



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A  
ADMINISTRATION AND MANAGEMENT  
Volume 17 Issue 1 Version 1.0 Year 2017  
Type: Double Blind Peer Reviewed International Research Journal  
Publisher: Global Journals Inc. (USA)  
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

# The Implementation of TQM in Higher Education Institutions in Saudi Arabia: Marketing Prospective

By Khalid A. Almurshidee

*Qassim University*

**Abstract-** This research aimed to reveal the extent of the implementation of total quality management (TQM) in higher education institutions in Saudi Arabia in light of the perceptions of the educational and administrative leaders. A questionnaire have been developed consisting of (70) items distributed in eight areas of TQM. The research applied to a sample of 135 leaders from the educational and administrative leaders in Qassim University. The results of the research showed that the application of the principles of total quality management in higher education institutions in Saudi Arabia was medium from the standpoint of administrative leaders with the exception of the area of Academic Affairs and the field of community service where its application was high. The application of the principles of Total Quality Management was medium from the standpoint of educational leaders with the exception of the area of strategic planning.

**Keywords:** *quality, total quality management, higher education, leadership.*

**GJMBR-A Classification:** *JEL Code: M10*



*Strictly as per the compliance and regulations of:*



# The Implementation of TQM in Higher Education Institutions in Saudi Arabia: Marketing Prospective

Khalid A. Almurshidee

**Abstract-** This research aimed to reveal the extent of the implementation of total quality management (TQM) in higher education institutions in Saudi Arabia in light of the perceptions of the educational and administrative leaders. A questionnaire have been developed consisting of (70) items distributed in eight areas of TQM. The research applied to a sample of 135 leaders from the educational and administrative leaders in Qassim University. The results of the research showed that the application of the principles of total quality management in higher education institutions in Saudi Arabia was medium from the standpoint of administrative leaders with the exception of the area of Academic Affairs and the field of community service where its application was high. The application of the principles of Total Quality Management was medium from the standpoint of educational leaders with the exception of the area of strategic planning.

**Keywords:** quality, total quality management, higher education, leadership.

## 1. INTRODUCTION

The development of higher education institutions meets various links and requires a comprehensive quality management system as a method and style of work in the management of various aspects of educational administration (Tsinidou *et al.* 2010). There are various theoretical foundations that define the concepts of development and concepts of the development of education, both general and higher education, according to the visions and the aspects researchers, theorists and practitioners focus on for the development and modernization process (e.g., Jarvis, 2014). Sometimes they targeted production issues and solving problems and at other times aimed at improving the business climate and the development of the skills of the employees and the rational use of human and material resources (e.g., Hoang *et al.*, 2010).

The importance of total quality in the era of globalization seems as a basic premise of excellence and competitiveness and under States' attention to education as a national first project to face the third millennium with all its challenges, education reform operations received with great interest in most countries of the world, and the total quality management (TQM) enjoyed great deal of this interest to the extent that it made thinkers call this era "the era of quality" as one of

the main pillars of the new administration model, bringing the global community to look to the total quality and educational reform as two sides of the same coin, so we can say that the total quality is the real challenge that will face the nations in the coming decades (e.g., Altahayneh 2014) .

According to Tarawneh (2011), there is conviction in social and academic circles in the Arab world to the effect that university managements are inefficient, and that the majority of Arab universities suffer from a lack of autonomy, and the magnitude of the regulations and instructions and ambiguity and contradiction, and multiple levels or administrative and hierarchical episodes in writing reports and settings. Decisions are taken at the highest level at the top of the administrative hierarchy, and that means neglecting the role of middle management and executive leadership, the consequent is emergency and crisis management. Most of the university energies are spent on routine matters and there is no administrative control over the performance of employees; academics and administrators, and therefore determine the level of this performance, and often evasive techniques and delay are used to resist reform and change.

