Ishikawa fishbone diagram](Ishikawa, 1990, p.81)

Genichi Taguchi was a statistician and an engineer, and he contributed to the improvement of the quality of manufacturing through applying a statistical methodology in studying products variation from the standard requirements (Harrison, 1997). His methodology was mostly helpful in controlling quality in manufacturing (Paul, 1997). A new perspective on quality was pioneered by
Taguchi focusing on the economic value of reducing variation, being on target, and dispelling the traditional view of conformance to specifications (see Figure 6).

Figure 6: Taguchi economic value perspective (Taguchi, 1995, p. 227)

Deming's 'plan-do-check-act' cycle, system of profound knowledge and his 14 points and all the TQM principles that were developed by the rest of the TQM main authors started in manufacturing but was then implemented in other sectors like the service sector, healthcare and education. In some cases it witnessed success, and in other cases it failed, and this positions scholars in this realm in two different groups: those who advocate it and those who consider it a failure. In each sector there are defenders and opponents. The focus of the rest of this section of the literature review is on the implementation of TQM in higher education, specifically its success, its failure, and the opinions of the defenders and opponents.

2.3.2 Defenders of Total Quality Management in Higher Education

Some scholars argue that TQM can be implemented in both administrative and academic departments in higher education. Moon and Smith (1998) consider that TQM can be implemented in any public organization including higher education in all departments. They found that it was successfully applied in two public organizations in the UK: Her Majesty's Custom and Excise and the Benefit's Agency. These two cases are government administration departments where
improvements had taken place such as reducing waiting and answering call times, but the study does not include any successful evidence in academic departments in universities.

Antony and Preece (2002) argue that TQM is continuous improvement through self-assessment, where performance is compared to an excellence model to find gaps and ways for their suitable bridging and this can be implemented in higher education. It is important to point out that academic freedom is essential for professors as in order to approach any course from a variety of directions and tailor their courses and teaching to students; a professor has to use foundational principles that are applied differently in each case rather than replicable practices (Deem, 1998). Professors who teach in the same way and deliver the same lectures provide minimal opportunity for students to learn (Roettger, Roettger and Walugembe, 2007, p. 126). Sousa (2006) points out that there is no one type of best teaching, but it is essential to incorporate different approaches in teaching for optimal learning. Aly and Akpovi (2001) support the use of TQM in universities and argue that a lack of leadership and resources to encourage continuous improvement causes TQM to fail in academic departments. In their case study of TQM practices in the University of California (UC) and California State University (CSU), questionnaires were sent to the two university campuses to both administrative and academic managers to check on TQM programs offered by their schools. Half of both universities used TQM concepts, and seventy six percent of them reported that they are using them in the administrative departments only (Aly and Akpovi, 2001). The study results also indicate that academic institutes use TQM in administration, which is easier than academic departments because some processes may be the same. Ali and Akpovi demonstrated those administrative processes, staff morale, teamwork, the quality of the program and personnel hiring improved when the universities adopted TQM principles. It should be noted that programmes are designed only by scholars qualified in the disciplines and they have to reflect lavational interests of the university as well as the particular expertise of those in a discipline who happen to be there. The
universities implemented TQM radically through reengineering where TQM was dramatically challenged because of staff and faculty resistance in academic departments, and this would be one reason that hindered TQM from developing in the academic departments and demonstrates the need to modify the TQM model in order for it to be successful in higher education.

According to Green (1994), there are two basic dimensions that should be assessed in higher education: producing graduates who meet the human resource needs of organizations and enhancing knowledge through research. Green (1994) accepts the importance of teaching and research in higher education, however he refers to assessing those essential values in higher education while ignoring the difficulty of assessment in this human system context and limiting the role of graduates to being university products. Green (1994) defends the implementation of TQM in higher education explaining that quality was internal in the past, however the concern about efficiency, quality, and accountability is growing and TQM control and assessment can serve the quality of higher education. Indisputably, Green (1994) does not take into consideration the uniqueness of higher education and that fact that its body is constituted of professionals who can self-assess the quality of their performance in teaching and who are in a continuous improvement process through creating knowledge when they conduct research.

Some scholars argue that TQM can be implemented in any organization, including higher education. Pike and Barnes (1996, p. 24) defines TQM by stating:

TQM is a way of managing to improve the effectiveness, flexibility and competitiveness of a business as a whole. It applies just as much to service industries as it does to manufacturing. It involves whole companies getting organized in every department, every activity and every single person at every level.
TQM is a phrase that can be broken down into three terms: "Total," which reflects everyone's involvement; "quality," which implies meeting customers' requirements; and "management," reflecting the commitment of senior management (Witcher, 1990). In 1999 there were four higher education institutes out of fifty-one in Malaysia surveyed in a study by Kanji and Malek (1999) that implemented TQM. The results show that TQM success factors like teamwork, leadership and continuous improvement influenced the four institutes' performance and led to business excellence, but it is not clearly stated in Kanji and Malek's article how those factors caused a successful TQM, and especially how some professors can do research individually and teach using their own ways and methods. Montano and Utter (1999, p. 57) argue that: "While implementing TQM and quality improvements endeavours at educational institutions can be difficult at best, the results can be extremely beneficial for all involved." However, Montano and Utter (1999) advocate TQM in teaching and research ignoring the learning theory and different scholarly styles. "According to the socio-cultural theory of learning, mental processes are actions that cannot be separated from the environment where they are performed" (Roettger and Roettger and Walugembe, 2007, p. 128).

According to Schargel (1996) TQM is a very successful management system that should not be applied from the business sector to higher education only as it should also start in schools. Based on results from an empirical study, he argues that TQM helps in creating well educated students and thus a well skilled work force that will thrive when they work in industry, otherwise they need to be trained and educated in their workplaces which cost billions of dollars. His study is a case analysis of initiating the 'Westinghouse Education Quality Initiative' in the 'George Westinghouse Vocational and Technical High School' which introduced a TQM program. The school had many problems including high-aged teachers, entry students with poor math and reading skills and high rates of failure. Schargel (1996) explains how TQM was introduced to the high school through
training a group of voluntary teachers about the TQM model and then writing down a mission, choosing a quality steering committee and a quality coordinator. The first target was increasing the morale of staff through choosing a staff member to be recognized every month by writing up his/her name on a bulletin board for everyone to see (Schargel, 1996). Since this practice is similar to giving young children stars on their work, scholars and academics are cynical about this kind of activity as it is not based on scholarly practices and standards. Schargel (1996) explains that the philosophy of TQM was also introduced to students and a class of children was chosen as a quality leader who used to meet with the principal every month to discuss students’ improvements and last year students were assisting their peers in the first year where dropout rates dwindled. The improvements included more extra-curricular activities, more parents attending parent-teacher meetings and more students were able to graduate and join colleges, and intrinsic motivation for students to be knowledgeable people was created (Schargel, 1996). The ‘George Westinghouse Vocational and Technical High School’ was the only vocational high school and one of only six high schools to receive a grant for an employment office. Schargel (1996) argues that TQM can be implemented in all education institutes as a complete model, where it is a never ending process that will embrace more and more TQM principles. This case study shows some quantitative measures as evidence of the improved results, yet some TQM concepts such as how to measure continuous assessment were not mentioned.

Although during the 1990s there are more studies that advocate TQM in higher education, there are some scholars who still defend TQM and consider that it could be implemented exactly the same way as in business without any modification. Sirvanci (2004) claims that a secondary student enrolling in higher education should be considered the same as raw material that goes through the production process from one step to another. From a very commercial point of view he argues that a
student passes from one course to another in order to gain his degree, which is a similar process to the brand that a product in manufacturing is labelled with, and therefore the student goes to the workplace and competes with other peers among employers in same way as any competing product in the market. This is an oversimplification of the learning process, and in fact it leaves out most of it; he excludes student input, personality, communication impact, knowledge, and personal development. The student's role is learning through an active and cooperative way in order to solve illustrated problems and professors coach, facilitate and guide this action (Roettger and Roettger and Walugembe, 2007, p. 129). When the Baldridge Education award was developed in the 1990s in the U.S it focused on 'student satisfaction', and although the term 'customer' was not used by its criteria yet the student was treated as a customer. In 2002 changes were made to the award's criteria where 'student learning results' became the main focus of the award (Sirvanci, 2004). Sirvanci (2004) considers that this change was due to awareness of the student being considered as a product and not a customer. He considers that a student is a customer only when he/she graduates and donates as alumni, however he insists that the student is a product, and employers hiring graduates from the same university reveal repeated purchase. This debate is unacceptable since it is a reduction of the human being and its complex development, ideas, and motivations. This change in the Malcolm Baldridge National Quality Award criteria is not necessarily intended to change a student's position from a customer to a product but the focus on the 'student learning outcome would embrace quality teaching and thus knowledgeable students. Sirvanci (2004) identifies some challenges that face TQM in non-profit organizations like higher education such as customer identification, leadership, organizational and cultural issues, the role of the student, and performance measures.
Focusing on leadership like Aly and Akpovi (2001) and Kluse (2009), Sirvanci argues that presidents and chancellors of higher education institutes are unlike CEOs in business organizations as they have less authority in their positions, and this holds them back from taking decisions to change the environment of their organizations in both the administrative and academic departments into a TQM culture. In addition to leadership, Sirvanci (2004) argues that there are three more reasons that hinder TQM in higher education: old traditions, faculty interest, and lack of team spirit. He states that old traditions that have been built in education have deep roots which prevent change, especially changing the whole culture to apply TQM. In fact, old traditions are not always negative, and TQM would not be better in higher education. Sirvanci (2004) argues that faculty members are product focused on research more than market focused on students' preparation to meet employers' requirements. Sirvanci (2004) considers that the problem is in higher education since it prevents the successful implementation of TQM and discusses education using business terms, however faculty members are not product focused and are instead research and publications focused. According to Sirvanci, team spirit is hard to achieve in higher education since departments compete with each other for university resources, and this creates an extra challenge for TQM implementation. In fact, this is only partly true since research funds usually come from external sources and professors in a department do not all do the same thing as they have different specialisations and different teaching styles. It is the variety and exposure to difference that is important at the academic level, not all getting the same thing. "It is important for the university professor to be acquainted with basic information about the human brain and to understand the processes involved in learning in order to better facilitate the learning experience for all students" (Roettger and Roettger and Walugembe, 2007, p. 126).
Sohail, Rajadurai, and Rahman (2008) provide a case study of Pahang State College of Professional Development in the US about implementing quality management in higher education through the total quality management model. They try to prove that through their study and the replies they got from staff TQM empowered staff and helped to improve their practices from their own points of view. Their study aims at providing a benchmark for adopting TQM in higher education in order for other universities to improve the way they manage staff to motivate them. Although it is qualitative based on the emergent design, the position of the study was presented in the introduction which shows TQM as a successful model that helps universities improve their staff performance and thus their programs and the way they are delivered. Indisputably, the discussion was only limited to the positive side of quality management. The authors discuss the implementation of TQM in one university in the US and generalize conclusions on all universities in the world. The paper used qualitative methods in collecting information through a survey, including open-ended questions for students to check their satisfaction with quality, but the study doesn’t include faculty, and conclusions were based solely on a sample of students. The findings are based on the findings of a case study about a training institute which is not the right scope and sample to conclude results and recommend practices in higher education in general.

Taylor and Braddock (2007) looked at some theoretical and methodological matters in international university ranking systems and ideas through a conceptual interpretation of two systems that they consider to be the best in the world: Times Higher Education Supplement World University Ranking and the Shanghai Jiao Tong Academic Ranking of World Universities. The study concludes that although the Jiao Tong is not perfect it is better than the Times Higher Education Supplement since it includes more aspects in evaluating universities, and based on its criteria they suggest how a ranking system should be formatted. Through qualitative analysis the study examines the criteria of each of the two ranking systems by comparing them to conclude the ideal system.
would be. In the research statement the outcome is included, which is to find the best ranking system, and the purpose of the study is embraced within the discussion throughout the research which intends to find an ideal criterion for university excellence. Taylor and Braddock (2007) argue that even if a system is not perfect; there will always be advantages and good points to be benchmarked for university excellence. Nevertheless, the study sampling is limited to two ranking systems and some strength in other systems would have been ignored like continuous improvement in the Malcolm Baldridge National Quality Award. The paper suggests modification to the Jiao Tong ranking system through placing more emphasis on teaching and research as the basic finding of the intended purpose.

Ahmad and Hamdoon (2006) study the obstacles and challenges of implementing TQM in UAE higher education through a case study of Sharjah University. The purpose of the paper is to show the importance of TQM and to discover the problems that hinder its implementation in higher education. The paper refers to a lot of literature about TQM, including western and Arab scholars' research which is valuable in highlighting different views on quality at a time when few papers included Arabic literature in this field. On the other hand, the paper covers research with positive results of TQM and ignores the opinion of TQM opponents. Using qualitative analysis, the paper discusses problems of TQM implementation in Sharjah University. A survey was conducted using a multiple part questionnaire, and the results show that all staff, faculty, and students support TQM implementation but that their knowledge of TQM is simplistic. These results contradict many other studies (e.g., Brown and Koenig, 1993; Entin, 1993; Kosh, 2003) that show that faculty have negative attitudes of TQM. The reason may be the small sample used or the lack of information about TQM as Ahmad and Hamdoon mentioned, although the researcher should make sure that the participants are aware and knowledgeable of the questionnaire's approach when they are giving
input about it. The conclusion of this article recommends TQM implementation in UAE higher education, although the paper does not place enough emphasis on the Arab culture to adopt TQM in higher education.

Other studies about quality management in higher education include Brown and Marchal (2008). They present a study of a higher education nursing department at the University of Virginia that initiates the continuous quality improvement framework to improve its programs. The nursing department decided that continuous quality improvement should be applied through three main goals to be achieved: student satisfaction with advisement, students' satisfaction with the program, and raise of pass average and work to achieve the goals through Deming’s (plan-do-check-act) model. The study uses a fish bone diagram to present what the department found to be affecting its program, concluding that continuous quality improvement takes place when an action is needed to solve a failure problem like student's dissatisfaction or student's risk to fail or to meet accreditation requirements. Although the continuous quality improvement framework was initiated and studied by faculty it still wanted to achieve goals that may be political, which are considered essential in order for organizations to survive. In fact, this contradicts Deming's idea since his (plan-do-check-act) cycle is a continuous process for continuous improvement.

Zeitz (1996) studies employees' attitudes about implementing TQM in a regional office of the US Environmental Protection Agency. About a dozen interviews were conducted and 448 questionnaires were administered. The study found that: "Contrary to previous literature, clerical and managerial employees were most favourable toward the TQM program, whereas professionals were most negative" (Zeitz, 1996, p. 120). The study suggests that the reason for this could be because professionals had little direct rewards and more work from the implementation of the TQM process, and also because the agency hadn't started using TQM to simplify professionals' processes by the time the study was conducted. The study seeks to explain the causes of the attitudes of
employees toward TQM through quantitative analysis and objective measurements. Zeitz (1996) addresses the issue of employees' attitudes towards TQM in a public department by defining a set of variables and procedures to measure them. The variables include perception of measurement support, barriers to implementation, satisfaction with TQM, TQM awareness, training, team experience, intrinsic value, grade, and position (Zeitz, 1996). These variables were measured through a survey of employees in the Environmental Protection Agency regional office. The article presents six hypotheses related to different level of employees and their attitudes toward TQM. For example, hypothesis one states: "Lower to middle level managers will have less favourable view of TQM" (Zeitz, 1996, p. 122) is based on a literature review of Deming and Carr Littman who concluded that lower and middle managers mostly resist TQM programs. A theoretical framework guides the analysis and proposes that there is causal direction between its factors. Information comes from the whole population of the Environmental Protection Agency regional office. Zeitz (1996) reports ample information about the research measures, which helps scholars studying public administration to progress in the practice and theory of research in this topic. A deep understanding of the measurement approach is revealed which provides confidence in the research results. Zeitz (1996) uses two data collection methods: interviews and questionnaires. In most of the cases chi-square is used as a test, where employees are categorized based on their position at work and attitudes towards TQM.

Anyamele (2005) discusses the importance of leadership in developing and maintaining a quality management system in Finnish higher education. His study found that quality management helps higher education institutes to be learning organizations and cope with changes in the world. The scope focuses on educational managers (administrative and academic) in Finnish higher education organizations. The research is qualitative and Anyamele used a questionnaire with open-ended
questions based on the EFQM criteria that was sent to different leaders in higher education; 30 replies came back in addition to interviews with five different senior managers in Finnish higher education. The results of the study depend a lot on interviews, although only five were conducted and they focused solely on the positive management characteristics of Finland education. Anyamele’s (2005) study concludes that quality management in Finnish higher education institutes is presented through excellence in leadership and serving students who are considered the customers. All stakeholders and the academic community are also considered customers, but the study doesn't show how quality management serves the academic community. Anyamele (2005) used mixed methods in studying TQM as a type of public administration in Finnish higher education. The study focuses on the role of leaders to develop and maintain quality management. It finds that TQM helps universities to adapt to change and become learning organizations. The scope includes senior managers in academic and administrative departments in Finnish higher education institutes. The European Foundation for Quality Management (EFQM) was used as a theoretical frame that was used to construct a questionnaire. The article used quantitative analysis for the data collected from the questionnaires, however the results mainly depend on a qualitative analysis of interviews even though only five interviews with different senior managers were conducted, and these only focused on the strength of Finnish higher education management. Anyamele (2005) concludes that TQM is adopted in universities that have excellent leadership skills, and the findings are similar to some of Zeitz's (1996) findings that show the importance of managers' role in helping employees to have a positive attitude of TQM.

Potocki, Brocato and Popick (1994) conducted a study in Johns Hopkins University, Physics Laboratory Education Centre where the university implements TQM and believes that students should be empowered. Students gave input about the curriculum and course designs and the
university asks for their feedback at the end of every class through a semi structured questionnaire consisting of three questions: What helpful aspects did you get from this class? What unhelpful and unclear aspects did you get? Is there any knowledge you learned which you didn't expect? (Potocki, Brocato and Popick, 1994) In this study qualitative methods were used to gather information through interviews and focus groups. During focus group sessions students identified six vital elements that contribute to their learning: challenge, interest, relevance to future jobs, flexibility of projects, knowledgeable instructors, and valuable teamwork. Based on these findings the study advocates TQM and recommends that all universities focus on their students' satisfaction in order for them to thrive, although the study's results were generalized based on a single university in the US.

Carroll et al (2009) studies the quality management system in higher education institutes in Oman. The article is an explanation of quality management requirements introduced by the government, yet it doesn't explain how higher education institutes perform to meet the quality requirements of the ministry of higher education and external accreditation bodies. The paper gives a historical background of higher Education in Oman and then an explanation of the Oman Quality Plan. The Oman Accreditation Council required all universities to get accredited locally in order to guarantee a standard quality that fits the local Arabic and Muslim needs. The historical background is well structured as it gives us a picture of the development of quality awareness in Oman. The paper concludes that the key success factors of quality management are benchmarking and the involvement of various stakeholders. This study gives a picture of the quality management in Oman introduced and forced by the government. It is more about the requirements for a foreign university in order to export its programs to Oman than the quality management in the organization. The effectiveness of this paper is questioned since Carroll et al elaborates on how quality management
was introduced to Oman universities from the governmental side where quality equals accreditation requirements, and this contradicts a lot of literature in quality management.

Reavill (1998) argues that there are 12 stakeholders in higher education and the quality assessment of higher education in the UK such as the Higher Education Funding Council of England, Scotland, and Wales does not cover all stakeholders' needs even though it contributed a lot to the quality of higher education. According to him the customer is clearly identified as the employer purchasing the output of higher education. He considers that the student is neither a customer nor a product, but is instead a stakeholder. To him, the 12 stakeholders are: students, employers, families and dependants of students, employees in the university, the university, university's suppliers of goods and services, secondary education schools, other universities, industry, nation, government, tax payers, and professional bodies. They are all stakeholders because they either pay for the university or benefit from it, or both at the same time. He argues that it is hard to prioritize them but the first four are the most important. The problem in Reavill (1998) is the same as in some previous articles discussed above, which is that he is considering education as part of the economical sector and not socio-cultural.

## 2.3.3 Opponents of Total Quality Management in Higher Education

Quality management was brought into education in an attempt to improve the quality of life in societies through improving the quality of teaching, quality in the classroom, and the quality in the teaching process (Evans and Lindsay, 2005). However, its application instead reduced the standards because it was not modified to suit educational organizations, there was no plan for the change, and
there was a desire to do it fast without making adjustments to fit which were similar to the change from centralized control to a distribution of authority (Ramsden, 1998).

Some scholars argue that there are significant reasons which hinder the success of TQM in higher education. For example, Kosh (2003) argues that TQM has a very small impact on higher education since all of the successful cases were limited to administrative rather than academic departments. One of TQM's basic components is having defined processes and a consistent assessment and measurement of performance with standard processes. Kosh (2003) argues that this cannot be implemented in higher education since standardization in teaching limits professors' innovation in their classes. Professors are sometimes assessed at the end of the semester and with TQM they need to be assessed continuously and maybe on daily basis which is very hard (Kosh, 2003). Teamwork is essential in TQM, and this cannot be achieved in higher education according to Kosh (2003) since committees try to hinder work in higher education more than just getting on with it.

According to Brown and Koenig (1993), the major difficulty of TQM implementation in the academic department is that it gets a lot of resistance from faculty since it causes more committee work and provides less professional benefits. Entin (1993) argues in a study that he conducted on ten colleges and universities in and around Boston that senior management usually have a lot of enthusiasm to implement TQM but faculty resistance creates a huge gap between employers' requirements and academic institutions. Mehralizadeh and Safaeemoghaddam (2010) studied the extent of applying quality management models like TQM, ISO 9000, and EFQM derived from the business sector to higher education institutes in Iran. Mehralizadeh and Safaeemoghaddam (2010, p.177) discuss that new management ideas need to be "socially authorized, theorized, productivised, and progressive, harmonized, dramatized, and individualized". The results of the study are
consistent with Brown and Koenig's observations and show that TQM was not socially authorized, especially by higher education institutes, since it requires more committee work and offers less individual benefits for them as scholars and also less freedom. Mehralizadeh and Safaeemoghaddam take the same view as Kosh that TQM works solely in administrative departments and weakens the academic culture that is supposed to be the priority in higher education institutes. Mehralizadeh and Safaeemoghaddam also argue that TQM is not properly theorized for education since it focuses on the process of enrolling students more than what students learn. It also contradicts all educational theories and does not build on the social and culture theories as education cannot be productivised since the outputs are heterogeneous. Mehralizadeh and Safaeemoghaddam also argue that TQM is not harmonized if stakeholders are not all satisfied and treated equally in higher education institutes, and this is reflected in the European Foundation for Quality Award and the Malcolm Baldridge National Quality Award criteria where the importance of different stakeholders is unequal. Mehralizadeh and Safaeemoghaddam also state that TQM is not dramatized since no empirical evidence in their article demonstrated that, and it is not individualized since it does not benefit people at the individual level or at the organizational level and the awards given do not reflect the actual success of TQM in higher education institutes. Mehralizadeh and Safaeemoghaddam use Rovik's model of management solely and generalize the results to all Iranian higher education institutes, discarding any successful cases of TQM implementation that may have happened in Iran.

Pfeffer and Coote (1991) consider TQM to be a slippery concept since it includes a wide variety of meanings and means different meanings to different people. Wiklund et al (2003) argue that TQM is a vague concept referencing Deming the founder of quality management, and he states:

…the trouble of total quality management, the failure of TQM, you can call it, is that there in no such thing. It is a buzzword. I have never used the term, as it carries no meaning (quoted
Pfeffer and Coote (1991) argue that all definitions given to TQM are not clear, and they consider it as aiming to satisfy both internal and external customers through three components: values, tools, and techniques. For example, quality awards like the Malcolm Baldridge National Quality Award and European Foundation for Quality Management Award are tools that can be used in techniques such as self-assessment by supporting core values like commitment. Pfeffer and Coote (1991) consider that a student is an "active participant" in education and not a customer or a product. In 1995 the National Agency for Higher Education was established in Sweden to guarantee quality management in Swedish universities that had a dramatic increase in students during the 20th century. It focuses on system views and continuous improvements, where universities' assessment consists of two stages, first a self-assessment using the plan, do, check, act cycle of Deming, and then the National Agency's assessment based on criteria adopted from the Malcolm Baldridge National Quality Award and the European Foundation for Quality Management and Swedish Quality Award. In 2001 the National Agency also introduced "the national evaluation for subjects and program" which shifted from processes and systems that are TQM based and focused on what is done instead of how things are done. Wiklund et al (2003) also criticize this assessment because it requires a lot of statistical data that takes a lot of time to collect and which might not be useful after a short period of time. They also recommend engaging students more in the assessment process through involvement and creating commitment in them with new ways that assessments should bring into light what resources are needed. Their study generally criticizes assessment since it diminishes innovation and creativity and encourages future research on university case studies to analyze how assessment is affecting the university's performance.
Houston, Robertson, and Prebble (2008) present a study in the academic department in one of the eight public universities in New Zealand. The paper includes total system intervention as the main approach and its intent is action research using qualitative tools like focus groups and qualitative analysis, but the action research approach wasn't revealed clearly throughout the study. The desired outcome of the study was to discover whether this department is doing the right thing and whether they are doing it right in the programs they offer and their content. The purpose of the study is to give a beneficial report for national improvements of quality management in higher education. The paper constructs its conceptual framework and methodology based on critical systems thinking in which all students' inputs were collected. There were four hundred students in the department and it was impractical to conduct individual interviews as Houston, Robertson, and Prebble explained, and therefore focus groups were done instead. Participants from the entire department were requested to give a meaning for the word quality which implied potential interventions for improvement and the quality improvements they suggest. The study reveals that quality models like audit processes gave little attention to educational theories, processes, and student learning. The critical systems approach used by the researchers helps in identifying problems, solving them, and offering methods to improve management systems in university departments. In regards to the context of the study, the scope only included a single department of a single university and the results are generalized even though the cases would vary in different universities in New Zealand. The study argues that finding problems helped in solving them but this wasn't represented. Nevertheless, we shouldn't deny that these results would be useful as a beneficial benchmark that will help in quality improvement in the national higher education sector, and thus meet the purpose of this study.

The research statement of Anderson (2006) focuses on finding the reason why academics are against the assessments used by their universities even though they contribute a lot to the quality of
teaching and research. The paper is an interpretive study done over a sample of thirty academics from ten universities in Australia. Qualitative methods are used through semi-structured interviews. The study found that "… academics drew on notions of quality as understood within traditional academic discourses of excellence in scholarly endeavour" (Anderson, 2006, p. 171). They consider that in total quality management, quality is conformity with the lowest standards (Anderson, 2006). The study also finds that faculty members consider quality assurance threatening and feel it should be replaced. The study concludes that TQM doesn't work in higher education and generalizes this conclusion to all higher education institutes, although the sample is limited to one country and the cultural aspects of the participants are not mentioned. The findings answered the research question but did not show how this report would be used beneficially for academics or for managers and the problem was illustrated and the reasons of the problems were discussed but there was no purpose shown to take the finding further and reveal beneficial effects in practice.

