

Quality Management and Excellence in Higher Education: Toward Developing a Generic Model

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Abstract

Quality improvement in education, learning and research at universities has attracted the attention of many leaders of higher education in different societies. The purpose of this article is to examine how modern quality management approaches could be applied at universities in order to improve education, learning and research. To this end theories and models of quality management in higher education in the first decade of the third millennium have been reviewed. In addition, the role higher education leaders should play to enhance quality of their organizations has been highlighted. This study also reviews the way both total quality management and EFQM models are used in higher education. Finally, a comprehensive model that is based on learning organizations and puts an emphasis on the cooperation as well as collaboration of main stakeholders of higher education has been suggested.

Introduction

According to a great number of researchers, higher education is the leverage for creating opportunities and flourishing modern economic and social systems; and the future of these systems is highly dependent on the nations' ability in providing and maintaining the quality of their higher education systems. Today, the fast pace of change in different areas of life has necessitated the constant improvement in training, learning and research in order to respond to increasing demands of societies; furthermore, the concern that the current education system lacks enough capability for preparing trainees to live and work in the 21st century has motivated societies to seek after suitable solutions to redesign their higher education systems (Dejager and Nieuwenhuis, 2005:251). Therefore, it sounds quite natural for today's societies to make an effort to improve their training institutions incessantly and lead universities towards greater excellence. As a case in point, this means more efficient and more effective management of universities. Taking modern approaches of management into consideration, this article intends to provide a theoretical framework for improving management at universities.

Two Views towards Management at Universities

For the last two decades, quality improvement at universities has been placed squarely on the contemporary agenda; this trend dates back to the late 1980s. Since then, the application of quality models common in industry has attracted the attention of theorists and practitioners of higher education. As a corollary, the use of this approach at universities has been analyzed and discussed in the literature of higher education (Srikanton and Dalrymple, 2000: 215). The development of higher education requires higher productivity of university services as well as flexibility in organizational structure of these social institutions. The idea of quality management at universities is mostly concerned with the application of the tools and techniques by means of which these organizations could be enabled to optimize all aspects of their services. These tools and techniques put the means of management improvement at university leaders' disposal so that they could manage their organizations more efficiently and effectively and also fulfill various expectations of different stakeholders. Through a general

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analysis, two different types of quality of higher education could be taken into close consideration. Although both models enhance educational standards, their differences have some outcomes. These two models are two different managerial methods which have ideological origins. The two models to quality are mentioned in Table 1.

Table 1: Quality Model

Type One Quality	Type Two Quality
<ul style="list-style-type: none"> • Efficiency • Emphasis on measurable results • Binding fixed, well-specified procedures • Tight coupling: observing hierarchy, low trust culture • Compliance, punishment in case of errors • Motivate by reward & punishment (extrinsic motivation) • Learning based on one-way communication • Linear and simple view toward social world (cause and effect) • Rational view of communication and planning 	<ul style="list-style-type: none"> • Effectiveness • Emphasis on processes • Flexible procedures • Loose coupling: group work, trust culture • Creativity, errors are necessary for learning • Self-actualization: (intrinsic motivation) • Learning based on two-way communication • Considering complexity of tasks and that social interactions makes effects unpredictable • Communication with the purpose of awareness and sense-making

Source: adopted from Knight and Trowler (2000)

As it is mentioned in the table, in the first attitude the concept of quality has an intuitional nature and related to fundamental theories of university life during Cultural Revolutions of 17th century in the West. This view does not comply with the common management paradigms emphasizing on contingency and complexity theories. Nevertheless, it is congruent with clearly defined, repetitive and stable human activities. This attitude to quality is suitable for the production lines of factories and barracks that need higher levels of stability. It is also in harmony with some higher education activities such as the registration of students and keeping their records that call for some definite and constant procedures. But even in such cases, relying too much on this method of management, due to the lack of trust in employees on management side and the exertion of excessive and close control on them, has caused some sort of self-alienation and fatigue among those employees who do not show much reaction to nonfinancial matters (Knight and Trowler, 2000:110).