While recognizing the importance of access to quality in education, which is considered a main goal most of the educational organizations seek to achieve which have adopted the philosophy of Total Quality Management. It is based on the principles and foundations represented in the participation of administrators in creating an organizational culture that leads to quality and cares with the consciousness of client and his mind, and the constant search for the best (Altahayneh 2014). In order to achieve quality, it must be controlled through monitoring and reduction of poor performance because continuous improvement is the foundation of quality (Tsinidou *et al.* 2010; Argia and Ismail 2013).

The TQM system is in response to modern shifts and changes in the political, economic, social, scientific, information and technological fields whether at the international, regional or local levels, represented in the emergence of phenomena of globalization, privatization and free trade and control of major companies on global markets and economic competitiveness internationally (Shroff and Dave 2014;

**Author:** Associate Professor of Marketing, College of Economics & Business, Qassim University. e-mail: mrshdy@qu.edu.sa

Jarvis 2014). This means that the application of TQM requires a certain floor in all organizational, administrative and social structures inside and outside the organization, so as to provide a suitable environment for the possibility of application. Costing (1994) confirms that the success of the application of an administrative concept the administrative Leaders are unaware of its importance, there must be full conviction of the senior management of the importance of this concept, and makes quality at the forefront of senior management strategies, and to disseminate this conviction. It also requires leaders who can guide individuals towards achieving their radiant perceptions, and there is no university or institution has made progress within the concept of total quality management without a leadership with high administrative capacity (Dirkse van Schalkwyket *al* 2013).

In the Arab world, it is difficult to predict the number of universities that apply the principles of TQM, with the knowledge that there are a significant number of Arab universities began to take upon themselves the obligation to apply the concepts of total quality in its programs, policies and educational goals (e.g., Al-alawy, 1998; Alruwaili 2013).

This research aims to identify the perceptions of administrative and educational leadership in higher education institutions in Saudi Arabia to the extent of the application of TQM. To achieve this objective the research responded to the following questions:

1. To what extent is the application of the principles of TQM in higher education institutions in Saudi Arabia from the standpoint of administrative leaders?
2. To what extent is the application of the principles of TQM in higher education institutions in Saudi Arabia from the standpoint of educational leaders?
3. Are the resigificant differences between the perceptions of the educational and administrative leaders to the extent of the application of TQM in higher education institutions in Saudi Arabia.

Employing the principles and ideas of TQM in higher education systems for the benefit of educational institutions, as it lays the foundation stone to see philosophical new goals of the institution and its mission, and raise the morale of employees, and gives them the opportunity to express, and alter their perceptions and attitudes towards the profession, making the educational environment a healthy producing climate (e.g., Alhaqbani 2013; Zabadi 2013). The importance of this research is about what could reveal of insights for the administrative and educational leaders to the extent of the application of total quality management in Saudi universities; especially with the fact that TQM applications within the context of studies the education sector in Saudi Arabia are not sufficient to date and lack better conceptionalization (e.g., *Sahney et al.* 2004; Alruwaili, 2013; Sahu, *et al.* 2013).

Furthermore, The importance of this research will be found in its real contributions to scientific research in the field of educational TQM; and in its provision of some practical evidences to educational leaders and practitioners.

## II. THEORETICAL BACKGROUND

### a) *TQM for Public Services is a Marketing Concept*

The term "Total Quality" and "Total Quality Management" expressions common in the contemporary management and d marketing literature. The two terms reflect the global trend dominates the thinking and behavior of business organizations and governing management and marketing decisions in all areas of work (e.g., Hemsley-Brown and Oplatka 2006). Form marketing point view , most of organizations work on improving their products; whether these products are goods or services, in order to maintain market share and increases it , and attract and keep customers, and increase their competitiveness both at the local, regional and international level (e.g., Shroff and Dave 2014).. The majority of organizations are using several strategies to improve the level of sales and production, the most important of these strategies is quality, as the total quality is assumed as strategic entry point to produce the best product or service possible at the lowest possible cost (e.g., Powell 1995; DeShields *et al.* 2005; Zineldin *et al.* 2012). The accurate way of defining quality is marketing way. Marketing definition of quality should be the cornerstone management strategies should be built upon. Form marketing prospective, TQM can be defined as: Administrative system strategically complementary to achieve customer satisfaction through the participation of all employees in the organization and the continued development of each organization's operations and optimal use of resources(e.g., Wilkins *et al.* 2012) , it is a trend or management philosophy in the long-run aim to achieve customer satisfaction and the efficient use of resources and the continued development of all the operations of public organizations(e.g., Sahu *et al.* 2013a).