2.3.4 Arguments about modifying the TQM model in Higher Education

At the same time, between TQM extreme advocates and TQM extreme opponents some scholars suggest using this model in higher education with some amendments in order to suit its context. McCulloch (1993, p.7) considers implementing TQM in higher education if its language is carefully adapted to educational values. McCulloch (1993, p. 8) divides customers of higher education institutes into primary, secondary, and tertiary and states they should be prioritized and served accordingly. McCulloch (1993) argues that TQM encourages teamwork in committees through innovation and incremental change. Evans and Lindsay (2005), consider that when organizations support teamwork all personal initiatives are taken into consideration, which adds value to the
processes and leads to continuous improvement. Training is part of TQM, but McCulloch (1993) argues that training for faculty should be substituted by self development.

Stensaker (2008) summarizes quality assurance processes in universities through an abundant review of quality management literature and then explains the gap between expected and real outcomes in higher education. A new relationship between organizational change and quality assurance is recommended which is the outcome that the paper intended. The outcome and the purpose were not mentioned through a clear research question or statement but were only concluded in the final section. This interpretive study type helped in finding what the paper looked at, but this study was only based on theory where some qualitative methods like interviews and observation were missing. Stensaker is not against quality assurance in higher education but recommends that quality assurance programs should be aware of the gap between the required outcome of quality assurance and facts because quality reports are not used as an improvement process, however they are hindering freedom and innovation among academics. This recommendation reflects the effectiveness of the paper since it highlights a problem that the entire academic sector is suffering from, but it doesn’t suggest any practical changes that would improve this situation.

Another example of approaching TQM in higher education is Padro's (2009) interpretive study which discussed Deming's system of profound knowledge that can help universities change to meet the new accountability requirements they are facing. The paper is a theoretical conceptualization about Deming's profound knowledge system that includes four dimensions of his model. The first dimension is an appreciation for a system that views the organization as a whole integration between students, alumni, faculty, employees and the community, who have one aim as stated by
the mission, and this focuses on integration and quality from inside the university, but it is not stated clearly in the article how this would be done. The second dimension is variation in knowledge, where variation is not considered to be a problem since it gives academic freedom and prevents students from being pushed to programs just for political or market needs. Padro supports academic freedom and variation. The third dimension is psychology, which is summarized by awareness of emotional intelligence and building trust. The fourth dimension is theory of knowledge through the plan-do-check-act cycle of Deming, and this reveals Padro's support for the idea of assessment in education. In addition to those four dimensions Padro added two more: independence, where motivation is different based on an individual’s connections and interaction through public policy and defining quality through legislation. The public policy presented by Padro contradicts Deming’s dimensions which focus on quality as an initiation from the organization and not as a government requirement. The paper is locating quality management in the administrative and academic departments of higher education institutes. In fact, the dimensions added in this paper contradict with Deming's position of quality in higher education. Deming believes in motivating staff at all levels through empowerment and process ownership (Walton, 1986).

Ensby and Mahmoodi (1997) proposed the criteria of the Malcolm Baldrige National Quality Award be used to assess quality in higher education institutes. The purpose of the research is to show that the accredited bodies should not be used as a measurement of quality since they do not lead to consistency in instruction practices and they do not meet the changing needs of their students. Although the article defends quality management concepts in education, it also pays attention to the resistance of faculty to adopt Malcolm Baldrige National Quality Award criteria, considering that this resistance is a result of faculty fear of losing control. The article only includes universities in the US and results cannot be generalized to other universities and it limits the quality
management criteria to the delivery of material, course control, and assessment. Nonetheless, the article highlights the current system problems in many universities.

Similar to Ensby and Mahmoodi (1997), Bailey and Bennett (1996) focus on students in their quality management approach in higher education. The purpose of the article is to develop processes in higher education that meet the requirements of the students. The information presented is all based on a literature review through analysis of different articles that discuss whether the focus on higher education should be on the student or the employer in deciding what needs to be improved and for whom. The article suggests that universities should focus on developing processes to enhance students' skills and knowledge in order to attract more employers who are considered as customers in the article. Although many scholars are against having these industry concepts in a socio-cultural organization like education, many universities consider such an outcome as being effective and beneficial where they work to have defined processes that are continuously measured and assessed.

Michael, Sower, and Motwani (1997) designed a comprehensive model of TQM in higher education by defining the customers as three groups: students, industry, and community. The model starts with defining a mission and a vision statement with keeping the customer in mind, driving out fear through empowering employees, developing pilot teams in administrative departments where TQM should start before moving to the academic departments having measurement criteria through some statistics, recognizing and rewarding successes, improving constantly, and reviewing progress. Milakovich's (2006) arguments are similar to Michael, Sower, and Motwani's (1997), and he considers that empowering is essential for a successful implementation of TQM where people who
own their processes and form them based on what they argue is true perform at a very high level and benefit the whole organization.

Antony and Pierce (2002) advocated TQM in higher education institutes through quality function deployment by considering that it balances between teaching and research. In a case study at the University of Cincinnati Department of industrial engineering they identified the needs of various customers (businesses and students), and those needs were translated into product features such as "practice knowledge" and "communication skills" and then translated into process features like lab experiments, project reports, and presentations.

This section impacts the argument of the study by presenting the TQM concepts that can be applied in the academic department of higher education in order to build a new management model that aids universities in maintaining professional autonomy and scholarly values. Defenders of TQM like Aly and Akpovi (2001), Antony and Preece (2002), Kluse (2009), Moon and Smith (1998), Roettger, Roettger and Walugembe (2007), and Sousa (2006) argue that TQM can help universities survive in the changing world in a similar way to any other organization in any other sector because old management styles cannot work in a competitive environment, however most TQM defenders witnessed its success in administrative departments but not academic departments and among faculty members where it was either resisted or led to a huge problem in teaching and research as the core activities of higher education in the countries reviewed. Those are the main reasons that led many scholars like Brown and Koenig (1993), Entin (1993), Kosh (2003), Mehralizadeh and Safaeemoghaddam (2009), and Sirvanci (2004) to stand against TQM and consider it a fad that cannot work in the public sector in general and in higher education specifically. When there is a decision to plunge the entire organization of some businesses in TQM it is deployed in some
departments at the beginning and then spreads to the rest of the departments. The case in higher education would be the same, as starting TQM in administration and preparing the whole organizational culture to understand its goals and create a desire to implement it would help it spread to the academic departments, but with a number of the modifications discussed above. Therefore, the literature review of TQM, its development, its defenders and opponents in higher education, and scholars who argued that it should be modified helps in developing a new management model in higher education by mixing between TQM and professional autonomy as the main purpose of this thesis.

2.4 Higher Educational Leadership Literature

Higher educational leadership has an important role among senior administrators to help academics preserve academic freedom and to more sensitively administer a quality management programme. This section focuses on scholar's recommendations for top administrators to lead faculty members in a proper way, especially since the higher education context is unique and leadership within this context is also unique. The leader's skills vary by his level of education and knowledge, and leaders in higher education should have very high leadership skills (Drucker, 1955). The purpose of this section is to include the leaders' role in higher education within the new TQM management model, the way they support faculty, and find a way to create a culture of self-leadership among academic staff through professional autonomy and scholarly activities.

This section includes three main roles of higher education leaders that scholars focus on in the literature of higher education leadership. Firstly, it presents the way higher education leaders should lead faculty members. Ramsden (1998) argues that appropriate leadership in higher education
positively impacts faculty members in their role to achieve high qualities of teaching and research which are the two core activities of the university. According to Ramsden (1998), in this changing world that is affecting many western and Arab universities and shifting them into huge organizations, a higher education leaders' role is empowering faculty members and creating ownership on what they teach and the way they teach it, and this is essential and should be protected. Secondly, this section discusses how higher education leaders should deal with politics in universities and how they should have political intelligence in many cases in order to keep politics away from the university (Bezzina, Starratt and Burford, 2009). On the other side, higher education leaders should use politics to get best for the university by seeking resources and generating opportunities for faculty members (Ramsden, 1998). Thirdly, this section focuses on creating the right vision and working on achieving it regardless of all of the challenges that leaders may face. The most important vision in higher education is building the academic community and creating an educational environment that goes even beyond the university and leaders should have clear objectives to achieve this (Murphy, 2002).

Evans and Lindsay (2005, p. 204) define leadership as "the ability to positively influence people and systems under one's authority to have a meaningful impact and achieve results". Some higher education institutes are more focused on strategy, policy, and processes than leadership (Osseo-Asare, Longbottom and Murphy, 2005, p. 158). Osseo-Asare, Longbottom and Murphy (2005) argue that leadership is essential for vice-chancellors or presidents, deans, and heads of programs and departments in both academic and administrative departments. Osseo-Asare and Longbottom and Murphy (2005) recommend that quality managers should be aware of this and support those administrators in developing and improving leadership skills such as creating a mission and values, balancing research and teaching, and developing communication, empowerment, and support to
academic staff. According to Osseo-Asare, Longbottom and Murphy (2005), leadership should not be separated from processes since it is a skill that is integrated in everyday activity at all management levels. According to Seymour (2005), the main concern of higher education leaders is to ensure the future of the institute. Professors should be semi-autonomous and self-directed leaders in higher education (Carvalho and Downing, 2011; Côté and Allahar, 2011; Deem, Hillyard, and Reed, 2007; De Wit, 2010; Fanghanel, 2009). Leadership is crucial for the success of universities in this changing world according to many scholars. For example, Ramsden (1998, pp. 13-14) argues that the university has changed into a 'mass higher education system' in which leaders have to deal with, "[n]umbers, finances, structure, purposes, students, governance, confines, technologies, the amount of knowledge available and its diversity have all changed... and will continue to have revolutionary consequences for how universities are run, what university staff do and how academic leaders work". According to Ramsden (1998), when 'executive leaders' like vice chancellors in higher education support faculty and communicate clear ideas of development and change to them, they help them in better teaching and more effective research processes.

Some scholars argue that academic leaders are different from other leaders since they are in a position of teaching and research which constantly enhances their education and would give them the chance to distinguish themselves from different managers. According to Drucker (1955, pp. 415- 418), "Whether [the manager] develops his subordinates in the right direction, helps them to grow and become bigger and richer persons, will directly determine whether he himself will develop, will grow or wither, become richer or become impoverished, improve or deteriorate... [what] distinguishes the manager above all others is his educational one". Bottery (2004) defines five components of professional leadership and management in education: provisionality ethics where leaders should be aware of the limits of their judgments, truth searching ethics where
relativism is not accepted, integrity ethics where leaders should limit personal perceptions, humility ethics and considering personal fallibility as a factor of human being and not fail, and humanistic education ethics where the duty of leaders is helping people around them to help themselves. Similarly, Byham (1992, p. 247) argues that "Empowerment in education means getting students to take responsibility for their own progress by involving them in decision making, encouraging them to think for themselves and fostering trust, creativity, and a hunger for new challenges, but in order to empower students, teachers first need to empower themselves". Burdett (1996, p. 33) defines empowerment as: "the voluntary transfer of ownership of a task or situation to an individual or a group having the ability and willingness appropriate to that situation, in an enabling environment".

Ownership is also essential in higher education leadership. According to Moon and Smith (1998), ownership is essential in private and public organizations and empowerment helps staff achieve ownership of their process and commitment to develop them. Baume and Kahn (2004) argue that when one of the faculty members becomes a dean or a vice chancellor, he/she does not usually 'have a clue' about managing a team and has to work on developing some skills, and might think that academics do not like to be managed but the fact is that they like to be managed well. In universities, leaders have to inspire, develop, manage, and support academic colleagues (Ramsden, 1998, p. 4). Leaders in higher education should have professional ethics, they should be aware of their judgments, search for the truth, and limit their personal perceptions (Bottery, 2004).

Many higher education leadership scholars focus on the role of leaders in dealing with politics whether it is inside the university or outside and impacting the university. According to Davies, Hides, and Casey (2001, p.1025) leaders have an important role in implementing strategies, communicating policies and creating a vision. Leaders in higher education should keep politics away from educational debates and outcomes measurement, and they should have political
intelligence to rise above obstacles caused by politics (Bezzina and Starratt and Burford, 2009, p. 548). According to Ramsden (1998), academic leaders should be good politicians and good managers at the same time by combining high intellectual scholarship with superior skills in politics and giving it an instrumental role. Ramsden (1998, p.84) explains that "[s]killed politicians, they seek resources and generate new opportunities for staff in the department, both in teaching and in research, [t]hey keep the ship afloat while leading it into new waters". On the other side, there are disadvantages of politics in higher education. Baume and Kahn (2004, p. 37) argue that one of the essential challenges that faces higher education leaders is the "time spent on internal politics, fighting to save the unit or aspects of it, in terms of its location in the institution and its role in key policy development". Politics in higher education institutes takes different shapes, leaders may misuse politics in universities among its small community through sending different messages to people in the university or giving specific information to some people and not others. Baume and Kahn (2004, p. 173) consider that in most of the cases faculty have to sacrifice 5 percent of a project in order to get the 95 percent approved because of politics. Good higher education leaders make the maximum of their political resources through exploiting power for this purpose, and power is not evil and leaders should maximize their power to achieve benefits for the department (McCaffery, 2010, p.315). Leaders in education should be good mangers and politicians at the same time and they should give politics an instrumental role for high intellectual scholarship (Ramsden, 1998). Higher education leaders should use their power and political resources to achieve benefits for the departments, faculty, and students (McCaffery, 2010, p.315). The biggest challenge that faces higher education leaders is the time they spend fighting to develop a policy or save a department (Baume and Kahn, 2004, p. 37).
Higher education leadership scholars also discuss the role of leaders in creating the right vision of the university. For example, according to Davies, Hides, and Casey (2001, p.1025) universities need to shift their visions under the current conditions:

A more focused organizational vision is needed that includes an outward-facing, Customer-centred element, which is at conflict with the inward-looking culture that previously was prevalent in universities. The main sources of these pressures on higher education establishments are students, the government, the business community and the local community.

However, Ramsden (1998) argues that leader's role in higher education is to ensure that policies are adhered to and labour laws are followed and establish committed teams around him/her since people are committed to a person more than to a system. This is the reason why caring about a shared vision starts from personal visions as a leader who is committed can create personal visions among his team that become one shared vision, and therefore the result would be commitment and not compliance (Frazer, 2005). According to Murphy (2002), one of the most important visions is community building, and leaders should be involved in forming a community of learners in their educational organizations and the environment beyond, they should work on daily basis to influence learning among staff, faculty and students. Leaders in higher education should create their own visions: Ramsden (1998) argues that credible visions are those that represent the educational leaders as academic staff, they understand the nature of academic work and sympathize with their colleagues' needs and they deliver a high quality of teaching and research and also play a role as a model to other faculty. According to Evans and Lindsay (2005, p. 223), "The vision describes where the organization is headed and what it intends to be; it is a statement of the future that would not happen by itself". In accordance, leaders must know where they are going and what achievements they want, and therefore they need to create visions and choose the right methods to implement that will lead them to their visions. They have to come up with good ideas regularly, set agendas, and most importantly have credible visions. One of the university visions would be:
"….vision of the strengths of people and of how the university might best contribute to the creation of greater knowledge and well being" (Ramsden, 1998). When leaders have their own vision, they can create personal visions amongst their people and have one common vision to achieve (Frazer, 2005).

This section impacts the argument of the study by including the leaders' role in higher education within the new TQM management model, the way they support faculty, and create a culture of self-leadership among academic staff through professional autonomy and scholarly activities. Higher education leadership scholars discussed above focus on empowerment, managing politics, and creating a vision as the three important leadership skills in higher education. Leadership in higher education should be unique due to the uniqueness of this context. This literature highlights the importance of support that leaders should give to faculty members, the way leaders should deal with politics in the university through using it for the best of the university and the community as a whole, and eliminating it in many circumstances that affect the university negatively. In addition to this, the literature focuses on the role of leaders in creating the right vision in higher education and working to achieve it: for example, Evans and Lindsay (2005, p. 207) who argue that "Effective leadership requires five core leadership skills: vision, empowerment, intuition, self-understanding, and value congruence."

2.5 Higher Education Cross-cultural Management Literature

Designing a new quality management model should take into consideration the cross-cultural context of Dubai, UAE. This section uses the cross-cultural management theories of Hofstede (1984; 1986; 1991) and Trompenaars (1993). The purpose of this section is to address multi-cultural
staff and diversity in universities in Dubai to be used in designing the new management model in this thesis. According to Hofstede (1991), leaders in a multi-national context should not only learn the courtesies and customs of people who work with them but also mind-sets, management philosophies, and their national characters. Trompenaars (1993) explains that there are two types of people in the way they deal with their external environment: inner-directed and outer-directed people and this affects the way they view the world around them and thus their working environment and career as a whole. This section also uses Hofstede's (1991) cultural dimensions in order to study the characteristics and cultural components of Emirati people and of expatriates that come from different countries like the U.S, Britain, France, Spain, China etc.

In an organization that is culturally diverse leaders have a critical role. They may face many challenges that require a lot of understanding of cross-cultural communication and the values and enforcement of organizational values (Moran, Harris, and Moran, 2007). Just like other staff, people who belong to minority cultures want to be valued and not just tolerated in order to work effectively (Kouzes and Posner, 1995). This also applies to higher education, where both administrative and academic staff wants to be valued, especially in a professional culture that requires academic freedom. According to Young (2003), effective cross-cultural training does not have a simple model, and instead it depends on the needs of each context or organization since the cultural composition varies. In higher education, faculty members need to have academic freedom in teaching methods and research. Unfortunately, people who structure programs in the university set the level of freedom or lack of freedom for students and faculty in what they will do research in or get exposure to (Ottewill and Laughton, 2000; White and Usry, 1998).
According to McCaffery (2010, p. 29), diversity is considered to be a new concept that emerged in the mid of 1990s as a result of the detrimental consequences of equal opportunities in organizations. Middleton and Rodgers (1999, p. 32) define diversity as respecting all individuals, the differences between them, and the fact that each one is unique. Diversity may include visible and invisible characteristics like disabilities, ethnicity, gender, nationality, personality, and functional background (McCaffery, 2010). Globalization is impacting universities' contexts, by which universities are now multicultural leading to ethnic, religious, cultural, and social diversity. According to White and Usry (1998), the university's responsibility is not only embracing diversity but also fostering ways to tackle problems of disharmony and fragmentation.

Cultural awareness and sensitivity are essential in any cross-cultural organization. According to Lane and DiStefano (2000, p. 183), this includes awareness of “how another person’s culture affects his or her behaviour” in addition to recognizing of how our behaviour is shaped by our own culture. Hofstede (1986) also discusses the importance of understanding and learning about different countries and cultures like ‘belief systems’, ‘rituals’, ‘cultural symbols’, norms and behaviour, and cultural values. Nancy (1995) emphasizes the importance of cultural differences awareness through working in cross-cultural teams, developing skills of cross-cultural discussions, and resolving cross-cultural clashes. In addition to this, Ottewill and Laughton (2000) and Saghafi (2001) state that psychological maturity, emotional energy, and cognitive complexity are crucial personal characteristics. Cui and Awa (1992) discuss other characteristics of cross-cultural awareness including self-esteem and flexibility. Rhinesmith (1996) argues that cross-cultural competencies can be developed and improved through self awareness and self questioning in order to lead to a transformation of mindset and personality.
According to Trompenaars (1993), a successful cross-cultural relationship includes caring where cross-cultural leaders should express caring about the individuals within a cross-cultural context. Trompenaars (1993) also discusses the importance of mindfulness or carefulness within a cross-culture, in which leaders should show respects and empathy to each other’s cultures and the cultures of all individuals. Commitment is another characteristic that he explains cross-cultural leaders should have as an essential behaviour, in which should differences and difficulties arise leaders will commit to preserve a successful relationship among diverse individuals. Trompenaars (1993) argues that commitment, mindfulness, and caring should have continuity over time, where both leaders and individuals should have to continue developing and enhancing their own cross-cultural skills.

Rayner and Gunter (2005) define cultural diversity in education as personal and social factors of individual differences which are the main aspect of any educational setting. Through a case study of educational research in the US, Lee (2008) deduces:

… we cannot articulate a generative and robust science of learning and development without explicit attention to the diversity of the human experience. The National Science Foundation and the Institute of Education Sciences, the two largest sources of federal funding for education research, both explicitly call for attention to diversity. (Lee, 2008, p. 272)

Bartlett (2000), and Rayner and Gunter (2005) argue that diversity is not a problem that should be resolved or dealt with in higher education, however it is a resource that brings a lot of value to the university context. According to Alexander (2004), cultural diversity adds a lot of pedagogical value to higher education through several distinctive pedagogies which contributes to academic professional development for faculty members and leaders. “The implications are that there exist or might be constructed different forms of pedagogy, a combination of which educationists will need to acquire as they develop their own professional pedagogic expertise” (Rayner, 2009, p. 437).
Cultural diversity in the UAE universities, and especially in Dubai, is a fact that should be taken into consideration in any management system that any university is implementing. UAE culture is part of the Arabic Muslim culture which has its own characteristics and way of doing business, Islam widely affects the way Muslim people work. At the same time, the world all around us is changing at an unprecedented pace. Technology and globalization are affecting our lives and causing major changes (Sara, 2007). The workplaces all over the world are indisputably affected by this change, and UAE workplaces have changed as well through the past 25 years. The workplaces in UAE have changed due to many reasons like the increasing number of expatriates, women entering workplaces, and the government encouraging nationals to seek jobs in the private sector. Al-Shamsi and Fulcher (2005) show that Muslims in UAE are more committed and want to stay in their organizations for longer, however expatriates look for more salaries and benefits and are less committed. UAE women are also part of the changes in UAE workplaces. Although Emirati women are conservative due to their Islamic culture, many are seen in the workplace today. Emirate females are more educated now and more involved in business and the government although an Emirati woman's most important role in life is to get married and have a family (Al-Shamsi and Fulcher, 2005).

The increase in the number of expatriates in UAE has led the workplaces to adopt conditions that suit them. Jobs in the private sector are usually given to expatriates with a temporary residency through renewable work visas, however the public sector jobs are given to Emirates nationals with flexible hours of work, job security and superior employment conditions. Emirati Graduates are usually employed in the public sector, however to build an Emirate management and leadership potential to manage the country’s future development graduates are forced to seek work in the private sector by the government (Tanmia, 2006).
As a result, there is now more diversity within the public and the private organizations in the UAE, and specifically Dubai, which attracts expatriates from different countries in the world. All of those changes are also applicable to universities in Dubai. This highlights the diversity in public and private universities which has increased, and there are now expatriates from different nationalities interacting with each other and with locals. Simultaneously gender diversity is increasing, especially with the high presence of Emirati women in the university communicating with Emirati and expatriate men, and even with women expatriates from similar but not the same cultures like Arab women or expatriate women from different cultures like western women. This applies whether those individuals are academics, administrators, or students.

When studying cultural diversity in Dubai it is important to refer to Geert Hofstede's cultural dimensions as he included the Arab countries in his model. It is also beneficial to glance through this model of cultural characteristics of different people for different countries, especially as the model that the thesis aims to build is going to be used in Dubai universities which include different nationalities from all regions of the world.

After interviewing 116,000 employees from different 50 countries, his study in 1980 revealed the following four dimensions, and then a fifth was added after research in China and South East Asia (Hofstede, 1991).

- Power distance: it measures the response of subordinates to power and authority. In high power distance countries (Spain, France, and Latin America, most Asian and African countries) subordinates are scared of their superiors and their superiors are autocratic. In
low-power distance countries (U.S, Britain, and most of Europe) superiors use a consultative management style.

- Individualism/ Collectivism: in individualistic cultures (France, Germany, South Africa, Canada, etc.), people look out for themselves and their immediate families. In collectivist cultures (Japan, Mexico, Korea, Greece) the person’s strength and protection are in his loyalty to the group.

- Femininity versus Masculinity: in feminine cultures people have a good relationship with their supervisors and cooperate well with people they work with like in Sweden, France, Denmark, and Indonesia. When the masculine index is high like in the US, Japan, Mexico, Hong Kong, and Italy, people tend to get their recognition and then have a challenge to do more work and derive a sense of accomplishment.

- Uncertainty avoidance: in cultures with strong uncertainty avoidance people avoid unknown situations like in South Korea, Japan, and Latin America. Innovation and deviations are considered threatening and dangerous. In cultures with weak uncertainty avoidance like the US; the Netherlands; Singapore; Hong Kong, and Britain people are more open to risk and deviation is not considered threatening so greater tolerance is shown.

- Long-term versus short-term orientation: long-term orientation values are associated through thrift, perseverance and persistence like in China, Hong Kong, Taiwan, Japan and India. A short term orientation is based on protecting one’s reputations, and fulfils social obligations like in Britain, Canada, the Philippines, Germany, and Australia.

According to Hofstede, people in the Arab countries like to do business in places out of the office like in a hotel lobby which shows the counterpart’s willingness to come. The culture in the Arab countries has a high power distance and uncertainty avoidance where the leaders separate
themselves from the subordinates, and they are also high rule-oriented with regulations, rules, and laws to reduce uncertainty. Inequalities of wealth and power in the Arab countries grew in the society where the regulations, rules, and law were developed by people in power to increase their power and where these two dimensions combine together. Consequently, the culture in the Arab countries does not accept change. The Masculinity index is high, and this is because of the Muslim beliefs rather than the cultural paradigm. Hofstede's lowest dimension for the Arab World is the Individualism ranking. The culture in the Arab world is collectivist, where the commitment to the group and family is dominant. Arabs are long term thinkers because they have commitment and respect to their religion and argue that they work hard today for a better future.

This section impacts the argument of the study by addressing multi-cultural staff and diversity in universities in Dubai by recommending that these considerations be integrated in designing the new management model in this thesis. The literature review of cross-cultural management in higher education includes Hofstede (1984; 1986; 1991) and Trompenaars (1993). Hofstede (1986) gives an important role to cultural awareness of leaders who need to understand the mind-sets and national characters of individuals such as their courtesies and customs. The cultural dimensions of Hofstede (1991) are reviewed to recap the major cultural characteristics of Emirati people as Arabs and of expatriates who live in Dubai in order to take that into consideration when building the new management model of this thesis. Trompenaars (1998) distinguishes between people who are inner-directed and people who are outer-directed and how this affects their view of the world, their working environments, and their careers. All of those aspects of cultural diversity are taken into consideration in building the new management model of higher education in a cross-cultural context like Dubai, UAE.
In conclusion, this literature review helps in shaping the argument of the study. Traditional management university systems characterized mainly by academic freedom, collegiality, shared governance, and academic tenure are illustrated to combine those collegial characteristics with TQM concepts to build the best management university system that this thesis seeks. Those characteristics are also reviewed within the changes that happened to higher education when universities became huge and public funds are constrained. The purpose of this section is to identify the negative impact that many scholars have found along with those changes and to urge the need to go back to traditional management systems like the collegial model even in today's university. The third section of this chapter reviews TQM to clearly understand TQM principles and characteristics initiated by TQM founders and to review the literature that witnesses TQM success as well as failure in higher education in order to use the applicable TQM characteristics to higher education in the new model of this thesis. The higher education leadership literature section is also reviewed to present the literature that discusses how universities should be lead for the sake of including the role of higher education leaders in the new management model that the thesis builds. The last is about cross-cultural management to include cross-cultural awareness in the higher education management model that the thesis builds on in Dubai as the context of the study. The five bodies of literature have an impact on developing the approach and methodology of this thesis and direct the research methods and instruments as discussed in the next chapter.
Chapter Three: RESEARCH APPROACH AND METHODOLOGY

The research approach and methodology of this thesis follows the five qualitative research phases designed by Denzin and Lincoln (2008), and summarized in Figure 7.