So, it could be concluded that the first view towards quality is not at all suitable for managing educational and research activities of faculty members the nature of whose work and activities is complex, non-repetitive, situational and based on professional decisions. Studies show that knowledge workers such as university professors, social aid workers, physicians and nurses choose their careers just because of non-repetitive, complex and independence-in-decision-making nature of their jobs. Their motivation is to reach the acme of job satisfaction the end of which is self actualization. Despite the fact that compensation as well as extrinsic motives such as workplace situation and coworkers' relationships are considered really important factors, they don't play any important or motivating role for the group in case. It should be pointed out that the absence of such factors would result in their dissatisfaction and not choosing these jobs as their careers. It seems that the most important

motive for the university professors and other professionals is independence in applying their professional authority. Faculty members require a level of authority at which they could put their professional judgments into practice. Their decision making authority means independence in doing their job tasks. When academies do not have enough independence and lose their privileges due to some control on what they do, it would result in the destruction of knowledge dynamics. As a result, compensating academies would not lead to the expected results; that is educational quality and learning enhancement (Faghihi, 1379:12).

More serious problem with the first model of quality management is that it is not compatible with critical situations. The organizations that have to adapt continuously with changing environment must be entrepreneurial, flexible, creative and adaptable; besides, these characteristics must be preserved at all levels of management. As a result, the first model of quality could probably be used for some logistic activities; however, it is not suitable for educational and learning oriented activities at all.

Total Quality Management in Higher Education

The application of total quality management in higher education has attracted the attention of theorists since the end of 1980s. To some authors, total quality management is a unique insight into increasing organizational effectiveness; an insight with a strong theoretical basis that is also an approach to improve organizational performance directing people and organizations in fulfilling their tasks.

In the literature of quality of higher education, there exists conflicting views regarding the application of total quality management approach at universities. Srikantan (2006:16) believes that total quality control model is not a practical model for educational departments of universities. Reviewing the literature of the field, he refers to the other quality models which are to be dealt with in the rest of the article. On the contrary, Dejager (2005) contends that philosophy as well as value system of TQM approach are consistent with the nature of different activities of higher education (scientific and logistic). Basically, one of TQM's assumptions is that organizations must be responsive to the expectations of those who are to be served. Taking on this end, organizations appraise their own performance in order to find out the extent to which they have fulfilled the needs and desires of their recipients of services. TQM is a culture which is in agreement with professional organizations such as universities. In such a culture, all university staff from managers to faculty members to employees work for the satisfaction of recipients of academic services that are students. This satisfaction means the improvement of educational and research quality at universities (Dejager & Nieuwenhois, 2005:253).

One of TQM's assumptions is concerned with organizational structure. Organizations consist of interrelated units the cooperation of which is necessary for making organizational missions come true. On the other hand, the units have to obey the traditional functional lines that sometimes affect their collaboration negatively. It seems that task functional-based problems could be solved through the formation of some committees consisting of functional units' representatives (Faghihi, 1378). In designing or restructuring organization of universities especially for the tasks of educational departments, matrix structures could be applied. Regarding the organizational structure of university, it is worth mentioning that in spite of mechanical structures in which power lies in administrative position, at universities authority rests on specialty and expertise. Therefore, the hierarchy of authority at universities, which are considered as professional structures, is bottom up (Faghihi, 1379). The presence

of faculty members in university's decision making committees as well as their supervision on their own duties and responsibilities denote their authority.