In the framework of public services, quality means "unity of efforts for the sake of the optimal exploitation of available resources and presenting the service in the time and style that create the customers satisfaction about these services." (Richardet *al.*1992; Shroff and Dave 2014).

Directions were numerous around the dimensions underlying quality in the provision and management of public services (e.g. Sahney *et al.* 2004). Gronroos (1984), for example, has pointed out that quality has three basic dimensions, they are: technical quality, and it is associated with what is provided of services, and functional quality which is connected with the way it provides these services, but the third dimension is connected with the mental

impression about the organization that provides these services, and it depends on the appraisal of customers and their satisfaction about the technical and functional of these services (Gronroos 1984; Alhaqbani 2013).

Thus, the TQM should be viewed as "an organizational strategy accompanied by a variety of means, which leads the organization to offer to the beneficiary products and services of high quality." (e.g., Lee *et al.* 1992). It is a "philosophy focuses attention of employees on customer preferences and form a group of methods needed for the organization to build a system and a necessary administrative leadership to make the organization operate according to the philosophy of customer service". (Hoang *et al.* 2010). Therefore, total quality management requires a customer orientation towards continuous improvements in all aspects of the administrative process of production, services delivery procedures, and communications that meet or exceed client's expectations (Jarvis 2014)

#### b) TQM in Higher Education

Higher education in the current time faces a set of challenges imposed upon it an urgent need to apply the concept of TQM (e.g., Sahney *et al.* 2004; Tsinidou *et al.* 2010; Wilkins *et al.* 2012), which comes in the forefront of it:

1. Rapid growth in the field of knowledge, which has led to the emergence of many discoveries and inventions that made a clear difference in the quality and quantity of knowledge.
2. The great advances in communications systems and tools as the world have become a small village.
3. Information and technological revolution, and the trend towards the use of high-power devices and micro and complex instruments that are expected to turn economic and social systems upside down, and this requires rewriting philosophies and laws in all walks of life.
4. Sudden and rapid changes in the nature of professions in the market due to reliance on modern technology; electronic evolution of computers, for example, required the emergence of a number of professions and related businesses, as well as spread of the concepts of privatization and market economics.
5. The growing interest in regional economic blocs, the European Union and the North American market and Southeast Asia, as well as global corporate alliances to increase their competitiveness, and widening its market share.
6. The new growing interest in the problems of environment; because of their effects and dangers to human life.
7. The new increasing interest in the value of excellence and quality in its comprehensive sense, which reflects the performance of business in the

right way from the first time, and then achieves customer satisfaction.

The history of university education has resulted in the fact that is creating a structure resistant to change, and thus the application of the TQM entrance is possible only in the case of being able to realize major problems for this sector, and try to use the administrative entrances consistent with the nature of this system (Sahu *et al.* 2013b). Kelleh (1996) sees the following several steps that must be taken into account when trying to apply the TQM in universities and institutions and educational process:

1. Clearly defined objectives; as enigmatic selection of goals leads to highly decentralized decision-making.
2. Commitment to planning; because the absence of specific plans of action leads to internal competition.
3. Stay away from the complex delegation of authority, which makes it difficult to measure performance.
4. Get rid of the individual nature of the scientific personality that makes character very proud, not preparing for joint action, and therefore must encourage research teams.
5. Prepare an integrated information system; as the total absence of a specific structure to collect performance information so as to become available to different leaders, will hamper the decision-making process.