First Phase: qualitative perspectives are provided by the socially situated researcher, the researcher is socially situated who provides qualitative perspective through an emergent study that attempts to create meanings and collect information from the participants on the site. There were no pre-assumptions of what needs to be modified in the TQM model in a cross-cultural context like Dubai, and information started to be accumulated as the study proceeded. It progressed gradually, starting with a theoretical and analytical literature review through meta-analysis of the TQM model, its advantages and disadvantages in the public sector, and specifically in higher education, and then a field study was conducted through a survey to study the applicability of this model into higher education in Dubai. Based on the questionnaire, the interview participants were selected and the interview guide was finalized as per the emergent design of qualitative research.

Second Phase: Interpretive paradigms - the study selects the social constructivism paradigm. The social constructivism interpretive paradigm is selected to inductively develop a theory or a new management model in higher education in Dubai. Based on this paradigm, data is collected from a sample of faculty members as the participants of this study in order to interpret the subjective and objective meanings that they have about the university management systems in Dubai for the sake of creating a new management model using the grounded theory approach as one of the research strategies.
Third Phase: the research strategy is a meta-analysis followed by the grounded theory approach with some quantitative analysis. Meta-analysis is done for the foundation literature of TQM and the literature with and against TQM in higher education in order to check what the advantages and disadvantages of implementing TQM in higher education are, and this is to be used as the base of the commencement of the empirical study. The empirical study follows the grounded theory approach since it aims to generate a new model of higher education through collecting interpretations from faculty members as the participants of the research. For the sake of triangulation, some quantitative analysis of close-ended questions from the questionnaire data collection methods were studied using descriptive statistics, chi-square, and t test. Both the qualitative and the quantitative approaches help to answer the research question although the thesis is primarily qualitative.

Fourth phase: the methods of collection and analysis are presented through the methodology of the study, which includes site and subject selection, data collection methods (document analysis, a survey, and in depth semi-structured interview), ethical considerations and limitations of the study. The site of the study includes two universities in Dubai (a private university and a public university). The subjects are all faculty members in the two universities used for the survey, and some faculty members are selected based on a criterion sample for the in depth semi-structured interview. The data collection method of the empirical study includes documents analysis, a survey and a semi-structured interview. The data analysis method includes international total quality management awards criteria like in Europe, the US, Australia and also the UAE, the UNESCO international covenant on academic freedom, the Commission for Academic Accreditation standards for licensure and accreditation as per the Ministry of Higher Education and Scientific Research in the UAE, and management policies related to faculty and the academic departments in
the two universities under study. The second data collection method is the survey that is done through a questionnaire sent to all faculty members in the two universities. The interviewees sample was selected based on the data and information collected from the questionnaire. The semi-structured interview guide was finalized based on data and information collected from the questionnaire as per the emergent study that this thesis follows.

Fifth phase: makes sense of the thesis findings by building a new TQM model based on meta-analysis of the TQM literature together with the empirical study. The irrelevant TQM concepts are modified in this model based on the traditional university management systems reviewed literature in this thesis. The cross-cultural management and leadership in higher education literature that the thesis reviews also add their input to the new TQM model of this thesis.
Figure 7: Research approach and methodology

Phase 1:
Socially situated researcher providing qualitative perspective

0.500

0.480

Tolerance

Loss

No Loss

0.520
3.1 Research Approach

3.1.1 Dominantly Qualitative Perspective Emergent Study

The qualitative approach is the best approach to primarily use in this thesis based on the interpretive epistemological paradigm. According to Schwandt (2000, p. 190), in an interpretive approach "qualitative researchers study things in their natural settings by attempting to make sense of or interpret phenomena in terms of the meanings people bring to them". The thesis collects empirical data on higher education quality management practices in their natural setting through an interpretive study of two universities. The logic of inquiry for the thesis adopts an inductive reasoning approach that constructs or evaluates general propositions that are derived from specific examples (Creswell, 2003). The focus is on paradox theory building and is adopted from Poole and Van De Ven (1989). According to them, social theory researchers can exploit theoretical tensions and paradoxes to construct a new model that accepts the paradox, clarifies analysis levels, separates the two levels at the preliminary stage of research, and then finds innovative terms to resolve the tension and paradox. The model is based on TQM concepts, yet depending on the interpretations and collected data, inapplicable TQM concepts will be modified using the traditional university management models in an attempt to resolve the paradox and tension between TQM and those traditional models.

In opposition to a prespecified study, this thesis is an emergent study that attempts to identify, explain, illustrate and develop the total quality management model in order to build a modified TQM model that fits the higher education context in Dubai. In a prespecified study, the process of inquiry, supporting arguments, and questions of interest are decided at the commencement of the
study (Creswell, 2003). In an emergent study, the process of inquiry, supporting arguments, and questions of interest are developed as the research progresses in a way that means the research process may shift or change after the study commences and data collection begins. For example, the sites and participants may be changed, the data collection instruments may be modified, and the questions may shift (Creswell, 2007). Researchers use the emergent design because there is not enough situational control to carry out a prespecified research, the methodological instruments are lacking or inappropriate, or the investigator has inadequate awareness of the phenomenon. According to Creswell (2003), emergent designs could develop into prespecified designs as the researcher develops adequate understanding of essential issues after months of prior fieldwork study and emergent research. "The key idea behind qualitative research is to learn about the problem or issue from participants and to address the research to obtain that information" (Creswell, 2007, p. 39). The problem statement in qualitative research usually points to the purpose of the paper and starts with a general topic that the researcher wants to know about which, is known as the focus of inquiry (Ary et al, 2010). As the study proceeds, the general topic narrows into research questions (Neuman and Kreuger, 2003). The research question is what guides a research. It gives a picture of the intended outcome and the desired purpose (Creswell, 2003). For example, a case study about quality management implementations in higher education for Wallace (1999) has a clear research question and a defined purpose. In qualitative research, the purpose is to produce a descriptive and comprehensive report in order for the reader to recognize the social reality that the participants experienced, and the researcher doesn't know what events will occur and what variables will be important (Creswell, 2003).

The decision to choose qualitative or quantitative methods in studying quality management in higher education is not based on the legitimacy of a specific method but instead depends on using
appropriate methods to research objectives in order to conclude confident results. Researchers can use quantitative data and evidence in addition to qualitative interpretations, narratives, and observations (Luck, Jackson, & Usher, 2006; Yin, 2003). Lan and Anders (2000, p. 150) conclude that "there should be a move beyond arguments as to which research is more legitimate and toward discussions as to whether the methods have been appropriately used". This thesis primarily used the qualitative approach along with some quantitative analysis for the sake of triangulation. Many studies that use the qualitative interpretive approach and other studies that use the quantitative approach were critically reviewed as a learning tool in order to exploit the two approaches to meet the objectives of this thesis. TQM in higher education and the public sector has been approached from a number of different research traditions depending on the questions being asked about it. Hsieh, Chou, and Chen (2002) conducted a study about the new public management and TQM in the National Tax Administration of Taipei using a qualitative approach similar to Houston, Robertson, and Prebble (2008) who studied a public university in New Zealand using the same approach. Some researchers like Anyamele (2005) used mixed methods when carrying out a research project about Finnish higher education that applies public administration using the total quality management model. Flores-Molina (2011) used qualitative research to create a model of applying total quality management in higher education.

In fact, the inquiry strategy of this thesis is primarily qualitative, which is interpretive, descriptive, and inductive. This approach is used to "understand meaning people have constructed about their world and experiences" (Merriam, 2002, p. 4). The study was carried out on site in the natural setting with faculty members in their university offices. This helped in collecting more information and gaining profound understanding of participants. This study is a mix of qualitative meta-analysis
and a grounded theory in which it presents insights of the applicability of TQM in higher education and builds a new TQM model in Dubai, UAE as a cross-cultural context.

3.1.2 Social Constructivism Interpretive Paradigm

The paradigm or knowledge claim of this thesis is based on social constructivism in opposition to postpositivism, which starts with a theory. According to Creswell (2003, p.9), in social constructivism inquirers develop and inductively generate meaning patterns or a theory. In inductive research "[q]ualitative researchers build their patterns, categories, and themes from the “bottom-up,” by organizing the data into increasingly more abstract units of information" (Creswell, 2007, p. 38). In this thesis, knowledge is an active process and not a passive one, in the sense that knowledge is not discovered but is constructed based on experience and shaped with new experience. According to Hacking (1999), social constructivism clarifies how people construct or interpret reality in certain historical, social, and linguistic contexts. Social constructivism is usually combined with interpretivism where humans try to understand the world they live and work in through developing subjective meanings based on their experience (Mertens, 1998). The role of the researcher adopting this paradigm is to look for the complexity of views and not to narrow the meanings into categories or ideas (Creswell, 2007). The investigator's goal is to focus on the views of the participants and negotiate the subjective meanings historically and socially (Lincoln and Guba, 2000; Schwandt, 2001). In practice, the researcher should ask questions that are general and broad in order to help the participants to construct meanings of a situation, questions are better if they are open-ended so people can say what they do in their life setting (Neuman, 2000)."Constructivist researchers often address the 'processes' of interaction among individuals. They also focus on the specific contexts in which people live and work in order to understand the
historical and cultural settings of the participants" (Creswell, 2007, p. 21). Researchers then interpret the collected information based on their own backgrounds and their own historical, cultural, and personal experiences in an attempt to make sense of the meanings others have about their context (Creswell, 2007). This is the reason that makes qualitative research named as 'interpretive' research most of the time.

"An interpretive study provides descriptive accounts targeted to understanding a phenomenon using data that might be collected in a variety of ways, such as interview, observations, and document review" (Ary et al, 2010, p.29). Qualitative information can be collected through semi-structured interviews and in-depth interviews or through a fundamental interpretation related to an epistemological approach like ethnography and symbolic interactionism, in-depth interviews extract lay experience of processes in order to know what a successful practice is, when it happened, and the contextual factors that caused the success (Long and Godfrey, 2004). The approach and methodology of this thesis is chosen based on a critical evaluation of many interpretive studies on TQM in higher education. For example, Anderson (2006) studies the resistance of academics to quality assurance processes that are required by managers and accredited bodies through an interpretive study using qualitative methods through semi-structure interviews. Stensaker (2008) uses an interpretive study to discuss the required awareness by quality assurance programs of the changes currently taking place in universities.

Social constructivism illustrates the results of reality from a process of results and the construction of the interaction between a person's mind and his environment (Piaget, 1952). Social constructivism includes the following assumptions (Crotty, 1998; Patton, 2002):
People create meanings through interpreting the environment around them; the qualitative research uses open-ended questions to discover those meanings.

People create meanings of their world based on their social perspectives and history; the qualitative researcher uses his/her own background and experience to shape the information collected.

People create meanings of their world when they socially interact in their community; the qualitative researcher uses inductive reasoning to produce meanings from the study.

Social constructivism is often used with phenomenological studies where participants describe their experience (Moustakas, 1994) and in grounded theory perspective in which theoretical orientations are grounded in the perspectives and view of participants (Charmaz, 2006). Based on this explanation, the underlying meaning of management relationships in the academic departments of universities in Dubai is based on the input of faculty members as the participants of this research. Using the survey and interview instruments information is collected from faculty members including the objective and subjective meanings they have developed based on their experience, and then the thesis looks for complexity of views and interaction among individuals in order to make sense or interpret the meanings faculty have about the university context.

### 3.1.3 Research Strategy

According to the qualitative research process of Denzin and Lincoln (2008), the researcher should select the suitable research strategy that will answer the questions of the research. According to Creswell (2007), there are five qualitative approaches to inquiry: narrative research, phenomenology, grounded theory, ethnographic research, and case study research. The narrative
research is a text told by a single individual, while phenomenology is a text told by several individuals where the researcher describes what all participants have in common in experiencing a phenomenon (Creswell, 2007). Phenomenology emphasizes the meaning of an experience for a number of individuals but grounded theory goes beyond description and generates or discovers a theory by examining many individuals who share the same process, interaction, or action, and the study participants are not likely to be located in the same place or interacting so frequent (Creswell, 2007). In ethnographic research participants are located in the same place and interact frequently and develop shared patterns of beliefs, behaviour, and language, and ethnographic research requires more participants than grounded theory which usually includes 20 to 30 participants (Creswell, 2007). The entire culture or sharing group in ethnography may be considered to be a case, but the intent in ethnography is to determine how the culture works rather than to understand an issue or a problem using the case of a specific illustration, and a case study research can be one or more than one case study (Creswell, 2007).

Since the thesis collects data and interpretations from a sample of faculty members in Dubai in order to emphasize the meaning of their experience with university management systems and goes beyond description to generate a theory in the form of a new management model in the academic department of higher education, it uses the grounded theory approach as its research strategy. In addition, since the topic of this thesis is the implementation of quality management in higher education and this is debatable as there are as many opponents as defenders of TQM in higher education, the research strategy includes meta-analysis of the theoretical and empirical research of TQM foundations and TQM in higher education, as discussed in the literature review of this thesis. This study also includes some quantitative analysis like descriptive statistics, correlation, chi-square, and t test for the sake of triangulation. This makes the research strategy of this thesis
primarily qualitative using meta-analysis and the grounded theory approach with some quantitative analysis- are all designed to meet the objectives of the research.

3.1.3.1 Meta-Analysis

Since this thesis is an emergent study it starts with meta-analysis of the literature of TQM and TQM in higher education, and then based on this meta-analysis the field study using the grounded theory approach was designed. Meta-analysis initially developed in the field of education in a seminal paper by Glass (1976), after he used it to synthesise quantitative research in the field of psychology. The supposition of the meta-analysis strategy is that "The findings of multiple studies should be regarded as a complex data-set, no more comprehensible without statistical analysis than would hundreds of data-points in a single study" (Glass, McGraw & Smith, 1981, p.12). Accordingly, previous research is considered a type of data in statistical meta-investigation. The need for this type of secondary statistical data is argued by Hunter, Schmidt, and Jackson (1982) who discuss its importance in the field of psychology which is "not for additional empirical data but some means of making sense of the vast amounts of data that have accumulated" (p.27). According to Wolf (1986) and Wood (2000), psychologists consider statistical meta-analysis as a technique that not only offers an objective means of blending the results of previous studies but also moves a literature review to the same standard of repeatability and scientific inquiry as individual research. In fact, meta-analysis was only considered applicable for quantitative studies to be synthesised. Nonetheless, this systematic review procedure was used in qualitative research starting with medicine passing through policy and management research and reaching social science and educational research (Rist, 1990). Meta-analysis in qualitative research is also known as meta-ethnography (Noblit & Hare, 1988), qualitative meta-data-analysis (Paterson et al, 2001), or
qualitative meta-synthesis (Sandelowski, Docherty, and Emden, 1997). As such, in qualitative meta-analysis the findings of a qualitative literature review are formally mixed for an interpretive result through an analytic process that establishes transparently, comprehensively, and systematically the state of knowledge in a field of research.

This thesis uses qualitative meta-analysis as a method of conducting a thorough secondary qualitative analysis of primarily qualitative results. Therefore meta-analysis is conducted as the first stage of the research followed by the grounded theory approach and some quantitative analysis. In this systematic review procedure, the literature is reviewed as not only an objective means to combine the results of previous studies but also to compare, classify, and deduce conclusions of the TQM major concepts and the applicability of this model to higher education including successful and failing cases. As such, in the first step of the meta-analysis strategy, the literature of TQM founders including Crosby (1979), Deming (1966; 1986; 2000), Feigenbaum (1961), Imai (1986; 1996; 1997), Ishikawa (1985; 1990), Juran (1995; 1999; 2004), and Taguchi (1997) are systematically analyzed in order to summarize the theory of each of those founders and create a comparison between the theories for the sake of creating a list of quality management concepts and characteristics. Those quality management concepts and characteristics are then reviewed in the quality management awards like the European Foundation for Quality Management (EFQM) award, the Malcolm Baldrige National Quality (MBMQ) award, the Australian Quality award, Dubai Quality award, and international quality awards like ISO 9001 and Six Sigma quality award. The criteria of these awards have influenced the quality management concepts and characteristics, and those influences are added to the quality management list generated in the first step of this meta-analysis in order to have a synthesized review of the TQM model. After that and through meta-analysis, the studies done about TQM in higher education will be combined and analyzed based on
both successful and failing TQM implementation examples derived from the literature of defenders and opponents of TQM in higher education as presented in figure 8.
Research Methodology following 5 phases of the qualitative research process (Denzin and Lincoln, 2008)

**Phase 5:**
- Make sense of finding

**Phase 4:**
- Methodology (Methods of collection and analysis)
  - Survey
  - Quantitative analysis
  - Site and subjects selection
  - Meta-analysis
  - Data collection methods

**Phase 3:**
- Research Strategy
  - Meta-analysis of the research strategy

**Phase 2:**
- Interpretive paradigm selected: Social
  - Deming
    - (1966; 1986; 2000)

**Phase 1:**
- Examining artifacts
  - Grounded theory approach

Ethical considerations

Limitations

Ishikawa (1985; 1990)
3.1.3.2 Grounded Theory

Since this thesis is an emergent study, after the meta-analysis of the literature of TQM and TQM in higher education, the field study was designed using the grounded theory approach where the data collection instruments, questions, and inquiries continued to develop gradually starting with document analysis, then questionnaires, and then interviews with selected participants who are decided as the study progresses. The information collected was interpreted using the social constructivism paradigm in order to build a model of quality management in higher education. This thesis uses the grounded theory approach since it collects data and interpretations from a sample of faculty members in Dubai in order to emphasize the meaning of their experience with university management systems and goes beyond description to generate a theory in the form of a new management model in the academic department of higher education as the goal of grounded theory as identified by Strauss and Corbin (1990), is moving ahead of describing a process in order to discover or generate a theory based on data from participants who experience the process. Accordingly, grounded theory is a qualitative research approach in which the researcher generates a theory of an interaction, action, or a process based on the views of the research participants.

This qualitative approach was developed in sociology in 1967 by Barney Glaser and Anselm Strauss, who considered that the theories research studies used had been ill-suited and inappropriate for the study participants in many cases (Glaser, 1978; Glaser and Strauss, 1967; Strauss, 1987). Glaser and Strauss argue that theories must be 'grounded' in field data, especially in studying social processes, interactions, and actions of people, by interrelating categories of information based on the data collected from participants. On the other hand, the two founders of grounded theory disagree about the procedures and meaning of grounded theory. Glaser (1992) condemns Strauss's
design as being very structured and prescribed. More recently, Charmaz (2006) introduced the 'constructivist grounded theory' as another perspective into the discussion about grounded theory designs. In the course of those diverse interpretations, grounded theory has become popular in fields like psychology, education, nursing, and sociology (Creswell, 2007). Another perspective of grounded theory is suggested by Clarke (2005), and is similar to that of Charmaz (2006), but this relies on postmodern perspectives like the political nature of interpretation and research and positioning the researchers as an 'acknowledged participant' more than an 'all knowledge analyst' based on the poststructural, postmodern scholar (Foucault, 1972).

In general the two major designs of the grounded theory approach are the systematic design of Strauss and Corbin (1990) and the constructivist design of Charmaz (2005, 2006). In the systematic design the researcher systematically develops a theory explaining interaction, action, and process on a topic like developing a curriculum (Creswell, 2007). In the constructivist design, "[i]nstead of embracing the study of a single process or core category as in the Strauss and Corbin approach, Charmaz advocates for a social constructivist perspective that includes emphasizing diverse local worlds, multiple realities, and the complexities of particular worlds, views, and actions" (Creswell, 2007, p. 65). According to Charmaz (2006), constructivist grounded theory lies exactly within a qualitative interpretive approach focusing on developing a theory that depends on the investigator's view and analysis of the collected data.

The thesis protocol follows the constructivist design of the grounded theory approach outlined by Charmaz (2005, 2006) because the findings collected through the data collection methods including document analysis, questionnaire, and semi-structured interview are used to make decisions throughout the process, bring questions to the data and analyze the priorities, experiences, and
values of participants. Following the emerged study design along with the social constructivism paradigm, the questions and inquiries of the empirical study are developed based on the findings of the meta-analysis strategy. Consequently, the findings of the meta-analysis classifying the TQM literature as either defending or denying TQM implementation in higher education are combined together with the grounded theory findings in order to create a TQM model in higher education. As a result, the successful and failing cases of TQM in higher education are deduced together through the meta-analysis with the document analysis, questionnaire, and interview data done through the grounded theory approach, and along with the quantitative analysis of some findings from the questionnaire this should give a clear picture of the status of quality management in higher education. Accordingly, the researcher's interpretations will develop two categories of quality management in higher education following the social constructivism paradigm: quality management concepts that can be implemented in higher education and quality management concepts that cannot be implemented in higher education as presented in figure 9. As a result, the theory generated from this thesis is in the form of a new quality management model for higher education, but this model is finalized by including the leaders' role and the cross-cultural aspects that should be taken into consideration in Dubai as the context of the study.
Feigenbaum (1961)

Imai (1986; 1996; 1997)


Malcolm Baldridge National Quality Management Awards

ISO Awards

European Foundation for Quality Award

Dubai Quality Award

The Australian Quality Award

Six Sigma Quality Award

Implementation of quality management in the higher education context

Defenders defending TQM through successful TQM implementation examples in higher education

Opponents denying TQM though failing TQM implementation example in higher education

Figure 8: Meta-analysis research
3.1.3.3 Some Quantitative Analysis

Besides using meta-analysis as the first stage of the research strategy and the grounded theory approach for the empirical study using documents analysis, questionnaires, and semi-structured interviews, some closed-ended questions of the questionnaire are used for quantitative analysis for the sake of triangulation. Quantitative analysis within the grounded theory approach adds richness to the research and leads to better findings when generating the theory (Glaser, 2008). The pragmatists combine the qualitative and the quantitative methods and consider that the two methods provide the reader with different types of information and can be used for triangulation to have more confidence in the conclusion of the research (Firestone, 1987). Quantitative and qualitative research use different methodologies to study the same problem, and results may be complementary. The research method should follow the research question in a manner that gives thorough and useful answers (Johnson and Onwuegbuzie, 2004). In quantitative methods, instrumentation and design show how errors and bias are illuminated, while in qualitative methods rich description is presented and details are given to the reader in order to make sense of the situation (Firestone, 1987). Quantitative research presents the positivist paradigm where behaviour can be explained through objective facts, while qualitative research presents the phenomenological paradigm where there are multiple realities that are socially defined (Firestone, 1987). We cannot deduce that any of the research methods is more legitimate in studying TQM as a public administration, and each study contributes to the literature based on its methodology which either strengthens or limits the findings. Therefore, the thesis will exploit both methods in order to achieve the purpose of the study.
Issues in public administration are very complex and require good research questions and good answers. In order to present good answers it is not enough to simply decide the research focus, but also the most beneficial methodology and data should be determined (Behn, 1995). Public administration scholars tackle issues in exploring social phenomena that are hard to study, "reporting information regarding research measures helps scholars improve their own research practice by building on the strengths and weaknesses of other research" (Wright, Manigault, and Black, 2004, p.751). Most phenomena that researchers want to study in public administration quantitative research are hard to measure directly, and some are measured indirectly so degree of error in measurement is inevitable (Maddala, 1992). Scholars need to compensate for and limit measurement error through advanced statistical techniques and assess the degree to which the indicators accurately measure the intended phenomena, since measurement errors lead scholars to discover variable relationships that do not necessarily exist, or conversely they do not find enough evidence when relationships exist (Berry, 1993). "The choice of methods also has important implications for research measurement, because it signals the reader about potential limitations of the study related to the weaknesses of the data collection method" (Wright, Manigault, and Black, 2004, p. 751). According to Coughlan, Cronin and Ryan (2007, P. 661), quantitative research can adopt many strategies in the data collection step such as questionnaires, interview, attitude scales and observational tools. According to Box (1992), evaluation attempts of public administration research questions used to be biased to quantitative analysis in most instances. Scholars have recognized the importance of the two methods in approaching public administration problems and have started to focus on either quantitative or qualitative methods (Brower, Abolafia, and Carr, 2000). Scholars in qualitative research focus on the big picture rather than specific factors, and the main aim is deeply understanding the holistic picture and not gathering data and numerically analyzing it like in quantitative research (Slavin, 2004). There are some questions that have been
raised about the quality of quantitative research in public administration. Adams and White (1994) consider that many such quantitative articles were not guided by explicit conceptual or theoretical frameworks. Houston and Delevan (1994) also consider that many of them do not include hypothesis testing, appropriate research designs and suitable statistical techniques.

The thesis reviews some quantitative and mixed methods studies that attempted to find answers to the possibility of implementing TQM in the public sector and in higher education in order to choose the best quantitative analysis that would be the most appropriate aid to meet the thesis objectives. At each stage of the thesis the literature review primarily helps in developing the research question and identifying the data collection method through a deep and broad reading about the topic on the research question (Coughlan, Cronin and Ryan, 2007, P. 660). For example Zeitz (1996) seeks to explain the causes of the attitudes of employees toward TQM through quantitative analysis and objective measurements. Two statistical analyses were used in this article, descriptive statistics and correlation, to show that middle and lower managers have positive views of TQM. Kretovics, Crowe, and Hyun (2005) present a clear quantitative analysis in studying faculty perception of summer compressed courses. They explain when descriptive statistics was used and when ANOVA was used clearly, unlike Zeitz (1996) where the reader has to analyze the reason for using chi square and in which the statistical analysis are only clearly presented in the attached appendices. Anyamele (2005) used mixed methods in studying TQM as a type of public administration in Finnish higher education.

In conclusion to this section, the approach of this thesis is primarily qualitative, but some quantitative analysis is done to data collected through the survey method in a way that adds value to
the thesis findings based on a critical appreciation of the literature which used quantitative analysis in studying TQM in the public sector and in higher education.

3.2 Research Methodology

The methodology involves collecting interpretations and narratives in order to study the positive and negative influences of quality management practices on, academics, research and the teaching process. The methodology also includes quantitative analysis using the survey instrument. According to Coughlan, Cronin and Ryan (2007, p. 661), quantitative research can adopt many strategies in the data collection design such as questionnaires, interview, attitude scales and observational tools. The quantitative method used here allows for triangulation taking into account that "triangulation is not the simple combination of different kinds of data, but the attempt to relate them so as to counteract the threats to validity identified in each" (Burg, 1995, p. 5).

The methodology of this thesis is designed based on a critical appreciation of many methodologies used in research about TQM in higher education. For example Potocki, Brocato and Popick (1994) conducted a study in Johns Hopkins University, Physics Laboratory Education Centre where the university implements TQM and argues that students should be empowered. Students gave input about the curriculum and course designs and the university asked for their feedback at the end of every class through a semi structured questionnaire. In their study qualitative methods were used to gather information through interviews and focus groups. Based on these findings, the study advocates TQM and recommends that all universities focus on their students' satisfaction in order to thrive. Anyamele (2005) discussed the importance of leadership in developing and maintaining a quality management system in Finnish higher education using a questionnaire with open-ended
questions based on the EFQM criteria that were sent to different leaders in higher education. The results of the study depended a lot on interviews, although only five were conducted and these focused solely on the positive management characteristics of Finland education.