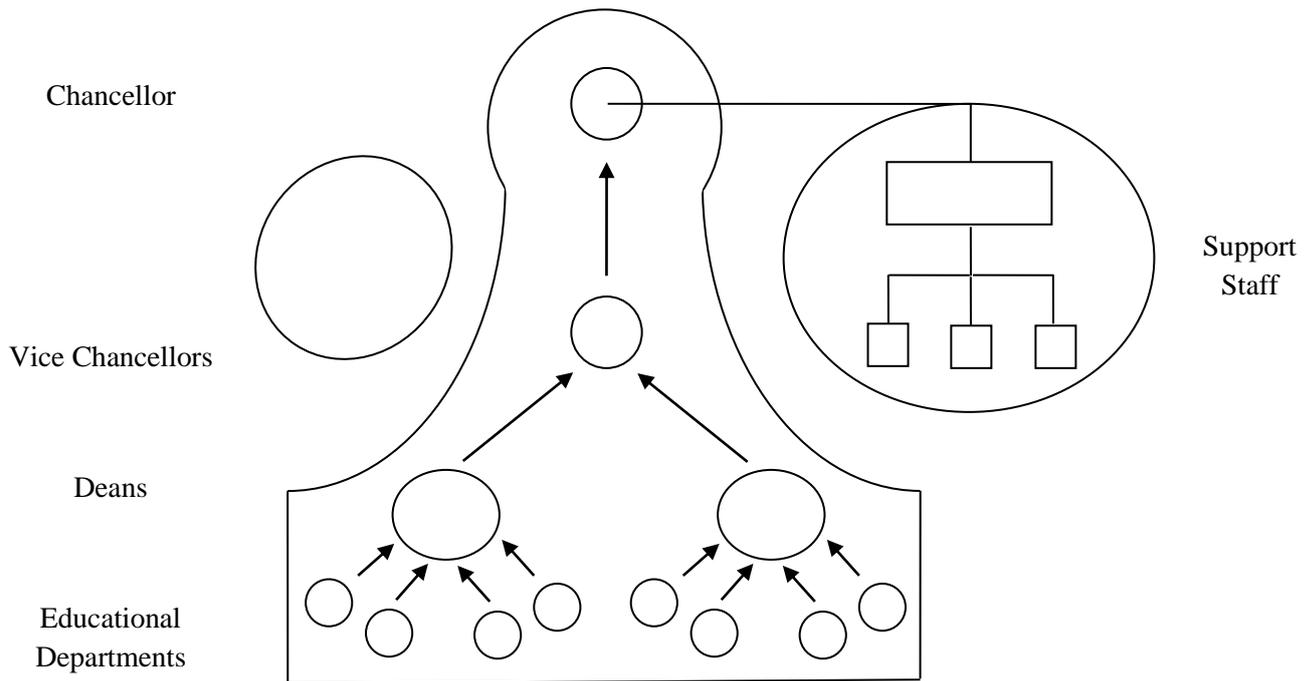


Figure 1-Hierarchy of Authority in University Structures

Source: adopted from Mintzberg 1983

As it is seen in Figure 1, the route of decision making processes regarding scientific activities (educational and research) take moves through educational departments at the bottom of the pyramid towards the top of the organizational pyramid. However, for support staff, this process, as it is in mechanistic bureaucracy, moves from the top the pyramid towards the bottom. Dejarar (2005) in an article entitled "the relationship between total quality management and result-oriented attitude in higher education" contends that such a bottom up structure in higher education institutions is in congruence with total quality management. Furthermore, he believes that TQM as an organizational culture, that externally puts its emphasis on fulfilling customers' needs and internally on management commitment to education, employees training, and self control is applicable to universities and higher education institutions.

EFQM Excellence Model for Higher Education

EFQM Excellence model is an effective scientific tool for the analysis and evaluation of improvement in universities and higher education institutions (Steed et al., 2005). This model helps organizations to respond to their stakeholder's needs. It needs to be pointed out that this could be done through the analysis of organizational processes that are the focal point of organizational change. These processes make people's talents flourish to achieve a better performance. There are eight fundamental concepts which underpin the EFQM Model. They are listed below:

- Customer Focus
- Results Orientation
- Leadership and Constancy of Purpose
- People Development and Involvement
- Management by Processes and Facts
- Partnership Development
- Corporate Social Responsibility
- Continuous Learning, Innovation and Improvement

The application of EFQM model in higher education requires the interpretation of the above mentioned eight concepts. Steed (2005) has offered an interpretation of EFQM model in higher education. For instance, the concept of customer orientation at university means forecasting, diagnosing, and responding to current and future needs of students and other stakeholders through the determination of goals and suitable indices, performances follow up, modeling and acting on the basis of gathered information. EFQM Excellence model is demonstrated in figure 2.