Therefore and according to many researchers (e.g., Sahney *et al.* 2004; Harvey and Williams 2010; Tsinidou *et al.* 2010; Sahu *et al.* 2013a; Alnaweigah 2013), the choice of TQM, as a working method and curriculum in universities and scientific institutions, to improve the quality of educational services, and improve the level of graduates requires the availability of several factors, including:-

1. The interest of the university administration of quality input of university education process and the educational process itself and its outputs.
2. The importance of the university administration direction to the labor market, so that checking well as regards the needs and expectations of this market of graduates, with the realization that these needs and expectations change from time to time.
3. Determination of the levels of quality in all areas, and performance activities, so that the administration can target its achievement through continuous improvement program.
4. Training and education for all levels of employees.
5. Attention to the safety and quality of educational programs.
6. Shaping the tests in systematic and objective manner at all academic levels.



In general, the application of TQM principles at the educational institutions requires an accurate understanding of all works and problems that hinder their applications. Schauerman and Peach (1994), for example, pointed out to some barriers that constraint its transfer to educational sector, of which are:

1. Colleges reject the idea that expressing about service receiving students.
2. Academic college's resistance to allow interference in its domestic laws and disciplinary boards and educational experiences.
3. The threat to the freedom granted to academic educators.
4. The cost of training on the application of TQM principles.
5. Inadequate training and lack of understanding of quality circles.

### III. METHODOLOGY

#### a) Sample

Research was applied on the educational and administrative leaders in Qassim University, as (60) administrative leaders (deans, department heads, administrative leaders) were chosen and (75) educational leaders, bringing the members of the research to (135) university personals.

#### b) Instrument

Following many similar research (e.g., Al-Oddadi 2013), a questionnaire is developed to identify the degree of implementing of TQM in Saudi universities., the questionnaire included (70) items distributed over eight principles of TQM: organizational culture (7 items), Strategic Planning (7 items), Administrative leadership (8 items), Academic and

Technical Affairs (17 items), Administrative and Financial Affairs (10 items), human resources & student affairs (5 items), faculty affairs (4 items), community service (7 items), and feedback (5 items), each item was given a weight listed on a quintet Likert scale to estimate the degree of implementation of item ( very large, large, medium, small, very small), and these paragraphs covered all areas of application of total quality management.

After the development of the initial image of the questionnaire, it was presented to ten arbitrators from professor's specialists for the purposes of the sincerity of the content, to find the suitability of areas and paragraphs for the elements content of TQM in Higher Education Institutions and appropriateness of paragraphs for the areas they represent. Suitability of items formulation from language standpoint. In light of the observations of arbitrators areas and items were adopted that received by agreement percentage (80%) of the arbitrators, items were modified, deleted and transferred that in need to do so, based on their observations and were reviewed for the last time in collaboration with the supervisor, the questionnaire was printed out in its final form by which it was distributed over the research sample individuals consisted of (8) key areas distributed over (70) items after it was initially composed of (85) items.

Coefficient of internal consistency was extracted, using Cronbach's alpha formula for areas of the Instrument and the table shows (1) the values of the internal consistency of the areas of the Instrument where coefficient reliability ranged between (0.82-0.91), these transactions are considered acceptable.

Table 1: Reliability coefficients for instrument

Number	Principles of TQM	Cronbach Alpha
1	Organizational Culture	0.88
2	Strategic Planning	0.87
3	administrative leadership	0.89
4	Academic and technical affairs	0.89
5	Administrative and Financial affairs	0.89
6	Human Recourses	0.81
6 a.	Human Recourses – Student's Affairs	0.83
6.b	HR / faculty affairs	0.84
7	Community Service	0.90
8	Feedback	0.92

#### c) Statistical Processing

To answer the first and second questions, averages were calculated and standard deviations of the total tool and its various fields. To answer the third question, the t-test to detect the level of significance of the differences in the opinions of the administrative leaders and faculty members for the possibility of the application of TQM in Saudi universities.