The methodology section of this thesis first discusses the site and subject selection from a sample of two universities that represent the main categories of universities in Dubai, UAE as the context of the study. This sample includes a private university and a public university. The subjects of the questionnaire data collection method include all faculty members and top administrators in those two universities, and the subjects of the in depth semi-structured interviews include some faculty members with and without administrative positions who are selected based on a criterion sample in order to give their interpretations about the applicability of TQM in higher education, and this helps in the model building following the constructivism grounded theory approach. The second section of the methodology discusses the data collection methods that include document analysis, a survey, and in depth semi-structured interviews. The third section gives brief background about ethical considerations, including the ethical approval process in the research site and other ethical considerations that this research reflects such as empathy, friendliness, un-involvelement, and being neutral. The fourth section discusses the limitations of this thesis.

3.2.1 Site and Subject Selection

Interpretations and data were collected from a representative sample of two universities in Dubai, United Arab Emirates that have been accredited by the Ministry of Higher education. This sample represents the main categories of universities in Dubai: one is a private university and the second is a public university. The sampling strategy in qualitative research is different from quantitative
research which is based on a specific population. In qualitative research the sample may include times, events, people, and a broader scope to examine the research question and whether typicality in samples or extreme cases is required (Long and Godfrey, 2004). In order to know if the right sample is chosen, the following questions should be asked:

… ‘why were these informants or events chosen?’, ‘are key events and informants captured?’, and ‘were these informants and events appropriate to explore given the study’s aims?’ Attention lies in both depth (for example, the intensity of data collection) and width (for example, to capture key persons and events, and to explore their inter-relationships) and thus in explicating the context of the informants’ experiences and accounts. (Long and Godfrey, 2004, p. 184)

The subjects of this thesis are academic staff in both teaching and administrative positions. These include faculty members and senior administration deans, vice presidents, academics, and presidents. Sampling includes the whole faculty member population for a semi-structured survey instrument and purposive sampling for the interviewees’ selection following the recommendation of Stake (1995) who argues that this is the best approach for this kind of study in order to serve its purpose. The questionnaire was sent to all faculty members by email, and the filled in questionnaires were returned by email or as a hard copy that the faculty member requested to be collected from his office. The in depth semi-structured interviews were all conducted with faculty members in their campus offices.

The study was planned to include four universities (two private universities and two public universities), with five subjects from each selected for interviews including four faculty members and one senior administrator for a total of 20 subjects in the academic departments of the four universities. However, two universities refused to give ethical clearance and the study was reduced to two universities. The survey included all faculty members, including top administrators in the
academic departments of the two universities, and the interviews included more than five participants from each university, as was proposed. Since the sample is composed of two universities and not four and since this an emergent study, the number of the interview participants was increased in order to achieve more reliable results to be generalized to Dubai as the context of the study.

Faculty members were recruited for the interview through criterion sampling and meeting the following criteria: 1) have significant publishing records in peer review journals so they are aware of the academic principles and the unique nature of the academic profession that requires time and capability to conduct research; 2) have at least five years of teaching experience in higher education so they have been teaching long enough to identify what is done in their universities' management systems and how TQM would affect scholarly values. Following the emergent study approach, during the study faculty members who reported in the questionnaire that they had an academic working experience in Dubai were also interviewed in order to collect more information and data about management systems in other universities in Dubai, with their confidentiality and anonymity preserved. In addition, there were a few additional subjects selected through snowballing including those who have been researching quality management or a faculty member who resigned from one of those universities due to the management system. Besides describing the management system in their universities, the main role of faculty members as the interview subjects was to give their interpretations about the possibility of implementing TQM in higher education in order to help in the model building following the constructivism grounded theory approach.

Accordingly, all faculty members in the two universities, including faculty members with administrative positions like deans, vice presidents, and presidents, were included in the survey data.
collection method. For the in depth semi-structured interview data collection method, and based on the criteria sample mentioned above, faculty members are selected from different faculties within each of the two participating universities, including senior administrators.

Overall, 56 questionnaires were sent to faculty members of the private university, 27 filled in questionnaire were returned. 22 questionnaires were sent to faculty members of the affiliated public university and 11 filled in questionnaires were returned. Therefore, the total number of questionnaires considered for this study is 38 questionnaires.

In the public university there are three faculties:
1- Faculty of Education
2- Faculty of Business
3- Faculty of Engineering and IT

The subject of the in depth semi-structured interview included two faculty members who have administrative positions, one faculty member from the Faculty of Education, one faculty member from the Faculty of Engineering and IT, and two faculty members from the Faculty of Business since they have a technical knowledge of quality management that gives them some expertise as interviewees. The selection of those subjects is based on the interview selection rationale discussed above.

In the private university, there are three faculties:
1- Faculty of Business and Management
2- Faculty of Finance and Accounting
3- Faculty of Computer Science and Engineering
The subjects of the in depth semi-structured interview includes two faculty members who have administrative positions, three faculty members from the Faculty of Finance and Accounting, two faculty member from the Faculty of Computer Science and Engineering, and four faculty members from the Faculty of Business and Management since this is the largest faculty among the three and because professors in this faculty have a technical knowledge of quality management that gives them some expertise as interviewees. The selection of those subjects is based on the interview selection rationale discussed above. In addition to this and based on the information collected from the survey, there were nine faculty members and three senior administrators from the private university who had academic positions in other universities. Six of those faculty members and two of the senior administrators were selected for the semi-structured interview in order to collect more interpretations of university management systems in Dubai.

The interview subjects' selection is summarized in Table 3: In depth semi-structured interviews subjects' selection.

<table>
<thead>
<tr>
<th>University</th>
<th>Faculty Members</th>
<th>Senior administrators</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public University</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Private University</td>
<td>9</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Private University (with academic experience in other universities in Dubai)</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>6</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 3: In depth semi-structured interviews subjects' selection.

3.2.2 Data collection methods
The data and interpretations gathering methods include document analysis, semi-structured survey, and in-depth semi structured interviews. The qualitative methods are document analysis and semi structured interview in addition to part of the survey questionnaire. The quantitative methods included a section of the questionnaire that collected quantitative data and thus helped in quantitative analysis. Based on the emergent study approach there is a particular order in which these were conducted: first, the majority of the document analysis was done in order to determine what kinds of quality management are being used in the studied universities. This required a modification in the survey instrument. The survey was conducted next, since the recruitment of most faculty interviewees was done through this instrument. Finally the interview guides were finalised based on feedback from the two preceding instruments.

3.2.2.1 Documents analysis

The documents analysis method is an important source of information in the interpretive study of this thesis. According to Stake (1995, p. 68), documents are mostly records of activities that the researcher is interested in but did not get the chance to observe taking into consideration that the recorder may be more expert than the researcher. Document analysis here included current documents and archival material related to management systems and policies in the two universities. According to Glesne (2002, p. 65), "to understand a phenomenon, you need to know its history". In addition, international and government documents regarding standards of practices for faculty in universities were reviewed, including general documents of management in universities like the UNESCO international covenant on academic freedom and the standards for licensure and accreditation of the Commission for Academic Accreditation (CAA) in the UAE (see Appendix A). Management documents that are related to quality practices for research and teaching in the two
universities were also reviewed. This included policies related to research activities that express management quality principles, for example research related documents about minimum publications required and the ranking of journals that are involved. For teaching, all policy documents and forms related to quality in teaching and supervision and all policies and forms having to do with quality of administrative work for faculty were analyzed. A summary of the analyzed documents is presented in Figure 10.
Implementation of quality management in the education context

Empirical study through grounded theory approach

Qualitative analysis

Meta-analysis of the literature

Interview

Documents analysis

Failing cases

Successful case

Questionnaire

Researcher interpretation following the

Quality management in higher education

Quality management concepts that can be implemented in higher education
3.2.2.2 Survey

The survey was one of the methods used in the grounded theory approach of the empirical study which also served for the quantitative analysis. The survey was conducted through a questionnaire that was designed from the meta-analysis of the literature review of TQM in higher education, meta-analysis of international TQM awards criteria, and other relevant documents like the UNESCO international covenant on academic freedom, the Commission for Academic Accreditation standards for licensure and accreditation, and the management policies in the two universities. The questionnaire results in turn informed the finalisation of the semi-structured interview guide and the selection of the participants of the interview.

After obtaining the ethical approvals from the two universities a participation information sheet was sent by email to all faculty members including faculty members with and faculty members without administrative positions (see Appendix B). In addition, a consent form was attached to this first email (see Appendix C) along with the questionnaire (see Appendix D). The 30 minutes questionnaire included questions about the teaching record length of professors in the academic field in general and in their universities in particular and their satisfaction level in teaching and research. Based on the literature review of total quality management that defends its implementation in higher education in some cases and denies it in other cases, professors were asked whether the management style used at their university has a positive or negative impact on teaching and research, particularly any practices that are associated with quality management models. The results of the questionnaire were investigated to check if the two universities apply TQM practices and what faculty members think about its impact in higher education.
The questionnaire was divided into two sections: the first section consists of a set of questions related to departmental information and demographics such as gender and age and the second includes questions that study the level of applied TQM practices in the two universities and its impact on teaching and research. The first section included closed-ended questions which aided in quantitative analysis to conduct inferential statistics and compare responses between different groups.

The design of this quantitative analysis focused on testing the following hypotheses:

- **Hypothesis 1:** There is a significant difference between faculty members' gender and the average number of their publications per year. This hypothesis is tested using t-test (unrelated).
- **Hypothesis 2:** There is a significant difference between marital status of faculty members and the average number of publications per year. This hypothesis is tested using t-test (unrelated).
- **Hypothesis 3:** There is a significant negative correlation between the number of children for faculty members and the average number of publications per year. This hypothesis is tested using spearman rho.
- **Hypothesis 4:** There is a significant difference between faculty members' current positions and their satisfaction levels with the management practices related to teaching and research. This hypothesis is tested using chi square.
- **Hypothesis 5:** There is a significant difference between faculty members' current positions and their satisfaction with their universities' policies. This hypothesis is tested using chi square.
The second section included questions about faculty teaching and research experiences and management systems in each of the universities. Faculty members were asked about their satisfaction level with the management systems in question 9 along with their reasons for this and whether it was related to any TQM practices in their universities. They were asked about their opinions on the quality of teaching and research in their department in question 11 in an attempt to discover how they evaluate those two major components of higher education and whether management practices are the reason behind their positive or negative judgments. They were also asked about the quantity of their publications and the reasons behind publishing or not in questions 12, 13, and 14 in order to collect information about the management systems and the motivation to publish. In every question, the subjects were given the chance to explain the reason behind each answer they give since there could be different reasons that encourage or discourage a faculty member to publish in the university such as family, organizational politics, cultural adjustment for expatriates, work overload, downloading of administrative and secretarial tasks to faculty, lack of resources to support activities, effect of for-profit practices, and ineffective time-consuming accountability practices, etc.

Accordingly, there are two reasons behind using the survey as one of the data collection methods in the empirical study of this thesis. First, it helped in collecting quantitative data for quantitative analysis and the comparison between different groups of faculty members. Secondly, the questionnaire included open ended questions that were used to collect general information from faculty members and their perceptions of the management systems in their universities. The questionnaire was sent by email to all faculty members and the interviewees sample was selected based on the data and information collected from the questionnaire.
3.2.2.3 In-depth Semi-Structured Interviews

The in-depth semi-structured interview guide was finalized after reviewing the reported management practices in the questionnaires, and the aim of the interviews was to clarify some management practices that faculty members mentioned in the questionnaires and to clarify some interpretations about the applicability of TQM in higher education based on the emergent study. The main focus of the interview questions was to discover what TQM practices may already exist in the universities and what the respondents' opinions about such a new public management system were. In cases where there were TQM practices faculty members were interviewed to collect their opinions about those practices and the impact of TQM on teaching and research to check if faculty member agree with the literature that defends TQM or with the literature that denies it in higher education. If the university does not apply any TQM practices, faculty members were asked about their opinions about implementing such a management system in order to study their views on how TQM might impact professional autonomy and academic quality that are the foundation of higher education as reviewed in the literature of traditional university management systems (see Appendix E). Therefore, the interview questions looked for faculty understanding of academic and scholarly quality standards and what professional autonomy means, what academic freedom is, and what peer review is and whether they think that TQM principles are in conflict with those issues and in what ways this occurs.

In questions 1, 6, 7, 13, and 15 participants were asked about management practices in their university in order to determine whether there are TQM practices. In questions 1 and 2 participants were asked about total quality management concepts in order to learn whether faculty members are familiar with TQM and to familiarize them with it if they are not familiar by using a list of TQM
characteristics which are included at the beginning of the interview guide. In question 9, faculty members were asked about academic freedom in order to learn faculty members' perception of academic freedom and their evaluation of it in their universities. TQM and its impact on academic freedom in teaching and research were asked in questions 9 and 10 so as to learn about faculty members' opinions of how TQM would impact academic freedom in teaching and research.

Leadership was discussed in question 3 in order to discover the role of leaders in supporting faculty members in each university. Committees were discussed in question 1 to identify their role. Politics and strategies were discussed in question 5 to find out if they are supporting academic freedom and peer review. In questions 6 and 14, the participants were asked about the availability of resources.

Question 4 asked about the contribution of faculty members to the quality of education in their universities. Question 8 asked about the relationship between the university and the Dubai community in order to learn about the role of the university in the local community. Questions 23 and 24 were about the accommodation of faculty members to cultural differences and diversity in Dubai.

Many participants preferred that the interview not be tape recorded as was initially requested, and as a result all interviews were recorded in writing after gaining permission from the participants and were then transcribed in detail directly after the interview to avoid missing any point that was not recorded during the interview. The interviews began with the same set of questions for all of the interviewees. Since the interview followed a conversational format and in order to elicit additional details there were additional probing questions. The advantage of using semi-structured interviews and asking similar questions for all subjects is that it lessens misinterpretation and helps in clarifying meanings and verifying the repeatability of interpretation and observation (Denzin, 2009; Schwandt, 2000; Stake, 1995).
3.3 Ethical considerations

The study was conducted after getting ethical approval from the British University in Dubai based on the university's guidelines for ethics in educational research, and also after the two universities' issued ethical approvals as the site of the research. The ethical approval stage took about ten months to complete because there was some sensitivity to criticism. The participation information sheet was modified in order to collect more general information. In the affiliated public university, the ethical approval did not include access to academic policies and processes that the research intended to review. Accordingly I was asked to submit a letter to the registrar to assure that I will treat the information in confidence and that it will not be used in a way which is negative to the university (see Appendix F).

Ethical consideration should not be limited to ethical approvals; a researcher should be empathetic, friendly, uninvolved and neutral all at the same time (Glesne, 2002, p. 129). This research takes the right to privacy into consideration, and after getting permission to collect information and conduct the survey and interviews, participants' confidences were protected and their anonymity was preserved. Faculty members were asked to return the filled in questionnaire by email or by submitting a hard copy, which I passed by their offices to collect. The reason that I collected the data of the questionnaire by email or in person was that I wanted to learn the faculty members identity in order to select the participants of the interview as this is an emergent study in which the interview participants were selected after receipt of the questionnaire data and based on the criterion sampling discussed above in the site and subjects selection section, however their identity is anonymous in this thesis report. In fact, for confidentiality and anonymity there were no identifiers
on the questionnaire, and when it was downloaded it received a code name or number and was stored in a locked place to which only I have access. Once the questionnaire was downloaded with a code the original email was deleted from my computer entirely and my computer is password protected, with only me having the password. This information was included in the detailed participation information sheet (see Appendix B).
UNESCO international covenant on academic

Ethics policies

TQM List

European Foundation for Quality

Document Analysis

Quality management concepts that cannot be implemented in higher education

Theory generated: A new quality management approach

Document Analysis

Management policies in the two universities

Academic promotions policies

Continuous improvement policies

Equity and diversity policies

Recruitment and selection policies

Figure 10: Artifacts, documents, and records for TQM Awards (part of documents analysis)

Academic workload policies

Community engagement policies

TQM Concepts

Opponents

Defenders

TQM Awards (part of documents analysis)

Grounded theory CAA standards for licensure and accreditation

Figure 9: Grounded theory CAA standards for licensure and accreditation

Academic promotions policies

Continuous improvement policies

Equity and diversity policies

Recruitment and selection policies

Figure 10: Artifacts, documents, and records for TQM Awards (part of documents analysis)

Document Analysis
Chapter Four: RESULTS

This thesis presents the results starting with the qualitative meta-analysis in which the findings of the qualitative literature review are integrated interpretively using an analytic process that establishes transparently, comprehensively, and systematically the state of knowledge in the field of quality management. The first section of the meta-analysis results presents the TQM concepts analyzed from the founders of the TQM literature in order to give a clear presentation of the TQM characteristics and concepts to be studied in subsequent sections in terms of their applicability to the higher education context. In addition to this, the meta-analysis section presents the input of TQM awards -offered in Europe, America, Australia, and the UAE- to quality management principles and characteristics. Those quality awards are based on the TQM founders' theories but they are analytically reviewed in order to add any of their developed concepts to the Quality Management characteristics and concepts for the sake of having a result of a comprehensive package of TQM characteristics. In the third section of the meta-analysis results all of the TQM concepts that were collected in the above two sections constituting the TQM characteristics discussed by the TQM founders and also those TQM characteristics developed by the TQM awards' criteria were analyzed from the perspective of the higher education TQM scholars in order to present the applicability or inapplicability of those concepts or characteristics to higher education. The results of the empirical study are presented using three methods of collection and analysis: document analysis, a survey, and in depth semi-structured interviews. Based on the emergent study approach there is a particular order in which these are conducted: first, the majority of the document analysis was done in order to determine what kinds of quality management are being used in the studied universities, and this required a modification in the survey instrument. The survey was conducted second as; the recruitment of most faculty interviewees was done through this instrument. Finally the interviews
guide was finalised based on feedback from the two preceding instruments. Semi-structured interviews were conducted with some faculty members based on criterion sampling.

4.1 Meta-analysis results

The first section of the meta-analysis results presents the TQM concepts analyzed from the founders of the TQM literature in order to give a clear presentation of the TQM characteristics and concepts applicable to the higher education context. This is followed by the meta-analysis of the influence of TQM awards to quality management principles and characteristics. Those TQM awards are attractive to many organizations, including higher education, and consequently their criteria can reshape the quality management concepts and implementation in organizations when they are granted such awards. In the third subsection of the meta-analysis results section all of the TQM concepts that are collected in the preceding two sections constituting of the TQM characteristics discussed by the TQM founders and also those TQM characteristics developed by the TQM awards' criteria were analyzed from the perspective of the higher education TQM scholars in order to present the applicability or inapplicability of those concepts or characteristics to higher education.

4.1.1 TQM concepts meta-analysis

This section presents the key TQM characteristics found by the major TQM scholars discussed in chapter two including Crosby (1979), Deming (1966; 1986; 2000), Feigenbaum (1961), Imai (1986; 1996; 1997), Ishikawa (1985; 1990), Juran (1995; 1999; 2004), and Taguchi (1997). Accordingly, the result of this section is a list of TQM characteristics based on a meta-analysis of the basic concepts and principles of those TQM scholars. Since the total quality management topic
has been debated in terms of its advantages, disadvantages, and its content, the results of this thesis begins with a clear presentation of the common TQM concepts and principles taken from the founders of TQM.

Deming's (1966; 1986; 2000) main argument about quality management was based on the plan; do, check, and act or PDCA cycle (see Figure 12). Plan is designing or revising (since this is a continuous process) the processes, do is the implementation of the processes, check is measuring the results and reporting them to decision makers, and act is taking corrective action to improve the process or change it. W. Edwards Deming was a statistician, and in the 1950s he proposed his theory based on analysing business processes and measuring them in order to find variation that leads to deviation from customers' requirements of products. Therefore his theory was designed for controlling quality in businesses, and specifically manufacturing, and focused on processes, analyzing processes, measuring products, finding variation, and customer's satisfaction.

Figure 12: Deming's PDCA cycle (Deming, 1966)
From this process, we can conclude that the Deming quality management theory also focuses on the following activities: designing or planning processes, conformance to designed processes, measuring results, reporting results to decision makers, taking corrective action, and continuous improvement. A summary of these concepts taken from his three main publications (1966; 1986; 2000) is represented in Figure 13 to analyze and combine all the TQM concepts.
Deming's quality concepts

Processes
analyzing processes
measuring products
find variation
Customer's satisfaction
Design or plan processes
Conformance to designed processes
Measure results
Reporting results to decision makers
Take corrective action
Continuous improvement
Focus on people

Six-Sigma

ISO 9000

Dubai Quality Award

Empirical study
(grounded theory)

The Australian Quality Award

Questionnaire

Interview

Figure 13: Deming's quality management concepts

![Figure 14: Juran's Trilogy (Juran, 1999)](image)

Quality planning: this phase focuses on developing processes and products that meet customers' satisfaction. Juran argues that organizations should have a specific goal, and in this stage processes should be designed to reach that goal. There are steps within this stage that Juran suggests, and these are presented as set quality goals, identify customers, determine customers' needs, design processes that will meet customers' needs, and establish processes control.

Quality Control: this stage is the implementation of plans, including monitoring operations to study differences between actual performance and required goals. This stage includes three steps: Evaluate performance, compare it with set goals, and take action to resolve differences.
Quality Improvement: this stage focuses on improvement of the quality process. It consists of the following steps: Create infrastructure for annual quality improvement, identify improvement project (what is required for improvement), hire project team members with clear responsibility for implementing the improvement project, and provide training, resources, and motivation for the team members to establish improvements.

Figure 15 adds Juran's theory of quality management to the key quality management characteristics that this thesis is collecting. The same groups of quality management characteristics are used from figure 13 and are added in order to include more quality management characteristic from the major scholars of quality management.
Figure 15: Quality management concepts including Juran’s Trilogy

Juran’s Quality management concepts

- Quality planning
- Implementation of plans
- Products
- Customers’ satisfaction
- Specific quality goal
- Identify customers
- Determine customers’ needs
- Design processes
- Processes control
- Quality Control
- Monitoring operations
- Evaluate performance
- Compare performance to goals
- Resolve differences
- Quality improvement
- Quality process
- Responsibility
- Training
- Resources
- Motivation
- Establish improvements

Traditional Higher Education Management System

Modified TQM Model

Changes in Higher Education

Cross-cultural context in Dubai

New TQM Model in Dubai

Quantitative Analysis

Leadership in Dubai Higher Education

Figure 11: Making Sense of Findings

- Customers: Customers’ requirements

Processes:
- Plan processes
- Design processes

Customers

Figure 15: Quality management concepts including Juran’s Trilogy
Ishikawa (1985; 1990) discusses the seven quality tools for quality improvements: flow charts, check sheets, Pareto diagrams, cause and effect diagrams, histograms, scatter diagrams, and control charts. Ishikawa argues that 95% of quality related problems can be solved through these seven tools. According to Ishikawa (1985), the first step to take in order to resolve quality related problems is identifying the problem, and then the appropriate tool from the seven quality tools is used based on what the problem is. The solution should be quickly communicated by the quality improvement team based on the nature of the problem. Ishikawa is famous for the Ishikawa diagram which is also known as the fish bone diagram, fishikawa, herringbone diagram, and cause and effect diagram. This diagram was created by Ishikawa to show the cause of a specific event. This diagram is essentially designed for quality defect prevention. Figure 16 shows Ishikawa's diagram with the quality management characteristics already identified.
Ishikawa's quality management concepts

Identify the problem

Use appropriate tools to solve problems

Communicate solutions

Quality improvement teams

Defect prevention

Assessment:
- Assess processes
- Measure results

Continuous improvement:
- For processes
- For results
- Self improvement

Leadership:
- Pride
- Self-improvement
- Training

Processes:
- Plan processes
- Design processes

Products

Planning:
- Monitoring
- Match performance & goals

Results:
- Find variation
- Measure products

Customers:
- Customers' requirements
- Customers' satisfaction

Quality goals

Assessment:
- Find variation
- Measure products

Leadership:
- Pride
- Self-improvement
- Training

Continuous improvement:
- For processes
- For results
- Self improvement

Reporting:
- Report to decision makers
- Leadership

Customers:
- Customers' requirements
- Customers' satisfaction

Leadership:
- Pride
- Self-improvement
- Training

Continuous improvement:
- For processes
- For results
- Self improvement

Processes:
- Plan processes
- Design processes

Products

Planning:
- Monitoring
- Match performance & goals

Results:
- Find variation
- Measure products

Assessment:
- Find variation
- Measure products

Leadership:
- Pride
- Self-improvement
- Training

Continuous improvement:
- For processes
- For results
- Self improvement

Processes:
- Plan processes
- Design processes

Products

Planning:
- Monitoring
- Match performance & goals

Results:
- Find variation
- Measure products

Assessment:
- Find variation
- Measure products
Because quality is everybody's job it may be nobody's job (Feigenbaum, 1961). This is the reason that Feigenbaum gives for the need to manage quality. Although the term TQM is referred to by many scholars as belonging to Deming since he is the founder of quality management, the fact is that this term was coined by Feigenbaum and was never used by Deming or Juran. Feigenbaum (1961) coined the term of total quality control which was developed to total quality management and quality systems. Feigenbaum proposed to move the concept of quality from the technical processes into management strategy. This move had a role in the proliferation of TQM from manufacturing to the service industry.

According to Crosby (1979), quality is free. He argues that when an organization establishes a quality program, this program will save more in returns than what the organization pays in costs for it. This is also the name of his book that was published in 1979 during the American manufacturing crisis, when Americans were losing market share to the Japanese products because of the better quality of those products. Crosby's (1979) major principle is 'doing it right the first time', consisting of the four following principles: 1) Conformance to requirements: Those are both the requirements of the product and the requirements of the customer; 2) Quality system is based on prevention of defects before they occur; 3) Standard of performance is zero defects; and 4) Quality is measured by the price of non conformance.

According to Imai (1986; 1996; 1997), organizations can be more successful and profitable when they apply the concept of Gemba Keizen. This means making simple improvements to processes. According to Imai, greater productivity is the result. The major feature of this concept is its low cost, just-in-time production, connection between policies and execution, process orientation, belief in consensus decision making, and belief in the value of employees.
Taguchi (1997) contributed to the improvement of the quality of manufacturing through applying a statistical methodology in studying product variations from the standard requirements (see Figure 17).
Quality goals
- Use appropriate tools to solve problems
Quality is free
In summary of this meta-analysis of the TQM concepts, there is no contradiction between TQM founders in their quality management principles, but each of them focuses on some points more than others and adds its own input. Table 6 summarises the main TQM concepts initiated by TQM founders.