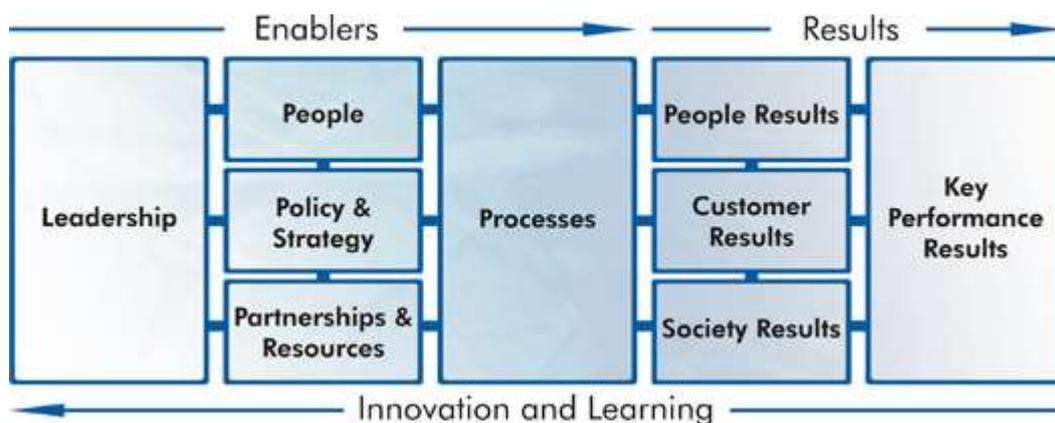


Figure 2-EFQM Excellence Model

Source: EFQM Levels of Excellence (2004)

The framework of the EFQM Excellence Model is based on nine criteria with five 'Enablers' and four 'Results'. The 'Enabler' criteria cover what an organization does. The 'Results' criteria cover what an organization achieves. In fact, in this process 'Results' are caused by 'Enablers' and feedback from 'Results' help to improve 'Enablers'.

EFQM Excellence Model is not necessarily a prescriptive theoretical framework. In other words, each of the criteria related to 'Enablers' and 'Results' could be analyzed and studied considering special situation of an organization. Each criterion of the model represents possible areas to be addressed. Asking about each criterion will demonstrate the extent an organization has achieved its planned results. For instance, regarding 'Enablers' the following questions could be posed:

- Are 'Enablers' efficient and effective enough in delivering 'Results'?

- Are they elaborated to their full potential?
- Could some signs be found demonstrating continuous improvement?

Regarding 'Results' the following questions could be posed:

- Are some comprehensive assessments conducted that could follow up the performance?
- Has the organization achieved its strategic goals?

The following sample is a mere expression of good practice that could be implemented in higher education context.

Table 2. EFQM Excellence Model

Criterion 1- Leadership

Excellent leaders facilitate the achievement of mission and vision; create the values necessary for organization's long term success and put them into action via appropriate behavior and conduct. They are committed to the development and implementation of university management system. During periods of change they keep up the constancy of purpose. Where required, they change direction and motivate the others to follow. Leaders develop the university mission, vision, values and ethics, and exhibit role models of a culture of excellence.

Areas that could be analyzed include how:

The university mission and vision are developed and made perceivable for all stakeholders.

Role modeling values and ethics are determined, propagated, and implemented in all leadership levels, to support organizational culture.

The effectiveness of all leaders is surveyed and the resulting information will leads to improve their effectiveness.

Leaders are personally and actively engaged with university activities in and out of the university.

Leaders encourage empowerment innovation and creativity, through teamwork and collaboration.

Leaders change the university structure towards group work and cross-functional working, support and spread learning throughout the university.

Activities are prioritized, assigned, and managed.

Leaders actively encourage cooperation and collaboration within the university.