### IV. RESULTS AND DISCUSSION

Arithmetic means and standard deviations of the application of the principles of TQM in Saudi Higher Education Institutions from the standpoint of administrative leadership were extracted, where it is noted from the table (2) the extent of the application of the principles of TQM in Saudi universities from the standpoint of administrative leadership to the areas of

(Academic Affairs and artistic, and community service) was high, and for the rest of principles of TQM (organizational culture, strategic planning, administrative leadership, administrative and financial affairs, administrative and financial affairs, human resources - Student Affairs, feedback, human resources -faculty affairs) was medium, as those areas came between the arithmetic average (3.88) which relates to dimension (academic affairs and technical) and the arithmetic average (3.28) on the dimension (human resources - faculty affairs), as the eight dimensions came combined

(total tool) with an arithmetic mean of (3.60). This refers to the extent of the application of the principles of TQM in higher education institutions in Saudi Arabia from the standpoint of administrative leadership is high.

Similarly, Arithmetic means and standard deviations were extracted of the perceptions of application of the principles of TQM from the standpoint of educational leaders. As noted from the table (3) the extent of the application of the principles of total quality management from the perspective of educational leaders indicated that (Strategic Planning) is

**Table 2:** The implementation of TQM in higher education institutions in Saudi Arabia from the standpoint of administrative leadership.

No.	Principles of TQM	Mean	Standard Deviation	Level
1	Academic & Technical Affairs	3.88	0.43	High
2	Community Service	3.67	0.60	
3	Organizational Culture	3.64	0.64	
4	Strategic Planning	3.59	0.68	Medium
5	Administrative Leadership	3.55	0.81	
6	Administrative & Financial Affairs	3.49	0.68	
7	Human Recourses – Student Affairs	3.37	0.60	
8	Feedback	3.33	0.86	
9	Human Recourses – Faculty Affairs	3.28	0.62	High
Total		3.60	0.65	

high, and the rest of other dimensions (feedback, academic and technical affairs, community service administrative, leadership, human resources - faculty, administrative and financial affairs, and human resources - Student Affairs) were on average medium, as these dimensions came between the arithmetic

average (3.77), which relates to the dimension (strategic planning), and the arithmetic average (3.05) on the dimensions of (human resources - Student Affairs). The combined eight dimensions came with an arithmetic average mean of (3.40).

**Table 3:** The implementation of TQM in higher education institutions in Saudi Arabia from the standpoint of educational leaders.

No.	Principles of TQM	Mean	Standard Deviation	Level
1	Strategic Planning	3.77	0.60	High
2	Feedback	3.49	0.75	
3	Academic & Technical Affairs	3.44	0.90	Medium
4	Community Service	3.42	0.81	
5	Administrative Leadership	3.38	0.84	
6	Organizational Culture	3.37	1.01	
7	Human Recourses – Faculty Affairs	3.27	1.02	
8	Administrative & Financial Affairs	3.25	0.78	Medium
9	Human Recourses – Student Affairs	3.05	1.01	
Total		3.40	0.85	Medium

The test (independent sample t-test) was used to detect the presence of significant differences at the statistical significance level ( $\alpha \leq 0.05$ ) (between perceptions of administrative leadership and of those of faculty members. It is evident from the table (4) The

differences in the perceptions of administrative and educational leaders did not reach the level of statistical significance, as all values statistical "t" were not significant at level of 0.05 or less, therefore there are no significant differences between the two perceptions.

**Table 4:** The differences between the perceptions of the educational and administrative leaders of the implementation of TQM in higher education institutions in Saudi Arabia

Principles of TQM	t	Significant
Organizational Culture	1.32	0.19
Strategic Planning	1.18	0.24
Administrative Leadership	1.08	0.28
Academic and Technical Affairs	1.41	0.16
Administrative and Financial Affairs	0.88	0.38

Human Recourses – Student Affair	0.78	0.44
Human recourses – Faculty Affairs	1.47	0.15
Community Service	1.35	0.18
Feedback	0.19	0.85
Total Tool	1.01	0.35