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<td>TQM concepts</td>
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<td>(TQM founders)</td>
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<td>2</td>
<td>Processes</td>
<td>- plan processes</td>
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<td>- design processes</td>
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<td>- conformance to design</td>
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<td>- analyze processes</td>
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<td>3</td>
<td>Results</td>
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<td>- measure products</td>
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<td>- quality Control</td>
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<td>- defect prevention</td>
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<td>4</td>
<td>Customers</td>
<td>- check customers requirements</td>
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<td>5</td>
<td>Assessment</td>
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<td>- statistical analysis</td>
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<td>6</td>
<td>Reporting</td>
<td>- report to decision makers</td>
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<td>7</td>
<td>Continuous improvement</td>
<td>- for processes</td>
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<td>- for results</td>
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<td>- self improvements</td>
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<td>- simple improvements</td>
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<td>8</td>
<td>Planning</td>
<td>- monitoring</td>
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<td>- match performance&amp; goals</td>
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<td></td>
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<td>- connection between policies and execution</td>
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<td>9</td>
<td>Quality goals</td>
<td>- use appropriate tools to solve problems</td>
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<td></td>
<td></td>
<td>- quality is free</td>
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<tr>
<td>10</td>
<td>Strategic Management</td>
<td>- strategic planning</td>
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<td>- strategic objectives, mission, vision</td>
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<td>11</td>
<td>Communication</td>
<td>- quality improvement teams</td>
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<td>communicate solutions to</td>
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<td>problems</td>
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</tbody>
</table>
| 12 | Teamwork | - quality improvement teams  
- consensus decision making |
| 13 | Cost | - reduce cost  
- increase value |
| 14 | Product | - conformance to standard  
- meet customer's requirements  
- continuous improvement |
| 15 | Leadership | - training  
- motivation  
- resources  
- value of employees  
- pride  
- self improvement  
- improvement |

Table 6: TQM concepts from TQM founders

4.1.2 TQM awards criteria meta-analysis

Many organizations in the world seek TQM awards in order to prove their high quality products, services, or performances to their stakeholders, regardless of whether those organizations are in manufacturing, services, or even in the public sector. This section of the meta-analysis section reviews the most important quality management awards that are offered in Europe, America, Australia, and the UAE such as the European Foundation for Quality Management (EFQM) award, the Malcolm Baldridge National Quality (MBMQ) award, the Australian Quality award, Dubai Quality award, and international quality awards like ISO 9001 and Six Sigma. They are based on the TQM founders' theories but are analytically reviewed in order to add any of their developed concepts to the quality management characteristics and concepts so as to produce a comprehensive summary of TQM characteristics.
The TQM awards are attractive to many organizations including higher education, and consequently their criteria can reshape the quality management concepts and implementation in organizations that are granted such awards. The awards criteria documents were reviewed based on meta-analysis in order to present their input to quality management principles and characteristics.

One of the international quality management awards is the European Foundation for Quality Management Award (EFQM). The EFQM is very popular, and about 30000 organizations have used it either through winning the award, applying for it, or even just using its excellence model as a self assessment tool for self improvement (EFQM, 2013). According to (EFQM, 2013), 84 % of the EFQM members reported that the award criteria helped them improve their organizations. The president of the European Council explains that "[a]ll European organizations, both in the public and private sectors, are facing new challenges. The increasing pressure to compete on a global stage with limited resources means we all have to work together to secure our future prosperity, and that of generations to come. The EFQM Excellence Model provides a framework that encourages cooperation, collaboration and innovation that we will need to ensure this goal is achieved "(EFQM, 2013). The EFQM excellence model is divided into nine criteria to examine cause and effect relationships between what organizations do and the results they achieve. What an organization does is covered by five 'enablers' criteria and what it achieves is covered by four 'results' criteria as presented in figure 18. The enablers' criteria include: leadership, people, policy and strategy, partnerships and resources, and processes. The results' criteria include: people results, customer results, society results, and key performance results. The high level meaning of each criteria is presented in a clear definition, and there are a number of criterion parts that support each criteria (EFQM, 2013). The EFQM model uses the RADAR logic (see Figure 19) which is based on the plan-do-check-act (PDCA) cycle of Deming (2000) to assess and score each sub-criterion.
According to the EFQM model, organizations should add value to their customers through understanding them and fulfilling their expectations and needs, and they should be aware of their social responsibility by advancing the social, environmental, and economic conditions in their communities through improving their performance (EFQM, 2013). The EFQM model also looks to change management capabilities of the organization within and beyond its boundaries, while also harnessing the innovation and creativity of its stakeholders to demonstrate value and a high level of performance as an excellent organisation (EFQM, 2013). According to the EFQM model leaders should be role models for the ethics and values of excellent organizations and should shape the future and make it happen through integrity, inspiration, and vision. Organizations should also manage with agility when identifying and responding to opportunities and threats (EFQM, 2013). Excellent organizations should empower and value their people to achieve their personal and organizational goals as organizations succeed through their people's talents. According to the EFQM model results should be sustained and outstanding in order to meet the short and long term needs of stakeholders within the operating environment context of the organization (see column C in Table 7).
Figure 18: EFQM award criteria (EFQM, 2013)

Figure 19: RADAR logic (EFQM, 2013)
The Malcolm Baldrige National Quality Award (MBNQA) is an American quality management award that was initiated in 1988. Its purpose is to strengthen the U.S competitiveness, facilitate organizational learning and growth, and share best practices (MBNQA, 2013). The criteria of MBNQA provide a system to help understand performance management for the sake of performance excellence. Organizations can use MBNQA criteria to measure their own performance as if the criteria are a common language between organizations which enhances communication for sharing best practices. The criteria consist of seven key categories: leadership, strategic planning, customer focus, measurement, analysis, and knowledge management, workforce focus, process management, and results, as presented in figure 20. Column C in Table 7 includes those criteria within the TQM concepts.

According to MBNQA (2013), the criteria of its model is based on the TQM model summarized by this award body in five points: customer focus, planning process, process management, process improvement, and total participation, and all of these are dedicated for the results of the organization. Nevertheless, according to MBNQA there is no single recipe of TQM for all organizations and each organization should implement TQM uniquely.
Similar to the European Foundation for Quality Management and the Malcolm Baldrige National Quality awards, the Australian Quality Award focuses on the main quality management concepts including seven key criteria (see Figure 21). These criteria focus on the following: leadership and innovation, strategy and planning processes, data, information and knowledge, people, customer and market focus, processes, products and services, and business results (Vokurka, Stading, and Brazeal, 2002). Column C in Table 7 includes those criteria within the TQM concepts.
As an effort to improve customer service standards, the government of Dubai and the national Department of Economic Development has launched a number of quality management awards for both the public and the private sectors like the Dubai service Excellence Scheme in 2002 which has a high standard of business ethics and criteria for service excellence and is aiming to gain customer's trust and create a pleasurable experience of shopping in Dubai (DED, 2013). Another quality award is The Emirates Quality Mark awarded by the Emirates Authority for Standardization and Metrology as the authorized body in the UAE (DED, 2013). The purpose of this one is to guarantee that assessed products meet the approved standard of export and local markets (DED, 2013).

Furthermore, the Dubai Government Excellence Program award was initiated to improve the performance of the governmental sector of Dubai. It is granted to exceptional initiatives, departments, and employees (DED, 2013). The Department of Economic Development also initiated the Dubai Human Development Award in 2002 which rewards and recognizes human resources initiatives taken by business organizations in order to achieve the goal of Dubai Human
Development which is not only providing work opportunities for UAE nationals but also develop their abilities and gives emphasis to their role in the development of the UAE through intensive guidance and training (DED, 2013). The Dubai chamber also launched the Mohammed Bin Rashed Al Maktoum Business Awards in 2005 to reward and recognize organizations that contribute to the economic development of the UAE.

Among many of those quality awards in Dubai, the Dubai Quality Award could be the most interesting award for higher education institutes in Dubai. The Department of Economic Development of Dubai introduced the Dubai Quality Award in 1994. The purpose of this award is to improve the standards of the operating businesses in order to boost internal and external trade (DED, 2013). This award is given to organizations that demonstrate commitment to best practices in their relevant areas. Interested organizations should submit documents that demonstrate high commitment to quality in all respective fields of their businesses. Each submission is reviewed by Dubai Quality Award assessors according to the Dubai Quality Award model. After the assessors' review, a short list of organizations is drawn up. The assessors then visit the short listed organizations and give recommendations for improvement (DED, 2013). The Dubai Quality Award model is based on the European Foundation for Quality Management Award model (see Figure 22).

According to the Department of Economic Development (2013), the purpose of the Dubai Quality Award is to recognize role model organizations and not to select winners and losers. "It is also a process for providing organizations with a 'roadmap' to achieve excellence through the adoption of good practices and soundly-based approaches that are deployed systematically and which are continuously measured and reviewed" (DED, 2013). Column C in table 7 includes Dubai Quality Award criteria within the TQM concepts.
The International Organization for Standardization (ISO) has a purpose of developing and promoting standardization through a framework for fundamental quality management. ISO 9001:2008 provides a definition of good management practices and intends to provide global standards to spell out trust and quality (see Figure 23). The certification is provided to organizations in all areas like manufacturing, servicing, accounting, legal and financial servicing, computing, processing, and education. "ISO comprises of 91 member countries…The standards were developed to effectively document the quality system elements to be implemented in order to maintain an efficient quality system within organizations" (ISO, 2013). The standards of ISO 9001:2008 consist of eight sections for auditors to assess an organization including the following:

1- Introduction

2- Scope
3- Terms and definitions
4- Quality management system
5- Management responsibility
6- Resource management
7- Product realization
8- Measurement, analysis, and improvement

Sections four to eight include the requirement portion of the standard which enables organizations to improve products reliability, have better flow and control of processes, superior process documentation, more employee quality awareness, and a reduction in product rejections and scrap (ISO, 2013). Column C in Table 7 includes ISO 9001:2008 standards within the TQM concepts.

![ISO 9001:2008 pyramid](ISO, 2013)

Figure 23: ISO 9001:2008 pyramid (ISO, 2013)

Quality management awards have very similar criteria, and each can prepare organizations for other awards. For example, when Motorola used Six Sigma in its quality improvement efforts in the late
1980s, it was then awarded the Malcolm Baldrige National Quality Award in 1988 and was one of the first organizations to be granted this award (Six Sigma, 2013). Six Sigma achieved a lot of popularity in the 1990s after the successful experience of Allied Signal (now Honeywell) and General Electric in implementing its concepts (Six Sigma, 2013). Although the concept of Six Sigma is considered on a broader meaning, the basic idea of Six Sigma is improving processes where there are at least six standard deviations between the worst case specification limit and the mean of process variation. In other words, this means that the process is fundamentally defect free (Six Sigma, 2013). Six Sigma uses similar tools to the Quality Improvement Teams of the 1970s and early 1980s in order to improve processes, and it uses the DMAIC (define, measure, analyze, improve, control) process which is a variation of Deming's PDCA cycle as presented in figure 24. Six Sigma focuses on the importance of aligning its projects with the strategic business plan of the organization in order to realize breakthrough results (Six Sigma, 2013) through eight steps for successful implementation as presented in figure 25. Column C in Table 7 includes Six Sigma process within the TQM concepts.
Six Sigma - DMAIC

1. DEFINE
Define the Project Purpose and Scope. Identify high level processes for improvements. Determine Customer needs and Benefits.

2. MEASURE
Baseline data on current processes. Pinpoint problem locations and occurrences. Identify potential areas for improvements.

3. ANALYZE
Identify root causes and validate root causes against captured data. Determine improvements that need to be made.

4. IMPROVE
Implement improvements that have been determined to address the root causes of the major issues.

5. CONTROL
Perform before and after analysis. Monitor systems, document results and determine next step recommendations.

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Figure 24: Six Sigma DMAIC process (Six Sigma, 2013)

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Figure 25: Six Sigma steps (Six Sigma, 2013)
This sub-section of the meta-analysis section reviews the most important quality management awards that are offered in Europe, America, Australia, and the UAE such as the European Foundation for Quality Management (EFQM) award, the Malcolm Baldrige National Quality (MBMQ) award, the Australian Quality award, Dubai Quality award, and international quality awards like ISO 9001 and Six Sigma. Those quality awards are based on the TQM founders' theories but they are analytically reviewed in order to add any of their developed concepts to the Quality Management characteristics and concepts for the sake of having a result of a comprehensive package of TQM characteristics. Table 7 summarizes the TQM characteristics designed by the TQM founders as presented in table 6 along with the TQM characteristics taken from the TQM awards' criteria input.
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<td>-measure results</td>
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<td>-quality is free</td>
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<td>-quality of process, product, and service</td>
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<td>- strategic planning</td>
<td>-Leaders shape the future and make it happen</td>
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<td>-strategic objectives, mission, vision</td>
<td>-agility in responding to threats and opportunities</td>
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<td>-strategic business plan</td>
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<td>-align strategic business plan with the organization's processes</td>
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<td>-Prioritization</td>
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<td>11</td>
<td>Communication</td>
<td>-quality improvement teams</td>
<td>-information and analysis</td>
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<td>communicate solutions to problems</td>
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<td>Teamwork</td>
<td>Cost</td>
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<td>12</td>
<td>-quality improvement teams -consensus decision making</td>
<td>-reduce cost</td>
<td>-conformance to standard -meet customer's requirements -continuous improvement</td>
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<td>-increase value</td>
<td>-focus on products and services -product reliability -reduce product rejection and scrap</td>
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Table 7: TQM Awards' input to TQM concept
4.1.3 TQM successful vs. failing cases meta-analysis

In this section, all the TQM concepts that were collected above and which constitute the characteristics discussed by the TQM founders and those characteristics developed by the awards' criteria are analyzed from the perspective of the higher education TQM scholars in order to present the applicability or inapplicability of those concepts or characteristics to higher education. Columns B and C of table 7 are combined in one column (column B: TQM characteristics) in table 8 to analyze higher education TQM scholars' opinion about the implementation of each of the TQM concepts and characteristics in the context of higher education. In the literature review chapter, the literature of the defenders of TQM in higher education was presented separately from the literature of the opponents, while in these meta-analysis results each of the 15 main concepts of TQM presented in table 7 is discussed from both the defenders' and the opponents' points of view and is summarized in table 8. These meta-analysis results and the results of the empirical study help in building the new TQM model in higher education which is the main outcome of this thesis.

One of TQM's basic components is having defined processes and the consistent assessment and measurement of performance with standard processes. Kosh (2003) argues that this cannot be implemented in higher education since standardization in teaching limits professors' innovation in their classes. He considers that TQM has a very small impact on higher education since all of the successful cases were limited to administrative rather than academic departments. Similarly, Moon and Smith (1998) found that TQM improves processes through reducing and answering waiting time for calls in administrative departments but does not cause any improvements in academic departments. According to Antony and Pierce (2002), the processes of higher education are represented in lab experiments, project reports, and presentations, and he argues that TQM
improves those processes. Mehralizadeh and Safaeemoghaddam (2010) argue that TQM is not theorized since it focuses on the process of enrolling students rather than what students learn. Sousa (2006) points out that there is no one type of best teaching, but it is essential to incorporate different approaches in teaching for optimal learning.

According to Pike and Barnes (1996, p. 24) TQM helps to improve the effectiveness, flexibility, and competitiveness of higher education institutes. Kanji and Malek (1999) argue that successful results in higher education institutes implementing TQM are the outcome of teamwork, leadership and continuous improvement. According to Schargel (1996), TQM helps in creating well educated students and therefore well skilled work force when they work in the industry.

According to Reavill (1998), the customer is clearly identified as the employer purchasing the output of higher education. He considers that the student is neither a customer nor a product, but is instead a stakeholder. To him the 12 stakeholders of higher education are: students, employers, families and dependants of students, employees in the university and the university, university's suppliers of goods and services, secondary education schools, other universities, industry, nation, government, tax payers, and professional bodies. They are all stakeholders because they either pay for the university or get benefits from it, or both at the same time. He argues that it is hard to prioritize them but that the first four are the most important. Michael, Sower, and Motwani (1997) build a comprehensive model of TQM in higher education by defining the customers as three groups (students, industry, and community). According to Antony and Pierce (2002), higher education customers are both students and businesses, and the products are 'practice knowledge' and 'communication skills'. According to Green (1994), TQM should focus on improving the quality of programs in higher education since it generates human resources which he considers to be the
products of higher education. Sirvanci (2004) claims that a secondary student enrolling in higher education should be considered in the same way as raw material that goes through the production process from one step to another until they graduate and become products for employers and compete against one another in the market. On the other hand, Pfeffer and Coote (1991) consider that a student is an "active participant" in education and is not a customer or a product.

Antony and Peirce (2002) discuss the importance of self assessment in a TQM system by comparing performance to an excellence model for the sake of improvement. Green (1994) focuses on assessing the programs of higher education by assessing efficiency, quality, and accountability since it generates human resources to an organization which plays an essential role in the society. According to Kosh (2003), professors are sometimes assessed at the end of the semester and with TQM they need to be assessed continuously and maybe on daily basis which is very hard. Wiklund et al (2003) also criticize the assessment of faculty in higher education since it diminishes innovation and creativity. Wiklund et al (2003) criticizes TQM because it requires a lot of reporting, asks about a lot of details, and takes time to collect statistical data that might not be useful after a short period of time. Evans and Lindsay (2005) argue that when organizations support teamwork, all personal initiatives are taken into consideration, which adds value to the processes and leads to continuous improvement. According to Sirvanci (2004), faculty members are product focused on research more than they are market focused on students' preparation to meet employers' requirements.

According to Montano and Utter (1999), implementing TQM in higher education is beneficial to everyone in both the academic and the administrative departments. Sirvanci (2004) discusses three reasons that hinder TQM in higher education: old traditions, faculty interest, and lack of team spirit.
He states that old traditions that have been built in education have deep roots which prevent change, especially when changing the whole culture to apply TQM. Antony and Pierce (2002) demonstrate their practice of TQM in higher education institutes through quality function deployment, believing that it balances between teaching and research. According to Schargel (1996), TQM in higher education helps with designing a mission down to gradual improvements even in the classroom and creates intrinsic motivation among students. Sirvanci (2004) identifies some challenges that face TQM in non-profit organizations such as higher education including things like customer identification, leadership, organizational and cultural issues, the role of the student, and performance measures. In a study that he conducted on ten colleges and universities in and around Boston, Entin (1993) argues that senior management usually have a lot of enthusiasm to implement TQM, but faculty resistance creates a huge gap between employers' requirements and academic institutions. According to Mehralizadeh and Safaeemoghaddam (2010), TQM was not socially authorized, especially by higher education institutes professors since it requires more committee work and less individual benefits for them as scholars and less freedom. Brown and Koenig (1993) argue that the major difficulty of TQM implementation in the academic department is that it gets a lot of resistance from faculty since it causes more committee work and less professional benefits.

According to Sirvanci (2004), team spirit is hard to achieve in higher education since departments compete with each others for university resources and this creates an extra challenge for TQM implementation. Teamwork is essential in TQM and this cannot be achievable in higher education according to Kosh (2003) since committees try to hinder work in higher education more than they just work at getting it done. Mehralizadeh and Safaeemoghaddam (2010) take the same view as Kosh, namely that TQM works solely in administrative departments and weakens the academic culture that is supposed to be in place in higher education institutes. Contrary to this, McCulloch
(1993) considers that TQM encourages teamwork in committees through innovation and incremental change. According to Schargel (1996), using TQM improves the quality of graduates in higher education, and this reduces the cost that organizations need to train and educate their workers which can cost billions of dollars.

Aly and Akpovi (2001) support the use of TQM in universities and argue that a lack of leadership and resources that encourage continuous improvement cause TQM to fail in academic departments. Focusing on leadership like Aly and Akpovi (2001) and Kluse (2009), Sirvanci (2004) argues that unlike CEOs in business organizations presidents and chancellors of higher education institutes have less authority in their positions, and this holds them back from taking decisions to change the environment of their organizations into a TQM culture in both their administrative and academic departments. Training is part of TQM but McCulloch (1993) argues that training for faculty should be substituted by self development. Milakovich's (2006) arguments are similar to Michael, Sower, and Motwani (1997) and he consider that empowering people is essential for a successful TQM, where people who own their processes and form them based on what they believe is true perform at a very high level and benefit the whole organization.

In this section all of the TQM concepts that are collected in the above two sections constituting the TQM characteristics discussed by the TQM founders and the TQM characteristics developed by the TQM awards' criteria are analyzed from the perspective of the higher education TQM scholars in order to present the applicability or inapplicability of those concepts or characteristics to higher education. Table 8 presents TQM scholars' opinion about the implementation of each of the TQM concepts and characteristics and differentiates between the defenders and the opponents of TQM in higher education.
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<td>-community is the customer</td>
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<td>-assessing quality, efficiency, and accountability to generate human resources to the society</td>
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<td>-requires teamwork</td>
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<td>-faculty focus on research more than teaching</td>
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<td>Quality goals</td>
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<td>-quality of process, product, and service</td>
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<td>-improves both administrative and academic departments</td>
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<td>-faculty interest hinder TQM</td>
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<td>-lack of team spirit hinders TQM</td>
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<td>-preventing change hinders TQM culture</td>
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<td>Strategic Management</td>
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<td>-leaders shape the future and make it happen</td>
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<td>-agility in responding to threats and opportunities</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>-policy and planning</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>-strategic business plan</td>
<td></td>
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<td></td>
<td></td>
<td>-align strategic business plan with the organization’s processes</td>
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<td></td>
<td></td>
<td>-Prioritization</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>-TQM helps in designing a mission</td>
<td></td>
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<td></td>
<td></td>
<td>-TQM leads to gradual improvements</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>-TQM creates intrinsic motivation for students</td>
<td></td>
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<tr>
<td>10</td>
<td>Communication</td>
<td>-quality improvement teams communicate solutions to problems</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>-information and analysis</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>-faculty resistance to TQM creates a huge gap between employers’ requirements and academic institutions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TQM was not socially authorized since it requires more committee work and less individual benefits for faculty as scholars</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-TQM lead to less academic freedom for faculty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Teamwork</td>
<td>-quality improvement teams</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>-consensus decision</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>-TQM encourages teamwork in committees through</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>-team spirit is hard to achieve since departments compete with each others for university</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 13 | Cost | -reduce cost  
   -increase value  
   -resource management | -TQM reduces cost  
   -it reduces training cost for human resources in industry |
| 14 | Product | -conformance to standard  
   -meet customer's requirements  
   -continuous improvement  
   -focus on products and services  
   -product reliability  
   -reduce product rejection and scrap | -graduates are the product  
   -human resources for industry is the product |
| 15 | Leadership | -training  
   -motivation  
   -resources  
   -value of employees  
   -pride  
   -self improvement  
   -improvement  
   -change management  
   -encourage innovation and creativity  
   -leaders: role model for ethics and value  
   -recognition  
   -governance | -leadership is essential for successful TQM  
   -TQM enhances leadership through empowering faculty members |

Table 8: TQM in higher education

4.2 Empirical study results

In this section the results of the empirical study of the two universities are presented for a grounded theory which leads to the construction of a modified quality management model for higher education. These results are presented by using the document analysis followed by the survey
results and the results of the interviews. Since this study is emergent, the process of inquiry, supporting arguments, and questions of interest were developed as the research progresses. Since the thesis is based on social constructivism combined with interpretivism, general and broad questions were asked in order to help participants construct the meaning of their situation. The qualitative methods were document analysis and semi-structured interviews along with part of the survey questionnaire. The quantitative methods included a section of the questionnaire that collected quantitative data and thus helped in quantitative analysis. Based on the emergent study approach, these tasks were conducted in this order: first, the majority of the documents analysis was done in order to determine what kinds of quality management are being used in the studied universities, and this required a modification in the survey instrument. The survey is conducted next since the recruitment of most faculty interviewees was done through this instrument. Finally the interview guides were finalised based on feedback from the two preceding instruments. Semi-structured interviews were conducted with some faculty members based on criterion sampling.

4.2.1 Documents Analysis results

This section reports on the following two categories of document analysis: academic policies in the two universities under study, and general documents of management in universities like the standards for licensure and accreditation of the Commission for Academic Accreditation (CAA) in the UAE and the UNESCO international covenant on academic freedom. Those documents were analyzed and used in modifying the TQM inapplicable characteristics to higher education in the new model of this thesis.

4.2.1.1 University Documents
The relevant policies examined here include those related to faculty workload, faculty promotion, research strategies and committees, faculty committees, faculty evaluation, planning policies, peer review policies, and library committees, etc. The purpose of critically analyzing those documents is to check all faculty management related matters to quality management concepts.

In the private university, in order to be promoted and according to the promotion policy, faculty members are expected to perform at increasingly higher levels as they advance in their careers. This can be recognized by: a higher quality of performance and recognition in teaching and learning, a greater contribution to the advancement of the research and scholarship of their discipline, an increase in the complexity and responsibility of their duties and service to the university, greater contribution to academic, institutional and public life, and increasing contributions through leadership.

In the public university, the promotion policy is very similar to that detailed above and academic staff should be recruited and rewarded according to the disciplines of research, teaching and administration (internal service, external including community service and leadership).

The faculty workload policy in the private university views a distribution of faculty members’ time as follows: "50 to 65% teaching, 20 to 35% research and scholarship, 10 to 15% administration, 5 to 10% community service". Modification may be accepted based on the career aspirations of the faculty members and their research activity plans for the year. For example, these percentages are adjusted if the faculty member has won external competitive grants with completion timeframes, has assumed administrative duties of the faculty member such as appointment to an academic governance role, merits equity considerations, or if teaching needs of the faculty or the university's
workload needs require a change. Each faculty member discusses his/her assigned workloads with the faculty dean at the beginning of every academic year. The allocations are documented and records are maintained within each faculty. An annual appraisal of workloads is conducted as part of a faculty members' annual performance evaluation.

The faculty workload policy in the public university views a distribution of faculty members’ time as follows: "40% teaching, 40% research and scholarship, 10% community service, and 10% service to the field". In the public university faculty members are expected to spend time on teaching, research and on administrative tasks in line with the university policy on faculty workload but this may vary according to the needs of the university, faculty and students. For example, teaching load is adjusted based on the number of research students. The balance among teaching, research, and service, may differ across programs and by the terms of the faculty member's appointment. Each of these roles enables faculty members to generate and disseminate knowledge to peers, students, and external audiences.

An analysis of the faculty workload promotion policies in the private and public universities demonstrates that the two universities have very similar policies when it comes to how faculty members' responsibilities are distributed among teaching, research, administration, leadership, and community service. The policies of the two universities assign the largest responsibility of faculty members to teaching, yet the policies state that this may be modified for many reasons. Faculty members may teach more in some cases, and in others they may be given time to conduct more research than teaching. What the actual workloads are cannot be known based on policy analysis only. This information is obtained in the survey and interview results below.
While the private university does not include the term 'academic freedom' in any of its policies, in its 'Role and Responsibility of Academic Staff' policy the public university states that academic freedom is the right of members of the academic community to study, discuss, investigate, teach, conduct research and publish as appropriate to their respective roles, responsibilities, and disciplines. It is the policy and responsibility of the university to assure and protect these rights within the legislative framework while recognizing that the university operates within the context of the culture, morals and laws of the United Arab Emirates. This is one of the issues which emerged from the document analysis that was included in the interviews.

Both universities have faculty committees for each faculty which operate as a forum to discuss, coordinate and make decisions on all academic matters within the faculty. They ensure that the faculty member has appropriate systems in place to implement strategic faculty plans, identify opportunities for improvement and report to the academic board on the achievement of learning and teaching objectives. The communication, effectiveness, and importance of these committees in each university were also discussed within the interviews for better insight.