Source: adopted from Steed and Pupius, 2003

With regard to 'Results' criterion parts questions are whether the measures in place, being able to demonstrate the performance, follow up, and finally assess whether the strategic objectives are being met. In other words, results should show the extent to which:

- Things that are of great importance to recipients and other stakeholders of the organization are thoroughly measured.
- Constant improvement against targets and results is linked and caused by approaches.
- The best practices are put as models and are exercised for learning enhancement as well as performance improvement.

Towards a Generic Quality Model in Higher Education

Designing a comprehensive model for the university's various activities requires a separation between educational and support related processes. Education, teaching and research processes include the activities which result directly in learning enhancement and improvement.

Support activities refer to the operations that emphasizes on logistics and service offering to students. Such services are given by administrative departments such as registration office, library, welfare services and so forth. It seems that Total Quality Management tools and techniques can be applied in logistics and service departments of the university more effectively. Such that of their extensive usages in services like banking, transportation and so on. For educational processes the models that are affected by learning organization sounds more appropriate. Some of these models are to be dealt with in the rest of the article.

Transformative University Model

Harvey and Knight (1996, chap. 1) present 'transformation' as the most appropriate learning-oriented approach to quality. The emphasis is on 'enhancing participants' i.e. students, faculty (academics) and employees, 'adding value' to their capability and ultimately 'empowering' them (G.Srikanthan & John Dalrymple, 2002).

There is a 'clear focus' on 'adding to capability of students and empowering them'. Transformative learning requires a transparent process, which is integrated adding to capability of students and empowering them. Transparency means openness about the aims, processes and method of attainment of learning by the student. Integration means that such experiences are linked together into a cohesive whole (chap. 2) (G.Srikanthan & John Dalrymple, 2002).

In transformative model, quality policies have to be learning oriented. "Learning is based on a *dialogue* between participant and providers. *Dialogue* involves the discussions between learners and teachers about the nature, scope and style of their learning. *Dialogue* also requires a dynamic exchange among the teachers about the teaching and learning process." (pp 40-41). In this model, learning plays a more important role than teaching.

An Engagement Model of Program Quality

"'Engagement Theory' of program quality is organized around the central idea of student, faculty (academics) and administrative engagement in teaching and learning. High quality programs are those which contribute to the learning experiences for students that have positive effects on their growth and development. The theory maintains that in high quality programs the principal stakeholders – academics, students and administrators – invest in five separate clusters of program attributes, each of which contributes to enriching the learning experiences for students.

- Engaged Participants: Faculty (academics), Students and Leaders
- Participatory Cultures: Shared program direction, Community of learners, and Risk taking environments
- Interactive Teaching and learning: Critical dialogue, Integrative Learning, Mentoring, Cooperative Peer learning, and Out of Class activities
- Connected Program Requirements: Planned Breadth and Depth of Coursework, Professional Residency
- Adequate Resources: Support for Students, Faculty and Basic Infrastructure

In broad terms, the engagement theory advances a new perspective on program quality that emphasizes student learning as the primary purpose of higher education, highlights the pivotal role that academics, administrators and students play, and provides a template for assessing quality" (G.Srikanthan & John Dalrymple, 2002, pp. 2,3).

University of Learning Model

In this model, the organizational characteristics of higher education from a pedagogical perspective are examined. The commonly perceived functions of a university: teaching, research and mentoring, are the processes of learning at different levels. Hence, quality in a university context has a lot to do with the quality of learning and the quality of learning has a lot to do with qualities of different ways of seeing social phenomenon. When the learner 'widens the range of possibilities of seeing the same thing', his world grows richer and could have more options for actions. This model paves the ground to discern the fact that a particular phenomenon could be interpreted in different ways and its various dimensions could be analyzed and finally, the one most relevant to the situation could be focused on. Looking at a phenomenon from various dimensions makes discernment possible. Providing opportunities for seeing variation and using analysis and perception create the basics of learning. Hence, university is an organizational learning whose faculty (academics) are, by forming some groups, actively engaged in learning networks. Their commitment to a deep exploration of the subject matter from the learners' perspective develops alternative patterns of understanding. A holistic view would be intended to be developed as a result of a synergy emerging from this involvement. In such a communication system, people's various opinions would render a clear picture of their status in the group. As a consequence, group members would reach some sort of agreement in their opinions. They (the group) explore the potential in the students for 'discerning relevant aspects of variations'. Thus, large interdependent groups of academics and administrators working in concert create the foundation of a 'University of Learning' (Bowden and Marton, 1998).