## V. CONCLUDING

The extent of the application of the principles of TQM in higher education institutions in Saudi Arabia from the standpoint of administrative leadership is high and the academic and technical affairs ranked first meanwhile human resources - faculty affairs ranked last. The possibility of applying all intermediate areas with the exception of two areas (academic and technical affairs, community service); which the degree of possibility of their application from the perspective of administrators is high. And this result indicates that there is still fundamental constituents of the application of the principles of TQM in some aspects such as the academic and technical aspects, and community service while the rest of the aspects addressed by the research, such as strategic planning, organizational culture, finance, and human resources are still needed to provide more of the grounds until concepts of TQM can be applied on them.

The extent of the application of the principles of TQM in higher education institutions in Saudi Arabia from the point of view of educational leaders is medium on average, and the area of strategic planning ranked first while the area of human resources - faculty affairs ranked last. The possibility of applying all areas was medium except the field of (strategic planning). This suggests that faculty members believe that there is only one aspect of TQM that can be applied which is of strategic planning. As for the rest of areas, the faculty members believe that the possibility of its application is still within the average, this result can be accounted for the fact that the TQM implementation requires the availability of range of ingredients, including a clear definition of the objectives that would lead to decentralization in decision-making, but the reality of Saudi universities despite an evolution in management systems still suffers from a centralized decision in some areas, which disrupts the possibility of applying TQM, in addition to the fact that the application TQM also requires a comprehensive information system on students, teachers and university facilities, and in spite of the abundance of information but there are no ways and methods to access those information easily, whether by auto means or manually, which disrupts the predictability and perception of faculty members to the possibility of the application of total quality , in addition, the application of TQM requires that interested university administration inputs educational, but the reality is that university inputs are still suffering from some weakness in a number of aspects, and the need for university attention of labor market and its needs and align it with

the academic programs have role in promoting the possibility of the application of TQM, and it has been noted that many of the academic programs offered in Saudi universities are not commensurate with the needs of the market.

The results indicated that there were no statistically significant differences between perceptions administrative and educational leaders of the extent of application of TQM in Higher Education Institutions in Saudi Arabia, which is consistent with previous research.

Based on the findings of this research, the following recommendations for university' leaders can stated:

- Promote the culture of total quality, through conferences, seminars and workshops to identify each university employees, on what TQM and encourage them to discuss the difficulties that they expect during the application.
- The need to work to pay attention to human resources, both faculty affairs and student affairs, in the light of the requirements of total quality management programs.
- Focus on the optimal use of feedback, and get away from the routine in making use from information provided by feedback, and work on the speedy delivery of them to the administrative leaderships in order to make the strategic decisions necessary to modify programs of TQM in a timely manner, thus saving time and effort and money.

## REFERENCES RÉFÉRENCES REFERENCIAS

1. Alhaqbani, A. M. (2013). Impact of key organizational factors in facilitating TQM in a Saudi Arabian public sector organization: An empirical study. *International Journal of Innovations in Business*, 2(8), 732-761.
2. Al-Oddadi, S. A. (2013). Constraints of the Application of TQM in Higher Education Institutions Empirical Study. *Journal of King Abdulaziz University: Economics & Administration*, 27(1), 22-39.
3. Alruwaili, J. (2013). Total Quality Management in Education Directorates in Saudi Arabia: Contrasting Provincial Case Studies. *Public Policy and Administration Research*, 3(6), 26-34.
4. Argia, H. A., & Ismail, A. (2013). The Influence of Transformational Leadership on the Level of TQM Implementation in the Higher Education Sector. *Higher Education Studies*, 3(1), p136.