In the private university and according to the continuous improvement policy, the process of continuous improvement is the responsibility of the Office of Institutional Effectiveness. Academic and administrative staff are required to identify a 'non-conformance/ opportunity for improvement' through audits or daily activities, which should be brought to the attention of the office by completing and submitting a Recommendation for Improvement form. The purpose of this procedure is to ensure that any adverse impacts on the quality of service should to be identified, documented, and reported to management and then corrected in order to prevent a recurrence. Process improvement projects are carried out according to a continuous improvement process.
flowchart which is based on quality management and on Deming's PDCA cycle, as stated clearly in the policy. The effectiveness of this process for the academic department was also included for discussion in the interviews.

According to the research funding policies in the two universities, applications must satisfy the following criteria in both the public and the private universities:

- Acceptance of a full paper. Applications for conference funding based solely on abstract acceptance will not be considered.
- The paper must be subjected to a formal peer review process.
- The standard of the conference paper must be of high quality and may be subjected to internal review.
- In the case of joint papers, only the staff member making the presentation may submit an application.
- The applicant must agree to present a seminar in the university's research seminar series before the conference to enhance the quality of the paper and presentation.
- The faculty dean must support and align the conference paper application to the particular applicant’s performance. In addition the faculty dean must confirm that there will be no detrimental impact on the Faculty’s activities or that acceptable arrangements have been made to cover the staff member’s teaching and administrative responsibilities.

The difference between the private university and the public university in regards to the research policy is that research papers in the private university should be approved by the dean and should not affect the teaching and administrative responsibilities. However, in the public university, the research committee is responsible for obtaining funding for research. In the public university the
research strategy regards university staff as having an important role to play in developing research in the UAE and the Gulf region. Not only does it have to enhance its own research infrastructure, it also has equally important role of championing the development of a research base that spans across many countries but is based in the UAE. This demonstrates that the public university is more focused on research than the private university as part of its social responsibility and community development, and this will be emphasized further through the interview instrument.

In the private university and according to the subject-instructor evaluations process, evaluations take place every semester including the summer semester, and these are compulsory. The purpose of these evaluations is to monitor teaching performance and provide feedback to teaching staff. The results of this process are used to improve educational programs through in-house tertiary training workshops. The subject-instructor evaluation is an important component of annual performance review and the promotion process. Students complete lecturer evaluation and subject evaluation forms and the process is administered by the Office of Institutional Effectiveness. The results of the evaluation are sent to the Dean and to the Vice President prior to the end of the semester. The Office of Institutional Effectiveness sends a copy of an instructor’s report to the instructor. The Dean reviews and discusses the content of the evaluations with the instructor. Subject-instructor evaluations are used during the annual performance review of instructors and are included in the contract renewal and promotion processes and salary review.

In the public university the quality of instruction in individual modules is evaluated every semester, and the results are used to provide a basis for the ongoing improvement of learning and teaching effectiveness in each program. Generally speaking, academic staff members assess learning and teaching effectiveness using feedback from student evaluations, regular student liaison meetings,
formal and informal peer observations, assessment results, and annual comprehensive self and dean evaluation on all aspects of work. Evaluation results are used to improve learning and teaching.

In comparison, the private university depends on students' evaluation of the instructor while the public university looks for peer observations, students' feedback forms, and self-evaluation. This evaluation process will be discussed with faculty members in the interview instrument for further clarifications.

In both universities the library committee was formed to build a better library and to ensure the best use of library resources. In the public university a private library of one faculty member was built for research students under his supervision. The committee deals with all issues relating to the operations, development and maintenance of the library. The committee actively encourages staff and students to proactively contribute to the expansion and use of the library in order to ensure a higher level of learning and research capability. The inputs of faculty members on the library committee are discussed in the interviews.

In the private university, there is a planning policy to ensure that a comprehensive system for planning development and review is embedded at the university across all aspects of its operations, including strategic, tactical and operational planning which incorporates short term, medium term and long term perspectives. The scope of this policy includes all forms of planning across the university including institutional, project, academic, and administrative planning. The university's vision and mission statements express shared principles and direct the goals in core and key enabling areas. The goals are presented, with their key performance indicators, strategies, and
objectives as chapters of the strategic plan. They are the touchstones for all the university's planning, including administrative units, projects, capital and facilities management.

The university is committed to a four-step quality process of plan, act, and review and improve. Monitoring cycles assure quality through testing outcomes and introducing updates and improvements into the planning system. In the public university the planning policy focuses on faculty development through grants to attend national and international seminars and training courses. Strategic plans for each faculty are reviewed every five years for continuous improvement. There are more quality management plans used in the private university through monitoring and matching performance with goals, and this is something which will be discussed with faculty members within the interview instrument.

4.2.1.2 Documents on University Management

The analysis of the two universities' policies demonstrates that both have very similar policies in compliance with the standards of the Commission for Academic Accreditation (CAA) standards that they are accredited by. This urges us to review the CAA standards and their impact on faculty members.

Higher education institutes seek accreditation from the Ministry of Higher Education as an obligatory requirement in order to be considered by the government in the country. Universities have different reasons for pursuing accreditation, as for some of them accreditation is inevitable while for others it is for the purpose of improving quality (Heriot, Franklin, and Austin, 2009). The CAA is offered by the Ministry of Higher Education in the UAE for higher education undergraduate
and postgraduate programs. The CAA standards have quality and workload requirements for faculty members in accredited higher education institutes and institutes seeking accreditation for their programs. The CAA requires that a higher education institute has a specific mission presented in a mission statement. The institute's processes should be linked to its mission and also all actions, future planning, use of resources, and evolution should be guided by this mission (CAA, 2013).

Strategic planning and implementation are dominant in CAA standards that are mission driven, and therefore faculty activities such as pedagogical approaches, curricula design, and research type should be aligned with the mission (CAA, 2013). When CAA standards are closely analyzed a direct and indirect impact of these standards appears to influence faculty members, their objectives, and professional life to a great extent. Faculty should continuously improve, and the core value of faculty practices should be based on quality assurance.

The higher education institute should accept students with appropriate qualifications to its educational programs and employ faculty with appropriate qualifications to provide the programs, and overall quality (CAA, 2013). In general these standards necessitate a mix of appropriate faculty and students to attain a high quality that can fulfill the institute's mission (CAA, 2013). Faculty members in CAA accredited institutes are involved in school governance areas like advising, committee membership, educational directions and policy making along with research and other services to the university.

A faculty member must have a doctoral degree and should be involved in activities that ensure that they remain up-to-date in their fields, and further academic preparation and subsequent activities are also required from faculty members teaching in different areas from their specializations. Faculty
members should meet this requirement when they are initially hired. They are considered to be professionally qualified if they stay involved with activities which are relevant to their teaching field. Faculty academic standards and scholarly practices should be consistent with the institute's mission. Every department should have sufficient resources allocated to academic placement and advisement. Institutes should have adequate faculty members to cover the offered courses and balance this with the student class load. Adequate resources should be allocated to staff and faculty development. Individual faculty members have three basic responsibilities. They should have ample knowledge in their disciplines, develop pedagogical approaches and techniques, and give feedback on student performance. Faculty members should encourage and help students to create intrinsic motivation in their learning and contribute to their peers' learning.

CAA requires faculty members, students, and the community to make a contribution to student learning, which is the basic goal of higher education. Educational goals should always be revised to guarantee continuous improvement in programs (CAA, 2013). Learning assurance measures the performance of students and primarily depends on the results to continuously improve the program (Martell & Calderon, 2005), however Matt (2009) argues that for stakeholders the importance is the learning goals of the university more than the accomplishment levels of students. In addition, a study by Kelley, Tong, and Choi (2010, p. 299), shows that:

Faculty frequently participate in assessment tasks, including defining the learning goals of the degree program, developing instruments to measure student learning, and creating and implementing changes to improve student learning. Major causes of faculty resistance to assessment include the demanding time commitment and the lack of appropriate knowledge required to conduct assessment.
Palomba and Banta (1999, p.5) argue that the vital emphasis of assessment is on the program and not on individual students because the aim of assessment is to check the contribution of educational programs to student development and growth.

The focus on assessment and learning assurance has a pivotal influence on faculty members. These standards have an impact on developing the curriculum, where teaching skills should match with teaching content in the educational process. Assurance of learning standards for undergraduate programs is comprised of communication, ethics, analytical decision making, information technology usage, creating value chains, globalization, organizational leadership, and multicultural and diversity appreciation (Clarke, 2004). Additional learning requirements related to universities that offer master and doctorate programs include developing leadership skills, using innovation, developing research skills, and graduate students' research related outcomes (Clarke, 2004).

The UNESCO international covenant on academic freedom is also important in building the new model of this thesis. It discusses the importance of academic freedom and autonomy in higher education including the fact that:

The proper enjoyment of academic freedom and compliance with the duties and responsibilities listed below require the autonomy of institutions of higher education…Autonomy is the institutional form of academic freedom and a necessary precondition to guarantee the proper fulfilment of the functions entrusted to higher-education teaching personnel and institutions…Member States are under an obligation to protect higher education institutions from threats to their autonomy coming from any source… Autonomy should not be used by higher education institutions as a pretext to limit the rights of higher-education teaching personnel…Self-governance, collegiality and appropriate academic leadership are essential components of meaningful autonomy for institutions of higher education…Expressing concern regarding the vulnerability of the academic community to untoward political pressures which could undermine academic freedom. (UNESCO, 2013)

The UNESCO international covenant also includes duties and responsibilities of faculty members:
Higher-education teaching personnel should recognize that the exercise of rights carries with it special duties and responsibilities, including the obligation to respect the academic freedom of other members of the academic community and to ensure the fair discussion of contrary views. Teaching, research and scholarship should be conducted in full accordance with ethical and professional standards and should, where appropriate, respond to contemporary problems facing society as well as preserve the historical and cultural heritage of the world. (UNESCO, 2013)

In conclusion to this section, academic policies in the private and the public universities were reviewed in order to check the management systems in the academic departments of the universities to learn whether they apply TQM concepts. The results here show that the private university applies some of the TQM concepts but the public university does not. Based on the emergent study approach, the information analyzed in these policies is integrated into the design of the survey and interview for further interpretation from faculty members. In the next stage it is important to check whether the quality management concepts applied in the private university are considered successful from the faculty members' perspective, and interpretations about the possibility of implementing TQM will also be collected from faculty members in the public university in order to determine their opinion about having such a management system in their academic departments.

Since both universities have a lot of common policies to meet the requirements of the CAA, the CAA standards were also analyzed to study their requirements as they are also used in building the new model in a way that does not contradict with the those standards and will therefore be applicable to the UAE universities. This subsection also includes a review of the UNESCO international covenant on academic freedom, which is mainly analyzed so it can be used in modifying the inapplicable TQM characteristics for higher education in the new model that this thesis is attempting to generate.

4.2.2 Survey Results
After document analysis in the two universities there were many questions which needed to be asked to all faculty members in order to clarify some points and collect qualitative interpretations and quantitative data through a survey, as represented below. Some of those questions are analyzed quantitatively and others are analyzed qualitatively for the sake of triangulation.

### 4.2.2.1 Survey Quantitative Results

The first section included closed-ended questions that are analyzed quantitatively through descriptive and inferential statistics using the statistics software SPSS. This data is used for triangulation in order to study the difference in the opinions of faculty members among the different variables: age, gender, current position, and years of experience. Stake (1995, p. 114) argues that methodological triangulation is the most recognized protocol since it increases confidence in findings. This first section of the questionnaire included demographic questions about gender and age which aid in quantitative analysis and conducting inferential statistics and comparing responses between different groups. For example, although it may be considered that TQM practices would hinder faculty members from conducting research, there would be other reasons that do hinder them from research like professors who are mothers with heavy domestic responsibilities. Table 9 summarises the gender survey data, table 10 summarises the current position survey data, and table 11 summarises the marital status survey data of the questionnaire participants.
<table>
<thead>
<tr>
<th>Gender</th>
<th>Distribution</th>
<th>Average number of publications per year</th>
<th>Average satisfaction with management practices</th>
<th>Average satisfaction with university policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>55%</td>
<td>2-3</td>
<td>satisfied</td>
<td>Satisfied</td>
</tr>
<tr>
<td>Female</td>
<td>45%</td>
<td>1-2</td>
<td>dissatisfied</td>
<td>dissatisfied</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>1-2</td>
<td>50% satisfied/50% dissatisfied (no mode)</td>
<td>satisfied</td>
</tr>
</tbody>
</table>

Table 9: Gender Survey Data

<table>
<thead>
<tr>
<th>Current Position</th>
<th>Distribution</th>
<th>Average number of publications per year</th>
<th>Average satisfaction level with management practices</th>
<th>Average satisfaction level with university policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Professor</td>
<td>16%</td>
<td>2-3</td>
<td>Dissatisfied</td>
<td>Dissatisfied</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>29%</td>
<td>2-3</td>
<td>Dissatisfied</td>
<td>Dissatisfied</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>42%</td>
<td>1-2</td>
<td>Satisfied</td>
<td>Satisfied</td>
</tr>
<tr>
<td>Adjunct Faculty</td>
<td>5%</td>
<td>1-2</td>
<td>Dissatisfied</td>
<td>Dissatisfied</td>
</tr>
<tr>
<td>Instructor</td>
<td>8%</td>
<td>2-3</td>
<td>Satisfied</td>
<td>Satisfied</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>1-2</td>
<td>50% satisfied/50% dissatisfied (no mode)</td>
<td>satisfied</td>
</tr>
</tbody>
</table>

Table 10: Current Position Survey Data

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Distribution</th>
<th>Average number of publications per year</th>
<th>Average satisfaction with management practices</th>
<th>Average satisfaction with university policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>61%</td>
<td>1-2</td>
<td>satisfied</td>
<td>Satisfied</td>
</tr>
<tr>
<td>Not married</td>
<td>39%</td>
<td>2-3</td>
<td>dissatisfied</td>
<td>Satisfied</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>1-2</td>
<td>50% satisfied/50% dissatisfied (no mode)</td>
<td>satisfied</td>
</tr>
</tbody>
</table>

Table 11: Marital Status Survey Data
Based on eye balling of the quantitative survey data, analysis of the qualitative information collected from the questionnaire, and my experience as a faculty member in higher education, the following five hypotheses were generated to be quantitatively tested using SPSS.

Hypothesis 1: there is a significant difference between faculty members’ gender and the average number of their publications per year. This hypothesis is generated since all faculty members explain that they cannot conduct research during their working hours, and therefore they work on their research papers in the evening times and during weekends and holidays. Supposing that female professors have more domestic duties, there may be a significant difference between gender and number of publications. The average number of publications for the faculty who responded to the questionnaire is approximately two publications per year (S.D. = 0.72, Mean = 1.97, N = 38). Female professors have fewer on average (S.D. = 0.68, Mean = 1.81, N = 17) than male professors (S.D = 0.73, Mean = 2.18, N = 21). To study whether the difference is significant and since there are two experimental conditions and different subjects in each condition (males and females), the T-test (unrelated) was used. The results show that there is no significant difference between faculty members’ gender and the number of their publications (t = -1.6, df = 36, p = 0.12) and therefore the hypothesis is rejected.

Hypothesis 2: there is a significant difference between marital status of faculty members and the average number of publications per year. This hypothesis was generated since all faculty members explain that they cannot conduct research during their working hours, and therefore they work on
their research papers in the evening times and during weekends and holidays. Supposing that married professors have more domestic duties, there may be a significant difference between marital status and number of publications. The average number of publications for the faculty who responded to the questionnaire is approximately two publications per year (S.D. = 0.72, Mean = 1.97, N = 38). Married professors have fewer on average (S.D. = 0.67, Mean = 1.78, N = 23) than professors who are not married (S.D = 0.7, Mean = 2.27, N = 15). To study whether the difference is significant and since there are two experimental conditions and different subjects in each condition (married and not married- includes single/divorced/others), then T-test (unrelated) was used. The results show that there is a significant difference between marital status and the number of their publications (t = -2.132, df = 36, p < 0.05), and therefore the hypothesis is accepted.

Hypothesis 3: there is a significant negative correlation between the number of children for faculty members and number of publications per year. This hypothesis is also generated since all faculty members explain that they cannot conduct research during their working hours, and therefore they work on their research papers in the evening times and during weekends and holidays. It is expected that faculty members who have children publish less. Since data is nonparametric, spearman rho is used to study correlation significance. The results show that there is a significant correlation between the number of children for faculty members and number of publications (Rho = -0.561, N= 38, P < 0.01). By constructing a scatter diagram using the number of children as the independent variable and the average number of publications per year as the dependent variable, this significant correlation is found to be negative, as presented in figure 26: 'Hypothesis. Therefore, the hypothesis is accepted.
Hypothesis 4: there is a significant difference between faculty members' current positions and their satisfaction levels with the management practices related to teaching and research. This hypothesis is generated since Associate Professors and Full Professors are supposed to be more involved in research meaning they may not be generally satisfied with management practices that require teaching overloads such as in the case in the private university or having a lot of administrative duties as in the public university. There are five categories among the data of faculty members' current positions: Full Professor, Associate Professor, Assistant Professor, Adjunct Faculty, and instructor. The average satisfaction level of Full Professors is ( S.D. = 0, Mode = dissatisfied, N = 6), the average satisfaction level of Associate professors is ( S.D. = 0, Mode = dissatisfied, N = 11), the average satisfaction level of Assistant professors is ( S.D. = 0, Mode = satisfied, N = 16), the average satisfaction level of Adjunct Faculty members is ( S.D. = 0, Mode = dissatisfied, N = 2), and the average satisfaction level of instructors is ( S.D. = 0, Mode = satisfied, N = 3). Since the two variables are nominal, the chi-square test was done. The results show that there is a significant difference between faculty members' current positions and their satisfaction with the management...
practices related to teaching and research: $X^2(4, N= 38) = 38.0, p < 0.05$ and therefore the hypothesis is accepted.

Hypothesis 5: there is a significant difference between faculty members' current positions and their satisfaction with their universities' policies. This hypothesis is generated since Associate Professors and Full Professors are supposed to be more involved in research and they may not be generally satisfied with policies that require more teaching from them as in the case in the private university or having a lot of administrative duties as they do in the public university. There are five categories among the data of faculty members' current positions: Full Professor, Associate Professor, Assistant Professor, Adjunct Faculty, and instructor. The average satisfaction level with university policies for Full professors is (S. D = 0.41, Mode = dissatisfied, N = 6), the average satisfaction level for Associate Professors is (S.D. = 0.4, Mode = dissatisfied, N = 11), the average satisfaction for Assistant Professors is (S.D. = 0, Mode = satisfied, N = 16), the average satisfaction level of Adjunct Faculty members is (S.D. = 0, Mode = dissatisfied, N = 2), and the average satisfaction level of instructors is (S.D. = 0, Mode = satisfied, N = 3). Since the two variables are nominal, the chi-square test was done. The results show that there is a significant difference between faculty members' current positions and their satisfaction with their universities' policies: $X^2(8, N= 38) = 38.85, p < 0.05$ and therefore the hypothesis is accepted.

Although the female professors publish less on an annual basis, there is no significant difference between female professors and male professors in the average number of their publications per year. Nevertheless, there is a statistically significant difference between faculty members' marital status and the average number of publications per year, and faculty members who are not married publish more than married faculty members on a yearly average. The statistical tests also show that there is
a negative correlation between the number of children that faculty members have and the average number of their yearly publications. It is statistically significant that faculty members who have more children publish less, and faculty members who have fewer children publish more. In conclusion, faculty members who have more time in their homes with less responsibilities (not married, less children) publish more. Therefore, faculty members' problems with work load is concluded to be true, regardless of whether this is their teaching overload such as in the case in the private university or administrative tasks in the public university. At the same time, it is statistically significant that there is a difference between faculty members' current positions and their level of satisfaction with the management system and policies in their universities. Although assistant professors and instructors are satisfied with the management systems and policies in their universities, Full Professors and Associate Professors are not satisfied, and the open ended questions of the survey explained that the reasons for this dissatisfaction are always management requirements that prevent them from working on their research. They are not satisfied with the policies that require more duties from them other than research, and they are not satisfied with the management systems that sometimes exceed the policy requirements of administrative tasks and teaching load.

4.2.2.2 Survey Qualitative Results

When faculty members were asked if they are satisfied with the management system at their university 42% in the private university expressed a high level of satisfaction, especially faculty members who did not have a high average of publications compared to 58% of faculty members who have more publications. Those faculty members who are more involved in research reported that they are not very satisfied with the management system, especially with the number of teaching hours per week and the numbers of students in each class. Faculty members in the private university
were also not satisfied in their university's management systems in most instances, especially in the high numbers of students in the introductory undergraduate classes. Professor A explained: "How would I be satisfied if the quota of my class is 180 students and can be overridden to 200 with a special approval from the dean and not an approval from me"? Faculty teaching at the post-graduate level did not generally discuss this issue or problem, however 22% were dissatisfied because of the number of classes or number of teaching hours per week and per semester in general. Professor B explained: "According to my contract, I have to teach two semesters every year and spend the rest of the time conducting research, yet every year and for the last eight years they ask me to teach as overload in summer which ends up in me missing deadlines for research papers".

In the public university, 72% of the faculty members expressed their satisfaction with the top management and explained that there is a lot of respect and a professional culture of academic freedom. 68% of the faculty members who are not highly satisfied with the management system in the public university attributed this to a lot of administrative duties and long meetings that have adverse repercussions on research and teaching preparations.

When faculty members were asked about the impact of their universities' policies on their performance, those in the private university referred back to the same problem of teaching load. The work load policy gives a higher percentage of a professor's role to teaching than research, but faculty members explain that teaching is given more weight than the policy includes under teaching overload. Professor C wrote in the questionnaire: "Although overload teaching is optional, I cannot say no when this request comes from the dean or when the semester starts and students have no lecturer to teach them...." 47% of the faculty members said that they cannot keep pace with publications at an international and regional level. Professor D explains: "I am happy with
publishing one article every year, but the problem is that I do not have time for thinking, I'm thinking fast...

The overload teaching problem that many of the professors in the private university are facing is discussed in the interview with the deans.

This problem is not found in the public university where faculty members can publish more on an international and regional level. When faculty members were asked about policies, 89% expressed their satisfaction with the management system when it comes to applying policies especially the policy concerning academic freedom.

In total, 70% of the faculty members in both universities explained that they highly rate the quality of teaching and research at their universities, although 63% explained that they can perform better if they have more time for preparation and updating material. In the private university, 76% of the faculty members explained that the quality of teaching and learning would be better if classes have fewer students especially at the undergraduate level.

According to the faculty members' answers in the survey, the two universities do not apply TQM as a management model in their academic departments, but all of the faculty members in the two universities referred to many of the TQM characteristics that were on the list attached to the questionnaire. In the private university some of the TQM practices are already embedded in academic policies. This was also noticed in the document analysis results when the academic policies were analyzed. Faculty members in the private university reported that quality is managed by a specific department in the university which collects student feedback about faculty at the end of each semester. This is a student evaluation of faculty which is reported to the deans, and it has an important role in faculty promotions. In the public university many faculty members discussed
different forms of TQM that are applied in their academic departments such as teamwork through peer observation and empowerment through focusing on self-evaluation more than student evaluation and self-improvement more than improvements adopted by a specific quality assurance department.

In the private university faculty reported that there is a lot of standardization required from them especially at the undergraduate level. In cases where there is more than one section of a subject or course, faculty members are required to standardise the outlines or syllabus, learning outcomes, and assessment criteria. The exams are required to be exactly the same for all of the students in different sections, and they should be conducted at the same time. This is not the case in the public university where faculty members have more professional autonomy and academic freedom and express more satisfaction and innovation in the teaching and learning process.

The results of the survey had an important role in finalizing the interview questions and in selecting the interview participants based on interesting information in the questionnaire which was intended to be elaborated on through a face-to-face semi-structured interview. The most important results in this section are the problems of teaching overload that faculty members are experiencing in the private university which is more than the workload policy allows for. Faculty members in the public university have a lot of administrative duties that are also affecting their research and publications negatively. This problem of work overload was discussed with deans and faculty members through the interview instrument. Another important result that was found through the survey is that the implementation of some TQM concepts in the public university such as empowerment, self-evaluation, and self-improvement had already occurred. On the other hand, the private university uses a lot of monitoring and evaluation of faculty members which is done by the office of
institutional effectiveness for the sake of improvement. Therefore, each university uses the TQM characteristics in different manners, and these are discussed in the next section.

4.2.3 In-depth semi-structured interview results

Faculty members were recruited for the interview through criterion sampling and by meeting the following: 1) have significant publishing records in peer review journals so they are aware of the academic principles and the unique nature of the academic profession that requires time and capability to conduct research, and 2) have at least five years of teaching experience in higher education so they have been teaching long enough to identify what is done in their universities' management systems and how TQM would affect scholarly values. Following the emergent study approach, faculty members who reported in the questionnaire that they had academic working experience in Dubai were also interviewed in order to collect more information about management systems in other universities in Dubai. In addition there were a few extra interviews with faculty members through snowballing, and these people were recommended by interviewees who had been researching quality management or a faculty member who resigned from one of those universities due to management decisions. Besides describing the management systems in their universities the main role of faculty members as interview subjects was to give their interpretations about the possibility of implementing TQM in higher education in order to help in the model building process. In total 25 faculty members were interviewed, including 19 academics without administrative roles and 6 academics in senior administrative positions in the academic departments.
When faculty members were asked about the management system in their universities, academics with senior administrative roles in both universities stated that their systems are very successful and contain a large degree of leadership and academic freedom. For example, in the public university, top administrators emphasized the professional culture of their university which requires minimal management practices between deans and faculty members. For example, Dean A said, "Our faculty members are professional enough...they don't need to be managed...". When faculty members were asked about this, they all gave the same information and expressed their satisfaction in the management system in the university. On the other hand, the discussion of senior administrators in the private university included many more management concepts and practices. For example, Dean B said, "When students' evaluation of any faculty members are not very satisfactory, I ask them for a meeting... so they can explain their reasons... and then we plan together for what needs to be changed for improvement". The dean gives a high level of importance to student evaluations of faculty members as if the student is the customer in the industry and his feedback is essential, although this concept was not mentioned by any of the top administrators. When Dean B asks faculty members to justify the reason for student dissatisfaction, this shows a manager-employee relationship which is questioned in a professional culture like higher education.

The improvement plan that is required from faculty members is designed based on the dean's input. Contrary to this, the results of the interviews done in the public university with top administrators and faculty members show a different management style. For example, Dean C explained that, "faculty evaluation is divided into three main components, student evaluations, peer observation, and most importantly self-evaluation...The most important tool is self-evaluation as faculty members are professionals who are absolutely aware of self-evaluation and consequently self-improvement through updating content material and educational methods. "
Dean C also explained the peer observation process, "the comments of the faculty member playing the role of the observer are only given to the observed faculty member... What is reported to the dean is a form signed by the observer and the observed faculty member for the sake of keeping records of the observation history, and this is consistent with the reviewed policies". Faculty members in the public university expressed much more satisfaction in their relationship with top administrators. They stated that there is no centralization of decision making; however, important decisions are taken through committees where every committee member can give his/her opinion. According to the interview results in the public university there are some TQM practices and concepts that the university applies, but there is not a TQM model like empowerment, continuous improvement, teamwork, communication, self evaluation etc.