Responsive University Model

A number of leading authors believe in organizational excellence model as 'a responsive university' model. The model is based on the premise that '...the public...will judge about quality of a university in terms of the quality of their relationships... and the quality of the outcomes...'. Therefore 'to survive and thrive... universities will have to be responsive' and 'be service oriented (Tierney, 1998:163). The emphasis is on development of new internal relationships through communication and partnerships as well as 'new external relationships including social partnerships with communities' (G.Srikanthan & John Dalrymple, 2002, p. 3). In other words, 'a responsive university' is an organization whose programs have to be directed towards the student learning demands. Furthermore, its researches intend to solve society's problems. In such a university, obsolete teaching methodologies are restricted; instead, a range of novel tools are designed for responding to students' learning demands. It needs to be added that in such a university system transparent operational information is accessible. The academic staff should 'regularly review and take into account shifts in student demand, resource allocations, departmental goals and the evolving mission of the institution' (Tierney, 1998:165). Regular and constant evaluation of activities in this model is a characteristic of its scientific culture. Performance measurement would show if any added value is created and any favorable changes have taken place or not? External relationships are important for enhancing quality. These relationships are both among universities themselves and between universities and the government. Thus, 'the university ... will be more a network than a place'. (Tierney, 1998:170)

A Generic Model for Quality in Higher Education

If common features of the models cited earlier are examined closely, two focal points seem to emerge from the models: student learning and a dynamic collaboration of stakeholders around it. All the models have a common thrust on student learning experience. In 'Transformative University Model', quality policy has an emphasis on student learning experience. In the 'Engagement Model' of Haworth and Conrad (1997) the focal point is educational programs. 'Engagement Model' maintains that the clusters of program attributes should contribute to enriching the learning experiences for students. In the 'University of Learning' model, the focus is on students' competencies to see various aspects of an issue. 'Responsive University Model' is concerned with service aspects of university. These services are offered to students, social institutions and the state.

All the above models emphasize collaboration at the education delivery level. The 'Transformative Model', requires the learning experience to be based on a *dialogue* between the learners and teachers about the nature, scope and style of their learning, and also among the teachers about the teaching and learning processes. The 'Engagement Model' foresees teaching and learning to be based on critical dialogue, mentoring and cooperative peer learning. The 'University of Learning' model highlights a synergistic involvement of academics in a course/ research team, developing a holistic view of student competencies and a collective consciousness of commonalities and complementarities. The 'Responsive University' model emphasizes communication, which requires new relationships and partnerships both internally and externally." (G.Srikanthan & John Dalrymple, 2002, p. 4)

Therefore, given the common foci, it would be possible to develop a generic quality management model whose broad features are indicated below:

- It places an emphasis on learners "change" and their development through adding to their knowledge and learning experience, and finally leads to their empowerment.
- It increases a synergic involvement among educational institutions and other social institutions for learning.
- It also requires university leaders to encourage and facilitate the basis of a participatory and collegial culture.

Concluding Remarks

In all the models cited so far learning is highly emphasized. In TQM model quality groups, as inseparable parts of these organizations, learn from each other. In addition, learning about work processes takes place through the information and statistical as well as scientific tools which analyze and interpret these processes. Finally, learning about collective objectives, a kind of mutual learning, puts an emphasis on members' views and experiences concerning collective goals (Faghihi, 1378). In EFQM model, learning and change both happen through the measurement and evaluation of 'enablers' and 'results'. The university influences learning and change processes by regular and constant evaluation of leaders' efforts in members' empowerment, university's strategies and policies, member's cooperation and collaboration, as well as optimum use of resources and results that are granted for members, students and community.