5. Altahayneh, Z. L. (2014). Implementation of Total Quality Management in colleges of physical education in Jordan. *International Journal of Business and Social Science*, 5(3), 109-117.
6. Brad, It & Others (1995). "Hewlett - Packard Company Medical Products Group", in, Mara Minerua Melum, Break through leadership, American Hospital Association company.
7. Costing, H. (1994), Reading in Total Quality Management, Copyright, by Har Court Brace & Company, Sandigo, New York
8. DeShields Jr, O. W., Kara, A., & Kaynak, E. (2005). Determinants of business student satisfaction and retention in higher education: applying Herzberg's two-factor theory. *International journal of educational management*, 19(2), 128-139.
9. Dirkse van Schalkwyk, R., Davis, A., & Pellissier, R. (2013). The impact of leadership practices on service quality in private higher education in South Africa. *Journal of Contemporary Management*, 10, 223-238.
10. Gronroos, C (1984). A Service Quality Model and Its Marketing Implications, *European Journal of Marketing*, 18(4), 36-44.
11. Hemsley-Brown, J., & Oplatka, I. (2006). Universities in a competitive global marketplace: A systematic review of the literature on higher education marketing. *International Journal of public sector management*, 19(4), 316-338.
12. Hoang, D. T., Igel, B., & Laosirihongthong, T. (2010). Total quality management (TQM) strategy and organisational characteristics: Evidence from a recent WTO member. *Total quality management*, 21(9), 931-951.
13. Lee, S.M., Luthans, F, and Hodgetts, R.M (1992), Total Quality Management: Implication for Central and Eastern Europe, *Organizational Dynamics*, 20(4), 40-52.
14. Jarvis, D. S. (2014). Regulating higher education: Quality assurance and neo-liberal managerialism in higher education—A critical introduction. *Policy and Society*, 33(3), 155-166.
15. Kelleh, R. (1996). Creating a Culture of Evaluation and Self-Regulation in Higher Education Organizations, *Quality Control and Applied Statistics*, 41(3), 39-56.
16. Powell, T. C. (1995). Total quality management as competitive advantage: a review and empirical study. *Strategic management journal*, 16(1), 15-37.
17. Richard C, and others (1992): *Managing Public Services*, New York: Butter worth Heine Mann.
18. Sahney, S., Banwet, D. K., & Karunes, S. (2004). Conceptualizing total quality management in higher education. *The TQM magazine*, 16(2), 145-159.
19. Sahu, A. R., Shrivastava, R. R., & Shrivastava, R. L. (2013a). Critical success factors for sustainable improvement in technical education excellence: A literature review. *The TQM Journal*, 25(1), 62-74.
20. Sahu, A. R., Shrivastava, R. R., & Shrivastava, R. L. (2013b). Development and validation of an instrument for measuring critical success factors (CSFs) of technical education—a TQM approach. *International Journal of Productivity and Quality Management*, 11(1), 29-56.
21. Schauerman and Peachy, B, (1994), Strategies for Implementation: The Elcamino College Total Quality Management Story, *Community College of Research and Practice*, 18(4), 345-358.
22. Shroff, N., & Dave, K. (2014). A State-Of-Art Review of Total Quality Management Application in Service Sector. *International Journal of Business and Management Invention*, 01-08.
23. Tarawneh, E. (2011). Assessing and Understanding Quality in the Arab Region. In *International handbook of leadership for learning* (pp. 1107-1124). Springer Netherlands.
24. Tsinidou, M., Gerogiannis, V., & Fitsilis, P. (2010). Evaluation of the factors that determine quality in higher education: an empirical study. *Quality Assurance in Education*, 18(3), 227-244.
25. Wilkins, S., Stephens Balakrishnan, M., & Huisman, J. (2012). Student satisfaction and student perceptions of quality at international branch campuses in the United Arab Emirates. *Journal of Higher Education Policy and Management*, 34(5), 543-556.
26. Zabadi, A. M. (2013). Implementing Total Quality Management (TQM) on the Higher Education Institutions—A Conceptual Model. *Journal of Finance and Economics*, 1(1), 42-60.
27. Zineldin, M., Akdag, H. C., & Belal, M. (2012). Total Relationship Management (TRM) and 5 Qs Model as New Management Techniques: A Comparative Study for a Knowledge-Intensive Sector. *International Business and Management*, 4(1), 1-17.





This page is intentionally left blank