When faculty members were asked to give their interpretations about using a TQM model in higher education, many of them considered it positive if used in the right manner, in which the need for a modified TQM model was always discussed. One of the faculty members said," the biggest problem with TQM is that it always requires reduced costs, which means more teaching and administrative tasks to be given to each faculty member". On the other hand, Dean A in the public university explained that reducing cost is not bad as- there is a strategy for reducing cost that has a very positive impact. For example, Dean A explained, "the tuition fees for students have not increased in the last seven years, however faculty members' salaries were increasing".

All of those contradicting interpretations and the document analysis and literature review were used in constructing a modified TQM model in the next chapter. In the private university, interviewees explained that there are TQM practices like those in the continuous improvement process that uses the PDCA cycle of Deming or the planning strategy which uses a four-step quality process named
plan, act, review and improve where quality is assured by a monitoring cycle that tests outcomes and introduces improvements and updates into the planning system.

Through the interview instrument, it can be seen that there is a common problem between the two universities that faculty members are facing, which is a lack of research time. Even faculty members who have experience in other universities in Dubai reported the same problem in their previous universities. For example, faculty members in the private university are suffering from the problem of teaching overload, however faculty members in the public university are facing the problem of administrative tasks and form filling which prevents them from conducting research. In the private university, where teaching overload is optional in the policy, faculty members cannot refuse it and leave students without lecturers when the semester starts since they are professionals, and they explain that they feel they should support their universities. In the questionnaire many explained that they cannot reject overload teaching when it is requested from the dean. When they were asked about the reason they referred to political reasons, such as they have to stay on the side of the dean who is the decision maker in their promotions and salary increases. Teaching overload is always paid for faculty members, yet it is hard to refuse it if they prefer to work on their research papers instead. Another problem that faculty members discuss is the high number of students at the undergraduate level, where some classes go up to 200 students, and this affects the teaching and learning process and prevents faculty members from communicating effectively with students. In the public university the problem is similar, but instead of big classes faculty members have a lot of forms to fill out, sometimes two or three different forms that contain the same information. Every time faculty members were asked to give their interpretations of a TQM model in higher education, they discussed the need for such a model, especially if it is able to solve those problems and allow faculty members to work on research more. Most faculty members, and especially senior
administrators, work on their research outside their normal working hours which take a lot of their private time and causes family problems, and in some cases divorce.

Although faculty members are happy with the quality of education they are providing to students, they always discuss the lack of time that they have to update their courses' material and develop teaching methods in addition to their pedagogical research and research in their field which could even improve the quality of education. One of the main problems that faculty members in the public and private university, and even faculty members who have previously worked in other universities in Dubai all agree about is the lack of learning and research sources, whether this be hard copies of books and journals in each university's library or the data base of e-journals and e-books. A faculty member explains, "this lack of resources has adverse repercussions on the quality of research for faculty members and also on the quality of teaching and learning for students and developments in the academic community". Many faculty members argued that the best alignment between professors' personal ambitions and the university's benefits would be more encouragement to conduct research which would benefit faculty members as individual professionals, the university, and the community.

When faculty members were asked about the effectiveness of committees there were different answers. To some faculty members and senior administrators in the two universities, committees represent teamwork and de-centralization, while to others committees are endless meetings that hinder work more than they get it done. Faculty members consider that their universities operate according to the CAA and their policies should contribute to Dubai, the UAE and the Middle East in general through the high quality of graduates and research. Faculty members argue that academic freedom is essential in their career, especially when it comes to teaching methods, research topics,
and research methodologies. In the private university many faculty members explained that they do not have enough academic freedom and professional autonomy in their teaching. A faculty member explains, "all professors teaching the same course to different sections are required to standardize the course syllabus, assessment tools, and handouts... Even the power point presentations are monitored by the subject coordinator, who is a faculty member... The subject coordinator also approves students' marks at the end of the semester". With respect to research in the private university, any grant for a research paper is required by the policy to be accepted by the research committee, which checks whether or not the research would affect the teaching load of the faculty member in addition to checking the topic, and this all needs to be approved by the dean. Faculty members in the public university do not have this problem as academic freedom is more present within the culture of the university in teaching and research. All faculty members in both universities consider that the scholarly quality standards should be based on professional autonomy, including academic freedom and academic quality in both teaching and research. Many faculty members and senior administrators discussed the importance of peer review, particularly if individuals are in a decision making position like in research committees. Another problem that faculty members discussed is the high amount of reporting within their systems, whether through student related forms as in the case of the public university or through the teaching methods as in the private university.

Since the new TQM model that the thesis intends to develop includes the cross-cultural context of Dubai, faculty members were asked about changes they made to accommodate cultural differences especially since they are all expatriates. Most had academic experience in universities in their home countries so were able to describe the difference between the culture of Dubai and the culture in their countries. The diversity in Dubai, including its universities, is a fact that people moving there
cannot ignore. Many faculty members faced problems at the beginning in their life and career when dealing with students or faculty from different cultures and backgrounds.

The interview was instrumental in the model building process since many concepts and a lot of information collected through document analysis of policies in the two universities and through the questionnaire were actually clarified at this stage from the perspective of faculty members and deans. It was shown that faculty members require a new management model that is uniquely designed for the higher education context. The most important issues that they are concerned about are focusing more on research, reducing the number of students in their classrooms, self-evaluation, self-improvement, peer review, empowerment of faculty, more teamwork, less form filling, less reporting, and less documentation. All of this information along with document analysis, the survey results, and part of the literature review helped in designing the new TQM model for higher education.

Table 12 presents the summaries of the empirical results in accordance with TQM. It concludes the results of the document analysis, the survey, and the in depth semi-structured interview in accordance with each of the TQM concepts presenting what can be kept and what needs to be modified to fit the higher education context.

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<th>B</th>
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<tbody>
<tr>
<td>1</td>
<td>TQM concepts (TQM founders)</td>
<td>TQM characteristics (TQM founders/ TQM awards input))</td>
<td>Literature defending TQM in higher education</td>
<td>Literature denying TQM in higher education</td>
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<tr>
<td>2</td>
<td>Processes</td>
<td>plan processes</td>
<td>improves lab experiments/ project reports/ presentations</td>
<td>standardization limits</td>
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<td></td>
<td></td>
<td>design processes</td>
<td>-improves administrative</td>
<td>professors' innovation</td>
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<td></td>
<td></td>
<td>conformance to design</td>
<td>-cannot be implemented in</td>
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<td></td>
<td></td>
<td>analyze processes</td>
<td></td>
<td>teaching and administrative responsibilities</td>
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<td></td>
<td>control processes</td>
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<td>are more important than</td>
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<td>process documentation</td>
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<td>research in the</td>
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<td><strong>3</strong></td>
<td><strong>Results</strong></td>
<td>-improve processes flow and continuous improvement of processes</td>
<td>-find variation in tasks like students' enrolment</td>
<td>-improves effectiveness/flexibility/competitiveness in academic departments and does not improve what students learn</td>
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<td></td>
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<td>-different approaches in teaching for optimal learning</td>
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<td>-quality Control</td>
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<td>-defect prevention</td>
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<td>-social responsibility</td>
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<td>-sustained and outstanding results</td>
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<td>-meet short and long term needs of stakeholders</td>
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<td></td>
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<td>-results analysis</td>
</tr>
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<td></td>
<td></td>
<td>-clear measurement</td>
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<tr>
<td><strong>4</strong></td>
<td><strong>Customers</strong></td>
<td>-check customers requirements and customers satisfaction</td>
<td>-employers are the customers and students are the stakeholders</td>
<td>-students are not customers but stakeholders</td>
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</table>
|  | -add value to customers  
- understand customers  
- customers focus  
- market focus  | customers  
- businesses/industry are the customers  
- community is the customer  | - the student is an active participant not a customer  
- similar to customers in industry  |
|---|---|---|
| 5 Assessment | - assess processes  
- measure results  
- evaluate performance  
- identify problems  
- conformance to requirements  
- statistical analysis  
- organizational performance  
- data and information analysis  | - assessing the programs  
- assessing quality, efficiency, and accountability to generate human resources to the society  | - self assessment for faculty  
- continuous assessment for faculty is very hard  
- assessment for faculty diminishes innovation and creativity  |
| 6 Reporting | - report to decision makers  
- report data and information  | - TQM requires a lot of reporting  
- It asks about a lot of details  
- It takes time to collect statistical data  
- data might not be useful after a short period of time  | |
| 7 Continuous improvement | - for processes  
- for results  
- self improvements  
- simple improvements  
- improve employee quality awareness  | - requires teamwork  | - the private university uses quality management through Deming’s PDCA cycle  
- the office of institutional effectiveness is responsible of continuous improvement in the private university  
- self improvement through self evaluation is |
| 8 | Planning | -monitoring  
- match performance& goals  
- connection between policies and execution  
- policy and planning | -faculty focus on research more than teaching | -the private university uses quality management planning characteristics are used in a different way from the public university |
| 9 | Quality goals | -use appropriate tools to solve problems  
- quality is free  
- organizations succeed through people's talent  
- knowledge management  
- quality of process, product, and service | -improves both administrative and academic departments  
- quality function deployment balances between teaching and research | -old traditions hinder TQM  
- faculty interest hinder TQM  
- lack of team spirit hinders TQM  
- preventing change hinders TQM culture | - faculty members in both universities interpret for the need of a TQM model that requires more research responsibilities, fewer students in classes, and less administrative processes. - faculty in both universities discussed lack of library and data base resources |
| 10 | Strategic Management | - strategic planning  
- strategic objectives, mission, vision  
- leaders shape the future and make it happen  
- agility in responding to threats and opportunities  
- policy and planning  
- strategic business plan  
- align strategic business plan with the organization's processes  
- Prioritization | - TQM helps in designing a mission  
- TQM leads to gradual improvements  
- TQM creates intrinsic motivation for students | |
<p>| 11 | Communication | - quality improvement teams communicate solutions to problems | - faculty resistance to TQM creates a | TQM was not socially authorized since |</p>
<table>
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<tr>
<th></th>
<th></th>
<th>huge gap between employers' requirements and academic institutions</th>
<th>it requires more committee work and less individual benefits for faculty as scholars</th>
<th>-TQM lead to less academic freedom for faculty</th>
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<tr>
<td><strong>12</strong></td>
<td>Teamwork</td>
<td>-quality improvement teams -consensus decision making</td>
<td>-TQM encourages teamwork in committees through innovative and incremental change</td>
<td>-team spirit is hard to achieve since departments compete with each other for university resources -committees try to hinder work more than getting it done -no teamwork in academic departments -teamwork weakens academic departments</td>
</tr>
<tr>
<td><strong>13</strong></td>
<td>Cost</td>
<td>-reduce cost -increase value -resource management</td>
<td>-TQM reduces cost -it reduces training cost for human resources in industry</td>
<td></td>
</tr>
<tr>
<td><strong>14</strong></td>
<td>Product</td>
<td>-conformance to standard -meet customer's requirements -continuous improvement -focus on products and services</td>
<td>-graduates are the product -human resources for industry is the product</td>
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<td>-practice knowledge is the product -communication skills is the product</td>
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</table>
- Product reliability
- Reduce product rejection and scrap

- Leadership
- Training
- Motivation
- Resources
- Value of employees
- Pride
- Self improvement
- Improvement
- Change management
- Encourage innovation and creativity
- Leaders: role model for ethics and value
- Recognition
- Governance

- Leadership is essential for successful TQM
- TQM enhances leadership through empowering faculty members

- Presidents and chancellors in higher education have less authority than CEOs in businesses which hinders TQM
- Training should be substituted by self development

- The public university has more academic freedom
- The private university dean should approve any research paper

Table 12: Results of the empirical study in accordance with TQM
Chapter Five: CONCLUSION

5.1 A New TQM Model for Dubai Universities

The first section of the conclusion includes the characteristics of the new model derived from applicable TQM concepts in higher education and from modifying the inapplicable TQM concepts using traditional management systems like collegiality, self governance, and academic tenure that were reviewed in chapter two. The second section refers to the literature of cross-cultural management in higher education in order to include cross-cultural characteristics within the new model that is based on the context of Dubai. The third section refers to the higher education leadership literature in order to include the role of deans, vice presidents, and presidents within the new model. The final conclusion of the thesis is the new model presented in figure 27.
5.1.1 Applicable and Modified Inapplicable TQM Concepts

Based on the detailed literature review of TQM concepts and characteristics, TQM focuses on processes in which designing and planning processes are essential. Controlling and analyzing documented processes is a second stage which is used to make sure that results based on specific processes conform to standards, otherwise the flow of processes should be improved through a continuous improvement strategy within the organization. After reviewing the literature of the defenders and opponents of TQM in higher education, and based on the interpretations and data collected from the empirical study, it is concluded that organizing, documenting, and continuously improving administrative processes in academic departments is positive and helpful for academics. For example, many faculty members complained about the time they spend filling out forms and writing reports related to students' performance and advancement, which in many cases include the same information. When those administrative processes are documented it is easier to compare the administrative tasks that they require, and eventually some of them may be combined or even eliminated and this would reduce administrative tasks for the faculty members who can then concentrate on their main duties of teaching and research. Contrary to this, the main processes for academics presenting the core activities in higher education of 'teaching and research' should be based on professional autonomy. In this regard, the concept of empowerment and leadership from TQM should be used here since faculty members are professionals who are the most aware of their teaching and research processes. According to the new TQM model they should have the total freedom of designing the syllabi of their courses, teaching tools, assessment methods and marking criteria, and faculty members could plan their pedagogical methods based on the learning outcomes that the faculty set. Those learning outcomes should meet the strategic objectives of the faculty which is actually based on the mission and vision of the university.
The main tasks or processes that are required from a faculty member in Dubai according to the CAA standards are teaching, research, administrative responsibilities, social responsibilities to the community, and leadership (CAA, 2013). When administrative processes are standardized, documented, and continuously improved in a manner to reduce steps and eliminate useless processes; faculty members would have more time and energy to work on research, update material, and improve teaching based on academic freedom and self-governance. Eventually this leads to them accomplishing their teaching and research tasks successfully through full motivation which reflects on students' performance, and all together they can serve the community and society as the CAA and this profession ethically requires. Milakovich (2006) considers that empowering people is essential for a successful TQM, where people who own their processes and form them based on what they believe is true perform at a very high level and benefit the whole organization.

This new model includes both the rights and responsibilities of faculty members. The occupation of academics is called a profession because it has distinctive privileges, but also special obligations (Shils, 1997, p.10). The UNESCO international covenant includes the duties and responsibilities of faculty members that are integrated in the new model. Therefore, according to the new model, the responsibility of every faculty member consists of receiving, assimilating, and discovering knowledge, interpreting and transmitting knowledge about methods of discovery, validating knowledge, basing teaching on research findings, ensuring the fair discussion of contrary views, respecting the academic freedom of others in the academic community, ethical and professional standards in scholarship including teaching and research, responding to contemporary society's problems, and preserving the world's historical heritage.
All of the above characteristics of the new model could lead to ultimate results in higher education being presented in a higher quality of teaching and research. TQM requires controlling and measuring results to take corrective action in the case of non-conformance with standards. In higher education faculty members are professionals who know how to check the results of their performance, and this can be done through two assessment methods according to the new model: first by assessing students' learning through methods that the faculty member can decide based on the content and the learning objectives of each subject, and secondly by, the self-evaluation of teaching methods and self-improvement through pedagogical research in one's fields. Professors may have a teaching process that they use in their classes. Figure 28 is an example of a teaching process generated from this thesis, although each professor may have his own teaching process.
Faculty empowerment/ownership/self-

Preserv

Help/defend faculty

Leaders’ role

Cr

Faculty Responsibility

Base teaching on research findings

Re

Teach the information and skills more

No

Did students learn the information and skills?

Di

Figur

Start

Sever

Co

Committees support faculty
For self-evaluation and self-improvement, faculty members are recommended to focus on six objectives equally, as displayed in figure 29.

Figure 29: Six key components for faculty high performance

In TQM, customers are always right and their satisfaction is essential. Accordingly their feedback should always be checked for the sake of continuous improvement. In the literature of TQM in higher education there is a lot of debate about identifying the customers in higher education. According to Antony and Pierce (2002), higher education customers are both students and businesses, and the products are 'practice knowledge' and 'communication skills'. According to
Green (1994), TQM should focus on improving the quality of programs in higher education since it generates human resources that he considers as the products of higher education. Sirvanci (2004) claims that a secondary student enrolling in higher education should be considered in the same way as raw material that goes through the production process from one step to another until they graduate and become products for employers and compete with one another in the market. On the other hand, Pfeffer and Coote (1991) consider that a student is an "active participant" in education and not a customer or a product. For some scholars the student is the customer, and higher education institutes should attract those customers if they provide a valuable quality of education. To others, customers are employers and students are products presented as graduates, who may or may not attract employers.

According to the new model of this thesis, higher education is completely different from industry and it can neither consider students as customers nor as products. Accordingly, the customer and the product are the same, which is 'community development'. When professors, top administrators, and universities work to serve community development the product would be looking for community development as an ultimate result.

According to Kosh (2003), professors are sometimes assessed at the end of the semester, and with TQM they need to be assessed continuously and maybe on daily basis, which is very hard. Assessment is essential for TQM. This new model does not deny the importance of assessment, however and based on reviewing the literature of the defenders and the opponents of TQM in higher education and the empirical study the assessment is modified. Assessment includes process assessment and faculty assessment, and both categories are included under one component in the new TQM model which is self assessment. Faculty members are professionals who are the best
people to evaluate their performance and look for self-improvement through research in order to enhance their pedagogical skills and update their subjects' material, as discussed above. Student assessment is very helpful as many faculty members explained, particularly when they look for areas for improvement in their teaching and communication skills. This model includes student assessment of faculty members' performance, however the process should be managed by the faculty members themselves who can only view the results and look for improvements accordingly.

Wiklund et al (2003) criticize TQM for requiring a lot of reporting and too many details, as it takes time to collect statistical data that might not be useful after a short period of time and quantitative assessment is not appropriate for many scholarly and teaching activities. Reporting is also modified in the new model, and it is confined to reporting about student performance based on each university's policies. However, the model does not include any reporting about faculty performance since it is based on self evaluation for self improvement by each faculty member individually.

Continuous improvement is based on self evaluation, and this is a process that faculty members can manage and work on individually every semester based on Deming's PDCA cycle. Every faculty member plans for the semester, and at the end of the semester he/she can check whether all learning outcomes are achieved, and based on this improvement plans can be set.

Training is part of TQM but McCulloch (1993) argues that training for faculty should be substituted by self-development. The new model adopts this concept and substitutes training in TQM with self-development through self evaluation and continuous improvement.
Brown and Koenig (1993) argue that the major difficulty of TQM implementation in an academic department is that it meets with a lot of resistance from faculty since it causes more committee work and offers less professional benefits. The new model gives deans, top administrators, and committees an essential role which is supporting faculty and the teaching and research process. This happens by reducing the number of students in classes, eliminating teaching overload, and reducing administrative processes that consume faculty members' time in order to allow them to work on research and their teaching more. Their role is to support research by making learning and research resources- including hard copies of books and journals and access to data bases,- available for students and faculty members.

The CAA requires administrative tasks besides teaching and research from faculty members, but in some cases universities exploit this standard and require a lot of administrative task and teaching overload in order to reduce the cost of hiring more academic and administrative staff. It could be possible that reducing costs is not bad, but when it adversely impacts research the cost that universities and the society pay would be much higher.

According to Birnbaum (1988), the collegial model is based on trust between all member of higher education including not only faculty members and top administrators but also students and administrative staff. The new model integrates the characteristics of the collegial model where the role of deans is to advocate academics and represent their interests within a self-governance organizational structure (Abbott-Chapman, 2005; Crebert, 2000). The UNESCO international covenant on academic freedom focuses on professional autonomy and academic freedom in order to guarantee the fulfilment of higher education functions. According to the (UNESCO, 2013), faculty
members should be protected from any source of threat to their academic freedom through appropriate academic leadership, collegiality, and self governance.

The new model requires academic tenure within its collegial characteristics. Tenure has a major positive impact in shared governance. Carmichael (1988, p. 453), argues that "tenure is necessary because without it incumbents would never be willing to hire people who might turn out to be better than themselves". Rosovsky (1990) also links tenure with collegiality by stating that collegiality develops gradually and cannot be created spontaneously or instantly. It needs time to be built, and tenure is one of the major reasons for building collegiality where people belong to one community that they care about. This commitment needs a powerful tool, which in this case is tenure. Tenure includes less interference with one's work, a learning environment of professors from the two genders, a guarantee from age discrimination, and a social contract (Rosovsky, 1990).

Teamwork is essential in TQM, and this cannot be achievable in higher education according to Kosh (2003) since committees try to hinder work more than they just work on getting it done. Contrary to this, our new model suggests that teamwork can be used for peer review in two ways, first through peer observation of teaching which is optional, and the results should be confidential between the observer and the observed faculty with one aim of continuous improvement, and secondly through a peer review of research. Considering that teamwork is a requirement of TQM and that shared governance is essential in the collegial model and the fact of committees in higher education, the three can be combined together to serve the quality of teaching and research in higher education. This could be done by giving higher education committees the role of shared governance which is adopted from the collegial model since some universities in Dubai are not yet doing it. In a shared governance model there is an effective decision making process due to collegiality,
motivation, power, and attaining communality that makes all members focus on the university's benefits in decision making instead of individual benefits (Giamatti, 1988). Differences are put aside which help in creating a common vision for the institution with a broad-based acceptance focusing on collectivism as a main source of effective responsibility and authority (Giamatti, 1988).

In TQM value is based on increasing quality and reducing cost, however in the new model value is created by enhancing research. It is essential to focus on research in higher education which leads to creating knowledge and community development, not only research done by faculty but also students who should be encouraged to conduct their own research, whether through assessment methods or even through encouraging them to publish in order to investigate, be more involved in inquiry, and to question all that they study and review.

In conclusion, Kanji and Malek (1999) argue that successful results in higher education institutes implementing TQM are the outcome of teamwork, leadership and continuous improvement. Teamwork in higher education is represented through support between academic and peer review, and leadership is essentially attained about represented through self-governance, including self-evaluation and self-improvement. Sirvanci (2004) identifies a number of challenges that face TQM in higher education such as customer identification, leadership, organizational and cultural issues, the role of the student, and performance measures. This new model modifies those concepts and makes them applicable for higher education by using TQM along with traditional management systems to create the best system for the university. Sirvanci (2004) identifies three factors that hinder TQM in higher education: old traditions, faculty interest, and lack of team spirit. He argues that old traditions that have been built in education have deep roots which prevent change, especially when changing the whole culture to apply TQM. Contrary to this, the new model uses
traditional management systems to help universities regain what they lost within the changes that happened to higher education with new public management, TQM, and all of the other business models. The traditional university management concepts add a lot of value to the thesis, where the new higher education quality management model that is the result of this thesis replaces the inapplicable concepts of TQM with traditional management concepts of the universities in order to preserve professional autonomy and academic freedom.

5.1.2 Cross-Cultural Management within the New Model

Globalization is impacting the contexts in which universities now constitute their multicultural populations, thus leading to ethnic, religious, cultural, and social diversity. The literature about multi-cultural staff and diversity in universities is also important in designing the new management model of the thesis. Although the context of the study is Dubai, universities in this Emirate are very diverse and include faculty and students from hundreds of nationalities. This section integrates cross-cultural characteristics in the new model.

Bartlett (2000), and Rayner and Gunter (2005) argue that diversity is not a problem that should be resolved in higher education, and instead it is a resource that brings a lot of value to the university context. According to Alexander (2004), cultural diversity adds many pedagogical values to higher education through several distinctive pedagogies which contribute to academic professional development for faculty members and leaders. “The implications are that there exist or might be constructed different forms of pedagogy, a combination of which educationists will need to acquire as they develop their own professional pedagogic expertise” (Rayner, 2009, p. 437). Therefore this model uses cultural diversity in universities as an advantage for academic freedom. When faculty
members with diverse backgrounds are granted academic freedom, they can add a lot of pedagogical values through several distinctive pedagogies in teaching, research, peer observation, and peer review that are all components of the new TQM model. The pedagogical values that are the result of cultural diversity will lead to academic development for faculty, leaders, and students will eventually serve the community development.

According to Hofstede (1991), leaders in a multi-national context should not only learn the courtesies and customs of people who work with them but also their mind-sets, management philosophies, and national characters. In an organization that is culturally diverse, leaders have a critical role. They may face many challenges that require a lot of enforcement of organizational values (Moran, Harris, and Moran, 2007). People who belong to minority cultures want to be valued and not just tolerated in order to work effectively (Kouzes and Posner, 1995). According to Lane and DiStefano (2000, p. 183), this includes awareness of “how another person’s culture affects his or her behaviour” in addition to recognizing how our behaviours are shaped by our culture. The model requires leaders’ cultural awareness through mindfulness and carefulness within a cross culture in which leaders should show respect and empathy to each other’s cultures and the cultures of all individuals.

The new model also requires commitment from senior administrators as an essential behaviour. When differences and difficulties arise, they should commit to preserving a successful relationship between diverse individuals. Trompenaars (1993) argues that commitment, mindfulness, and caring should have continuity over time where both leaders and individuals should have to continue developing and enhancing their cross-cultural skills. This can happen through learning about the major cultural characteristics of Emirati people and the expatriates who live in Dubai based on the
cultural dimensions of Hofstede (1991), as discussed in Chapter Two. Leaders should distinguish between people who are inner-directed and people who are outer-directed, since this affects their view of the world, their working environments, and their careers.

5.1.3 Leadership within the New Model

Higher education leadership is included in this new model since it has an important role among senior administrators to help academics preserve academic freedom and to more sensitively administer a quality management programme. The higher education context is unique as a social institution and leadership within this context is also unique. This section explains the role of deans, vice presidents, and presidents in the new model as supporters of faculty members. They send their messages and defend them and would be their agents in most circumstances.

Individual leader's skills vary by level of education and knowledge, and therefore they should be at a very high level in higher education (Drucker, 1955). Ramsden (1998) argues that appropriate leadership in higher education positively impacts faculty members in their role to achieve a high quality level of teaching and research. Academic leaders are different from others since they are in a position of teaching and research which constantly enhances their education and this would distinguish them from other types of managers. According to Ramsden (1998) when 'executive leaders' like vice chancellors in higher education support faculty and communicate clear ideas of development and change to them they help them in better teaching and more effective research processes.
The role of leaders in the new model consists of empowering faculty member and creating ownership on what they teach and the way they teach. The model also emphasizes the political intelligence of academic leaders to keep politics away from the university as Bezzina, Starratt and Burford (2009) discuss in their research. The model also requires leaders to use politics to get the best for the university such as seeking resources and generating opportunities for faculty members, as discussed by Ramsden (1998). Creating the right vision and working on achieving it regardless of all the challenges that they may face is another essential job of higher education leaders according to the new model. The most important vision is building the community and creating an educated environment beyond the university, and leaders need to have clear objectives to achieve this (Murphy, 2002).

The model focuses on five types of ethics that higher education leaders should be aware of, namely provisionality ethics where leaders should be aware of the limits of their judgments, truth searching ethics where relativism is not accepted, integrity ethics where leaders should limit personal perceptions, humility ethics and considering personal fallibility as a factor of human beings and not failure, and humanistic education ethics where the duty of leaders is helping people around them to help themselves (Bottery, 2004).