In all these quality models, various individual and group methods and techniques of learning are emphasized. In 'Transformative University Model' learning takes place through a dialogue between learners and teachers as well as among the teachers themselves. 'Engagement Model' stresses in faculty (academics), students, and administrative engagement in designing and implementation of programs aiming at learning improvement as the requirements for achieving quality. In University of Learning Model, quality improvement is made possible through the opportunities provided for students to widen their view of the social world surrounding them, to see different dimensions, variations and complexity of phenomena and hence investigate and interpret them. And finally in the Model of a Responsive University, quality hinges on the way the university responds to needs and demands of its internal and external recipients of services.

In all of these models, the role of leadership and top management is highly emphasized. Studying the principles of Total Quality Management shows that leadership is indispensable for successful implementation of quality and that the philosophy of quality is not fulfilled in the absence of leadership. University leaders have their mission of achieving the objectives of educational programs and offering support services. They should nurture students to be capable of getting suitable jobs in their community. It should be pointed out that leadership is the organization empowerment force and plays a key role at the level of strategic management. The application of the EFQM Excellence Model in higher education facilitates the achievement of mission and vision for the university leaders. They institutionalize the values which are essential for long term success, change the direction of university towards better quality, and encourage the others to take steps in the same way. In other words, quality managers put forth the vision, mission, and their clear values; then, through cooperation, relationships and encouragement of receiving feedback from the faculty (academics) and employees attend to the improvement of projects. As agents of change, these leaders play their role in tandem with other managers in effective programming and implementing organizational change (Anyamele, 2005: 360). Another obligation the university leaders have is to restructure organization so that it could contribute to the

achieving of policies and strategies, designing and implementing an appropriate management system, initiating and maintaining of organizational processes, and understanding and responding to students and teachers as well as the other stakeholders' needs. In addition, quality leaders encourage the cooperation inside and outside of the university, attend the employees at all levels of university structure, and finally support employees to reach the individual and organizational objectives. The points that are highlighted almost in all models are cooperation in decision making and relative independence of faculty (academics). Therefore, it is necessary to pose the question, what is the university leaders' optimum level of supervision over faculty (academics) activities? Academics' discretion comes from the fact that their activities are complex and could not be standardized. A faculty member is assessed by his or her colleagues' supervision as a group; hence, colleagues could play a significant role in one's training, could judge about one's job quality, and finally could warn one about one's errors. Therefore, the supervision exerted through rules and regulations would decrease their motivation (Mintzberg, 1983; p. 197).

A question that has to be raised here is that how university leaders should deal with incompetent and unqualified people. Undoubtedly, there are some unqualified faculty who, after graduation, ignore to update their knowledge and information. They are those who are concerned with their own gains before taking care of their students' educational progression. So, direct supervision and control over the performance of such people seems to pay off. A professor who is regularly absent in his/her classes could be punished or even dismissed. However, this fact ought to be taken into account that no one except faculty member himself/herself could have an effective control over his/her activities that are complex and have latent effects. A dean who has channeled all his time and energies into direct controls over the academics does nothing except distracting them. Unnecessary supervision over professionals might demotivate them. It has to be noted that the higher education system or the university does not teach students; this is the teacher who does it. Thus, if he or she is not a competent, qualified and conscientious member, he or she couldn't be changed for better by exertion of some rules and regulations or by his or her superior commands (Faghihi, 1379).

Recent research findings (Jones and Saram, 2005) concerning university professors attitudes towards educational quality elucidated the fact that excessive and bureaucratic control and supervision is the outcome of recruitment without being concerned about scientific and moral qualification of faculty (academics) along with ignoring competitive selection processes. It is worth to say that over-emphasis on formal procedures would decrease teaching and learning quality, engage teachers in peripheral administrative red-tape and not let them put their attention on key features of quality improvement.

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