Therefore, according to the new model the main role of leaders is in the way they support faculty, and create a culture of 'self-leadership' among academic staff through professional autonomy and scholarly activities. In universities, leaders have to inspire, develop, manage, and support academic colleagues (Ramsden, 1998, p. 4). They should have professional ethics, be aware of their judgments, search for the truth, and limit their personal perceptions. According to Davies, Hides, and Casey (2001, p.1025), leaders have an important role in implementing strategies,
communicating policies and creating a vision. Empowerment, managing politics, and creating a vision are three important leadership skills in higher education that this model focuses on.

In summary of this thesis, changes that happened in the higher education management context were mainly caused by the increase in the number of students in universities and the decrease in public funds, both of which happened simultaneously (Deems, 1998; Shils, 1997). Those changes had a great impact on the management systems in universities leading to the erosion of the collegial model including shared governance, academic freedom, professional autonomy, and academic tenure. New management concepts emerged like productivity, revenues, employment flexibility, moderate evaluation of students, pedagogical issues and many others (Richford, 2003). The change from the collegial model to business models was not the choice of higher education. When public funds were restrained universities had to use marketing strategies to attract funds. Accordingly, the collegial model was gradually ignored and business models took place its. Indirectly, higher education institutes changed and became similar to training centres preparing students for industry. This new model focuses on both teaching and research as learning methods and learning results. Students can still learn and be trained to be successful and keep pace with industry and business development, but the collegial model is also brought back since it improves the quality of teaching and research and leads to enquiring students and intellectual citizens, all of which will serve community development. The new model consists of applicable TQM concepts in higher education along with modified and inapplicable TQM concepts using traditional management systems like collegiality, self governance, and academic tenure. The characteristics of the new model basically include processes, results, assessment, reporting, continuous improvement, planning, value, teamwork, and faculty responsibilities. Cross-cultural management characteristics are included within the new model which is based on the context of Dubai, a place in which universities have a
lot of cultural diversity among faculty members and students. The role of leaders like deans, vice presidents, and presidents is also included within the new model.

5.2 Thesis Implications

5.2.1 Implications for Theory

This thesis has a considerable number of implications on the TQM theory and concepts. It recommends ample adjustments in TQM to accommodate the context of higher education. Since TQM is a business model it cannot be applied fully to higher education, yet it includes many concepts such as continuous improvement, leadership, and strategic objectives that would serve higher education. Other concepts like assessment, monitoring processes, documentation and standardization, assessment of results, and conformance to standards are modified to suit higher education management systems as discussed above.

5.2.2 Implications for Policy and Regulations

The new model of this thesis modifies many TQM characteristics and replaces them with concepts from traditional management university systems like collegiality, shared governance, and academic tenure. However, at the same time the model takes into consideration the requirements of the Ministry of Higher Education in the UAE and integrates the relevant CAA standards for the sake of making this model applicable to any accredited university in Dubai. On the other hand, this model includes some characteristics that could be implemented in a better manner if some regulations were
introduced by the CAA such as eliminating teaching overload for faulty members and requiring that universities make more resources available for professors and research students. In addition, some policies within the universities need to be modified to help with the successful implementation of the new model, especially in this unique context of the Arab world, and this would require the government establishing policies for its universities instead of importing them.

5.2.3 Implications for Practice

Through the survey and interview instruments that this thesis used as part of the data collection method, it was found that some practices in the university are not controlled by or derived from any regulations or policies. In some circumstances, certain practices contradict regulations and circumvent policies like creating teaching overloads to reduce costs even it impacts negatively on research. Consequently the new model of this thesis should have practical implications for both faculty members and senior administrators. Academic managers in ministries and universities have to understand that academics should be independent. Academic freedom should be embedded in the language they use, the forms they create, and all of the issues they deal with. Faculty members should also have responsibility for self-evaluation, self-development, and continuous improvement. Those practices make their career a unique profession that doesn’t require standard processes or reporting systems as discussed above.

5.2.4 Implications for Future Research

Some higher education management systems used in the US, UK, and Australia are imported to Arab countries like the UAE. Western models do not necessarily fit contexts in the Arab world, and
instead of redesign there should be a design for new models that fit the culture of each country in the Arab world. In addition, Arab countries that are still in early nation-building stages like the UAE are in a transitional period which requires future research on transition management.

This research focuses on building a new management model in the academic departments of Dubai universities, however future research should be done in administrative departments and with students. The literature review discusses some successful implementations of TQM in administrative departments in many universities in the west as well as in the Arab world. Those models were not modified, and thus they were resisted in many cases. Accordingly, future research can study the possibility of modifying the TQM model in order to fit the administrative department in higher education successfully and without resistance. The applicability of this model can be also studied focusing on students' perspectives and collecting data from them. It is very important to look for a management model that enhances teaching, learning, and research from the perspective of faculty members and students simultaneously.

There is also a recommendation that future research be done in other universities and other Emirates of the UAE, as well as many other parts of the Arab world and other countries of the world. In addition to this, this model discusses many aspects and each of these can be discussed in more details in terms of their applicability in future research. It would be beneficial to take each of the new TQM model concepts and study its advantages and disadvantages from the perspective of faculty member, students, and top administrators.

In summary, although many researchers argue that the total quality management model should be modified in order to fit the higher education context, yet there is no quality management model
which is truly modified to take into account the nature of higher education and the need for professional autonomy including academic freedom and peer review. This thesis fills in this gap in the literature and designs a new TQM model for higher education. This model is based on TQM concepts, yet depending on the interpretations and collected data irrelevant TQM concepts are modified using the traditional university management models in an attempt to resolve the paradox and tension between TQM and those traditional models. The new model also requires commitment from senior administrators as an essential behaviour. When differences and difficulties arise, they should commit to preserving a successful relationship between diverse individuals. This can happen through learning about the major cultural characteristics of Emirati people and the expatriates who live in Dubai. Leaders should also distinguish between people who are inner-directed and people who are outer-directed, since this affects their view of the world, their working environments, and their careers. In conclusion, the contribution that this study has made to the literature of quality management in higher education is a new model of TQM that doesn't damage the scholarly values of higher education and enhances professional autonomy, including academic freedom and academic quality in teaching and research.
References


Appendix A: CAA standards for Licensure and Accreditation (Academic department)

4. Faculty and Professional Staff
The institution demonstrates that it has an appropriately qualified faculty and administrative and technical staff of a sufficient number to meet all requirements of its programs, services, and activities and to achieve its mission. All faculty members and professional staff hold appropriate credentials; their preparation and qualifications are suited to the field and the level of their instructional assignments or field of activity. The institution has orderly, transparent processes and policies for recruiting, developing, evaluating, promoting, and retaining members of the professional staff and faculty members, who exemplify diverse educational and cultural backgrounds.

4.1 Faculty Handbook.
The institution maintains a Faculty Handbook that covers the range of topics specified in Stipulation 1C: Faculty Handbook. The institution implements these policies and procedures and distributes the Faculty Handbook to all full-time and part-time (adjunct) faculty members.

4.2 Staff Handbook.
If professional staff are not included in the Faculty Handbook, the institution maintains a Staff Handbook that covers the range of topics specified in Stipulation 1D: Staff Handbook. The institution implements these policies and procedures and distributes the Staff Handbook to all members of the professional staff.

4.3 Recruitment and Records.
The institution:
4.3.1 has effective polices and processes for advertising, recruiting, and appointing faculty and professional staff members and maintains records of these processes;
4.3.2 has an assigned individual to coordinate and process matters relating to the appointments of faculty and staff: immigration and residence permits, benefits, evaluation of non-faculty appointees, maintenance of personnel files, etc.;
4.3.3 maintains a record on site for each full-time faculty, part-time faculty, and professional staff member, including official validated transcripts of academic preparation, the signed contract, and all documents required by the Ministry of Labor and Social Affairs in the UAE;
4.3.4 has policies in place regarding the content and maintenance (including backup) of personnel files, and guaranteeing appropriate employee access to his/her personnel file including the right to review the file and correct erroneous information.

4.4 Faculty Preparation.
4.4.1 The preparation and qualifications of all faculty members, both full-time and part-time, are appropriate to the field and level of their assignments and meet the minimum qualifications required for each level, as specified in Stipulation 8: Faculty Qualifications.
4.4.2 For adjunct clinical faculty, the institution adheres to the minimum qualifications specified in Stipulation 9: Adjunct Clinical Faculty.
4.4.3 The institution demonstrates that faculty members are competent in the language of instruction in the programs to which they are assigned.
4.4.4 The institution demonstrates a commitment to achieving diversity in the cultural and educational backgrounds of its faculty and administration.

4.5 Graduate Faculty.

The institution:
4.5.1 demonstrates that faculty members who instruct in graduate programs evidence a strong record of active engagement in research and scholarship related to the discipline covered in their courses or have significant professional experience in applied fields as practitioners;
4.5.2 appoints faculty members as principal supervisors of student research theses who are research-active in their field and have prior supervisory experience;
4.5.3 clearly defines and articulates the eligibility requirements for faculty members teaching graduate courses as distinct from undergraduate courses.

4.6 Staff Qualifications.

The qualifications and experience of all professional staff members are appropriate to the level of their appointment and the duties to which they are assigned.

4.7 Appointment, Compensation, Promotion, and Contract Renewal.

4.7.1 The institution provides faculty and professional staff members with contracts, letters of appointment, or other documents that clearly describe the terms and conditions of employment.
4.7.2 The institution demonstrates that it offers adequate salaries and benefits to attract and retain highly qualified faculty members of diverse cultural and educational backgrounds; it makes available to faculty the salary ranges and criteria for appointment to each rank and for different disciplines.
4.7.3 The institution establishes criteria and procedures for faculty promotion from one rank to another, for renewal of contracts, and, where appropriate, for awarding an extended or rolling contract.
4.7.4 The term of the contract offered after the probationary period provides a reasonable degree of job security for faculty.
4.7.5 The institution has policies in place covering nepotism, inappropriate employee relationships, and other policies appropriate under UAE labor and employment laws.
4.7.6 The institution has a clear policy regarding the handling of legal issues relating to the employment of faculty and professional staff.

4.8 Professional Development.

The institution:
4.8.1 provides faculty development activities that support teaching, research, and scholarship; these activities are regularly assessed to ensure they are appropriate and effective;
4.8.2 provides appropriate support services and professional development and training programs for faculty members in a variety of instructional strategies and technologies in order to foster active student learning;
4.8.3 provides adequate training and support for faculty members in using software related to meeting educational goals;
4.8.4 demonstrates, as relevant to its mission, that faculty members receive adequate opportunities and resources for research and scholarship; for example, publishing or presenting research papers; organizing and participating in national, regional, and international conferences, workshops, seminars, or exhibitions; leaves for sabbaticals and training;
4.8.5 demonstrates that the results of annual faculty and professional staff evaluations contribute to the production of individual and collective professional development plans; 4.8.6 provides professional staff development activities that support staff members’ roles and improve performance; these activities are assessed to ensure they are appropriate and effective; 4.8.7 allocates an adequate budget to support the professional development of its faculty and professional staff, and provides evidence that funds are used for that purpose; 4.8.8 has a structured orientation system in place for newly appointed faculty and professional staff.

4.9 Faculty Workload.

4.9.1 The institution employs a sufficient number of faculty members to effectively deliver the programs it offers, both credit and non-credit, in line with its mission and international norms. 4.9.2 Workload assignments are equitable and reasonable and include the entire range of a faculty member’s responsibilities, such as instruction, advising, committee work, thesis supervision, guidance of student organizations, research, service, and curriculum development. Assignments take into account the number of course preparations, level of courses taught, student enrollments, subject matter, support from clerical and other staff or teaching assistants, and administrative responsibilities.

4.9.3 The institution adheres to the following maxima with regard to faculty teaching assignments:

4.9.3.1 15 credit hours, or equivalent, per semester for non-terminal degree holders teaching in undergraduate certificate, diploma, associate degree and baccalaureate programs (see also Stipulation 8: Faculty Qualifications);

4.9.3.2 12 credit hours, or equivalent, per semester for faculty members with terminal degrees teaching in baccalaureate programs;

4.9.3.3 9 credit hours, or equivalent, per semester for faculty only teaching in graduate programs, or pro-rata for faculty teaching a mix of baccalaureate and graduate courses;

4.9.3.4 6 credit hours, or equivalent, per semester for part-time faculty;

4.9.3.5 6 credit hours, or equivalent, in a summer term.

4.9.4 In exceptional circumstances where teaching assignments in excess of the above requirements (overloads) are inevitable, they are compensated either through reduced teaching assignments in the next regular semester after the semester in which the overload is taught, or through direct overload compensation during the semester in which the overload is taught.

4.9.5 Workload assignments provide for a minimum release time as follows:

4.9.5.1 three credit hours per semester for program coordinators and department chairs;

4.9.5.2 six credit hours per semester for deans;

4.9.5.3 appropriate release time for other major administrative assignments.

4.9.6 The institution recognizes that laboratory, studio, clinical, internship and other forms of pedagogy must be differently accounted for in faculty workload calculations. For example, the instructor of record in a laboratory is typically given one hour of work load credit for every two contact hours in the laboratory.

4.10 Part-Time Faculty.

The institution:

4.10.1 ensures that no more than 25% of the instructors teaching courses in a given program are part-time faculty, unless prior approval is received from the Commission;

4.10.2 ensure that part-time faculty meet the same qualifications for appointment as do full-time faculty;
4.10.3 makes it clear, through part-time contracts and through policy statements, that part-time employment is for specified courses and for a specific semester and is not a continuing appointment;
4.10.4 provides orientation for part-time faculty;
4.10.5 ensures inclusion of part-time faculty in program development, professional development, and other institutional functions;
4.10.6 ensures that part-time faculty have access to instructional materials, including library and copying services, and can effectively provide office hours to meet the needs of the students.
4.11 Evaluation.
4.11.1 The institution conducts annual evaluations of the performance of all full-time, part-time, and visiting faculty members, and professional staff members at all locations, using a variety of measures.
4.11.2 The criteria, methods, and procedures for faculty and professional staff evaluation are equitable and disseminated to all faculty and professional staff members.
4.11.3 Feedback on evaluations is given to personnel and is discussed by both parties.
4.12 Code of Conduct.
The institution’s Faculty and Staff Handbooks identify expectations for faculty and staff conduct that reflect its mission and purposes, recognizing the need for faculty and staff to carry out their duties in a professional, ethical and collegial manner and to respect the culture of the United Arab Emirates.
4.13 Disciplinary Actions and Appeals.
The institution’s Faculty and Staff Handbooks have policies and procedures that allow disciplinary action to be taken against faculty and staff who violate the expected standards of conduct. These policies identify the range of possible actions available to the institution, and specify the procedures for regulating the processes of disciplinary action and for appeal by faculty and staff against disciplinary actions.
4.14 Grievances.
The institution operates a grievance policy and associated procedures; these are available to all faculty and professional staff members.
4.15 Graduate Assistants.
The institution ensures that its use of graduate students as assistants in teaching and instruction takes account of their other academic responsibilities. Graduate students may support the faculty by aiding with class activities (such as practical sessions and tutorials), facilitating group discussions and team-based learning, and offering technical support.
Appendix B: Participant information sheet for faculty members

TITLE: A New Management Model for Higher Education in Dubai-UAE: Quality Management in Alignment with Professional Autonomy

PURPOSE OF THE RESEARCH
This is an invitation to participate in a study conducted by Iman Rabah as part of a Doctorate of Education: Management degree supervised by Professor Eugenie Samier at the British University in Dubai. The purpose of the research is to develop a model of total quality management (TQM) that doesn't damage the scholarly values of higher education and through doing so to enhance professional autonomy including academic freedom and academic quality in teaching and research. The purpose and the objectives of the proposed thesis are addressed through a theoretical and analytical review of the TQM literature in higher education. In addition to that, empirical data and interpretations will be collected from faculty members in order to study academics' perceptions of TQM in higher education.

INVESTIGATORS
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METHOD AND DEMANDS ON PARTICIPANTS
If you choose to be included, you will be asked to participate in completing a questionnaire that will be sent to you by email. The purpose of this questionnaire is to study if there are TQM practices in the academic department within your university and what your opinion of such management concepts is. This questionnaire should only take 15 minutes to complete. Please note that your participation is voluntary and you can withdraw at any time. This study ensures your right to privacy, your confidences will be protected and anonymity will be preserved. Based on the information provided by you through the questionnaire, you may be asked for an interview. The purpose of the interview is to emphasize the impact of TQM practices on faculty members, their teaching, and research. The interview questions are clustered into three categories: Management issues, professional elements, and changes made to accommodate cultural differences in Dubai. This interview should only take 30 minutes. Please note that your participation in the interview is voluntary and you can withdraw at any time. This study ensures your right to privacy, your confidences will be protected and anonymity will be preserved.

For confidentiality and anonymity, there will be no identifiers on the questionnaire and when it is downloaded it will receive a code name or number and will be stored in a locked place to which only I have access. And once the questionnaire is downloaded with a code the original email will be deleted from my computer entirely and my computer is password protected with only me having the password. This is also applicable for any documented answers of the interviews.
POSSIBLE RISKS, INCONVENIENCES AND DISCOMFORTS

Apart from the 15 minutes of your time for the questionnaire and the possible 30 minutes for the interview, you may consider discussing the management system in your university as a possible risk to you; however, your answers should be general and about the system and not specific top administrators, your relation with them, or any of their names. The purpose of the questions in the questionnaire and the interview is to check if the management system that may not be the choice of any of your leaders is allowing for a high quality of teaching and enough time for research. Your involvement in the study is voluntary and you may withdraw your participation from the study at any time and withdraw any data that you have provided to that point. Refusal to participate in the study will not affect your relationship with your university the British University in Dubai.

BENEFITS OF THE RESEARCH
This research attempts to provide a new management model for higher education in Dubai that preserves professional autonomy and academic freedom in teaching and research. Findings from the study will be reported in a doctorate thesis and some sections may be published in educational journals. Confidentiality is assured, and your university and you will not be identified in any part of the research.

ETHICS REVIEW AND COMPLAINTS
This study has been reviewed by the Human Research Ethics Committee of your University. If you have any concerns or complaints regarding the way this research has been conducted, you can contact the Ethics Officer on 000000000 or email 00000000000. Thank you for your interest in this study.
Appendix C: Consent form for faculty members

RESEARCH TITLE: A New Management Model for Higher Education in Dubai-UAE: Quality Management in Alignment with Professional Autonomy

RESEARCHER: Iman Rabah

I have been given information about the research "A New Management Model for Higher Education in Dubai-UAE: Quality Management in Alignment with Professional Autonomy" and discussed the research project with Iman Rabah who is conducting this research as part of a Doctorate of Education: Management degree supervised by Professor Eugenie Samier in the Academic department of my university.

I have been advised of the potential risks and burdens associated with this research, which include discussing the management system, the quality of teaching, and the quality of research in your university; however I have been advised that the research is looking for answers about the management system in general and not individual administrators or names to be mentioned and the focus is about the impact of the management system on teaching and research and the time given to each. Also, I have had an opportunity to ask Iman Rabah any questions I may have about the research and my participation.

I understand that my participation in this research is voluntary, I am free to refuse to participate and I am free to withdraw from the research at any time. My refusal to participate or withdrawal of consent will not affect my treatment in any way/my relationship with my university or my relation with the British University in Dubai.

For confidentiality and anonymity, there will be no identifiers on the questionnaire and when it is downloaded it will receive a code name or number and will be stored in a locked place to which only the researcher has access. And once the questionnaire is downloaded with a code the original email will be deleted from the researcher's computer entirely and the researcher's computer is password protected with only her having the password. This is also applicable for any documented answers of the interviews.

If I have any enquiries about the research, I can contact Iman Rabah on 00971508518382 or Eugenie Samier on 0097144461343 or if I have any concerns or complaints regarding the way the research is or has been conducted, I can contact the Ethics Officer, Human Research Ethics Committee, Office of Research in my university on 0000000000 or email 000000000000000000.

By signing below I am indicating my consent to participate in the research discussed above through (please tick).

☐ A questionnaire

☐ An interview

I understand that the data collected from my participation will be used for the purpose of the Doctorate thesis of Iman Rabah and I consent for it to be used in that manner.
Signed Date
................................................................. ....../...../.....
Name (please print)
.................................................................
Appendix D: Questionnaire

Study on Total Quality Management (TQM) in Dubai Universities

This questionnaire is designed for research purposes for a doctoral thesis at the British University in Dubai (BUiD). The purpose of this questionnaire is to study if there are TQM practices in the academic department within your university and what your opinion of such management concepts is. Below is a table that gives a brief overview of TQM characteristics that will help you to answer the TQM related questions. This questionnaire should only take 30 minutes to complete. Please note that your participation is voluntary and you can withdraw at any time. This study ensures your right to privacy, participants confidences will be protected and their anonymity will be preserved.

If you have any questions or clarifications, please contact me on: 100014@student.buid.ac.ae
**Key TQM Characteristics:**

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**Iman Rabah**

**EdD Candidate- BUiD**
Section 1: General information about you and your faculty

21. What is your gender? Please select with an X.
   Male ____  
   Female ____

2. What is your marital status? Please select with an X.
   Single ____  
   Married____  
   Divorced____  
   Other ____ , please specify: _____________________

3. How many children do you have? ________________

4. What is your current position? Please select with an X.
   Instructor ____  
   Assistant Professor ____  
   Associate professor _____  
   Full Professor _____  
   Other _____ , please specify: ____________________________

5. How long have you been in an academic position at any higher educational institute? ________

6. How long have you been in an academic position at your current university? ____________

7. Are you an expatriate? ______  If yes, how long have you been in Dubai? ______
Section 2: Career Related Questions

8. Are you satisfied in your job at your university in terms of the management practices related to your teaching and research?

Generally satisfied
Neutral
Generally dissatisfied

Please explain why? Are there any related TQM practices? (Please refer to the TQM characteristics table)

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

9. Are you satisfied with your organizational policies?

Generally satisfied
Neutral
Generally dissatisfied

Please explain why? Are there any related TQM practices? (Please refer to the TQM characteristics table)

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

10. How would you rate the quality of teaching and learning at your university?

Poor
Good
Very Good
Outstanding
Please explain why? Are there any related TQM practices? (Please refer to the TQM characteristics table)

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

11. Are you able to publish in your field on an international and regional level?

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

For each of the below, please provide the requested information and identify whether the management policies or procedures at your university have negative or positive impact.

12. How many peer reviewed articles do you publish every year (on average)? ________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

13. How often do you publish peer reviewed books (on average)? ________
________________________________________________________________________________
________________________________________________________________________________

14. How many academic conferences do you attend every year? Please specify if local, regional, or international conferences __________
________________________________________________________________________________
________________________________________________________________________________
15. Does your university apply TQM practices? If yes, are those management practices supporting, creating barrier or have no effect on these scholarly practices? (Please refer to the TQM Characteristics table).

________________________________________________________________________________

________________________________________________________________________________

________________________________________________________________________________

16. Is there any type of standardization for Syllabi, processes and/or assessment criteria at your department and does that affect you positively or negatively? (Please refer to points 3.1 -3.8 in the TQM characteristics table).

________________________________________________________________________________

________________________________________________________________________________

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Appendix E: Interview Guide

Study on Total Quality Management (TQM) in Dubai Universities

This interview is designed for research purposes for a doctoral thesis at the British University in Dubai (BUiD). The purpose of this interview is to study if there are TQM practices in the academic department within your university and what your opinion of such management concepts is. Below is a table that gives a brief overview of TQM characteristics that will help you to answer the TQM related questions. The interview questions are clustered into three categories: Management type issues, professional elements, and changes made to accommodate cultural differences in Dubai. This interview should only take 30 minutes. Please note that your participation is voluntary and you can withdraw at any time. This study ensures your right to privacy, participants confidences will be protected and their anonymity will be preserved.

If you have any questions or clarifications, please contact me on:
100014@student.buid.ac.ae
Iman Rabah
EdD Candidate- BUiD
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### I. Management type issues:
1. How would you describe the management practices at your university? Does your university use any TQM practices? What effect does this have on your teaching and research? (Please refer to the TQM characteristics table)

2. The TQM model includes all the characteristics listed in the above table. Do you believe that this model is applicable to higher education in all its aspects? If not, what characteristics are not applicable? (Please refer to the TQM characteristics table)

3. How would you describe educational leadership at your university? Are there any TQM practices? (Please refer to points 2.1-2.6 in the TQM characteristics table)

4. How do people and specifically faculty members contribute to the quality of education at your university?

5. How are policies and strategies designed, how would TQM practices impact policies and strategies? (Please refer to the TQM characteristics table)

6. How do your university's resources contribute to the satisfaction level of faculty, staff, students and the community? What would the impact of TQM be in managing resources? (Please refer to points 6.1, 6.2 in the TQM characteristics table)

7. How does your university measure faculty satisfaction and alignment between their personal ambitions and the university's objectives and mission? What is your opinion about that?

8. How do you describe the role of faculty committees and the communication within those committees?

**II. Professional elements:**

9. How does your university assess its contribution to the community of Dubai specifically and UAE, and the Middle East generally?
10. How do you define academic freedom in higher education? Do you think that TQM implementation affects academic freedom and if so, in what ways? (Please refer to points 1.1-1.3 in the TQM characteristics table)

11. Is professional autonomy important in higher education from your point of view? In what ways do you think that TQM implementation affects professional autonomy, if at all? (Please refer to the TQM characteristics table)

12. What are the scholarly quality standards in your opinion and do you think that TQM practices would hinder or support those standards? (Please refer to the TQM characteristics table)

13. To what extent is peer review essential at your university? Do TQM practices facilitate peer review in your opinion? (Please refer to the TQM characteristics table)

14. Is the management system ensuring that you have enough hours for your teaching and research like course updates and in-depth research? In your opinion, what would the impact of TQM practices be in this regard? (Please refer to the TQM characteristics table)

15. Is the management system increasing or decreasing the number of resources (hard copy and electronic books and journals)? In your opinion, what would the impact of TQM practices be in this regards? (Please refer to the TQM characteristics table)

16. What is the requested amount of reporting on your academic activities? In your opinion, what would the impact of TQM practices be in this regard? (Please refer to points 3.1-3.8 in the TQM characteristics table)

17. Are there people in management interfering in teaching and research in disciplines that they are not familiar with?

18. To what extent do your academic responsibilities disrupt your family life?
19. Do you get enough time to give to each piece of research you're working on?

20. How often do you update the material of the courses or subjects you teach?

III. Changes made to accommodate cultural differences here:

21. Did you have an academic position in your home country or somewhere else before moving to Dubai? If yes, what country?

22. Do you have any administrative experience in higher education in a cross cultural context?

23. Is your university management system here similar or different to the management systems in your previous universities?

24. How easy or hard for you was it to accommodate cultural differences in Dubai?

25. Did that affect your performance in teaching and research? How?
Appendix F: Access to academic policies request in the public university

Registrar

The 00000000 University 00000000000000000000

Dubai, UAE

Based on the ethical approval I received from 00000 to conduct part of my thesis research in the university. I kindly request a copy of the policies and processes related to the academic department. I assure that I will treat the information in confidence and it will not be deterrent to the university.

Thank you,

Iman Rabah

Doctorate of Education Candidate