The Administrative Procedures of Total Quality Assurance in Saudi Public Universities

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Abstract: This study aims to investigate the administrative procedures of total quality assurance in Saudi Public Universities. This descriptive qualitative study has a document-research type of design. A purposive non-random sampling was used. The type of qualitative data used in this study included documents that were collected during the academic year of 2018-2019. The researcher used manual analysis of qualitative data through consequential processes. The findings revealed that there are departmentalization and clear divisions and subdivisions for development and total quality throughout the university. Additionally, the findings identified responsibilities and a clear line of authority for individuals who are responsible for total quality and its development at all levels of the university. The study recommends that the academic leaders should work hard to enhance and convey the responsibility of the culture of total quality through all administrative levels and among faculty and staff.

Keywords: Higher education, total quality, administrative procedures, quality assurance, accreditation.

Introduction

Total quality is an approach to ensure the quality of inputs, processes, services, activities, and outcomes in the higher education institutions. Several studies indicated that implementing the total quality in higher education institutions increases the quality of services, the quality of academic programs, and ultimately the quality of outcomes (Ragad, 2017; Alkrdwi, 2009; Alteeb, 2016). Additionally, total quality increases efficient performance and ensures continuous development and improvement of higher education institutions (Srikanthan, 1999). In the higher education institutions "achieving the quality education has been part of the tradition of academic" (Cheng, 2016: 4).

Total quality was considered by the International Organization for Standardization (ISO), which published several versions of ISO Standards 9000, 9001, 9002, 9003, and 9004 (Abbadi, Bouayad, & Lamrini, 2013). More specifically, Woodhouse (2013) stated that ISO standards in higher education institutions focus on three points of the total quality: 1) "checking the suitability of the planned quality procedures in relation to the stated objectives, 2) the conformity of the actual quality activities with the plans, 3) and the effectiveness of the activities in achieving the stated objectives" (p. 3).

Currently, to be competitive, the concern and demand for quality in institutions of higher education have increased (Koslowski, 2006). Moreover, "the quality in higher education—how to enhance it and how to evaluate it—has been placed squarely on the contemporary agenda in higher education" (Srikanthan & Dalrymple, 2002: 215). The unique purposes of higher education institutions are examples of why development of these institutions is necessary for a society to be successful because they can offer quality service and knowledge. Sallis (2005) proposed four reasons that are also called *quality imperatives* and these are "the moral imperative, the professional imperative, the competitive imperative, and the accountability imperative" (pp. 3-4). Total quality in higher education institutions has been used as a tool to ensure a realistic and efficient response to current changing situations and government mandates as well as ensure effective processes of ongoing improvement (Harvey, 1998).

To ensure the quality of higher education, the universities and colleges established their strategic plans to achieve the institutional and academic accreditations. Accreditation enables universities and colleges to meet quality standards through quality assurance, continuous improvement and assessment (Rayn, 2015). Also, accreditation focuses on accountability and improvement of the higher education institutions (Woodhouse, 2013). "Through the twentieth century more accrediting bodies were formed to address the quality assurance and quality improvement needs of an increasing number and variety of institutions and programs" (Phillips & Kinser, 2018: 2). Therefore, the main purpose of accreditation is to check the extent to which the universities and colleges are achieving the intended objectives.

There are many countries around the world with established and accrediting agencies. First of all, in the United States of America (U.S.A.), there are many local, state and federal accrediting agencies, because the American higher education system is decentralized and complex (Rayn, 2015; Eaton, 2012; Suskie, 2015). Second, in the United Kingdom, the Quality Assurance Agency for Higher Education (QAA) was founded to ensure the quality for all providers of higher education (Quality Assurance Agency for Higher Education, 2018). Third, in Australia, the Australian Universities Quality Agency (AUQA) was established in order to ensure the quality of higher education (McDonald, 2013). Fourth, in Japan, the National Institution for Academic Degrees and University Evaluation (NIAD-UE) is charged with evaluation and quality assurance of the Japanese higher education system (National Institution for Academic Degrees and University Evaluation, 2012).

In the case of Saudi Arabia, the quality of higher education is ensured by a government agency. This quality assurance agency is called the National Center for Academic Accreditation and Assessment (NCAAA) and is governed by the Education Evaluation Commission. NCAAA is an independent agency financially and administratively. NCAAA is responsible for quality assurance and academic accreditation in all higher education institutions that are public and private (National Commission for Academic Accreditation and Assessment NCAAA, 2015).

Statement of Problem

Recently, the importance of accreditation has been increased in higher education institutions in Saudi Arabia in order to ensure the total quality. Therefore, most of Saudi public universities and colleges work to achieve accreditation from NCAAA. According to NCAAA (2018), eleven public universities have been accredited. These universities and colleges achieved institutional accreditation as a prerequisite for attaining academic program accreditation.

Several empirical studies indicated that universities and colleges face some problems and obstacles in quality assurance issues. Oliamate and Oliamate (2014) found that the quality assurance in higher education is still weak. Also, the study of Ragad (2014) mentioned some obstacles met in quality assurance related to academic leadership, quality culture, continuous improvement, and empowerment. Hamadni and Almqari (2015) provided some obstacles that hinder quality assurance including uncertain procedures and inadequate decision-making processes. Aladadi (2012) discussed some obstacles that confront quality assurance such as insufficient financial resources and low awareness about quality assurance by academic leaders. This creates pressure on universities and colleges to employ and follow adequate procedures and processes for quality assurance.

The Purpose of the Study

The purpose of this study is to investigate the administrative procedures of total quality assurance in Saudi Public Universities.

Research Questions

To achieve the purpose of this study the following questions will be addressed:

- 1. What are the administrative procedures of total quality assurance at the university level?
- 2. What are the administrative procedures of total quality assurance at the college and supportive deanship levels?

3. What are the administrative procedures of total quality assurance at the academic department levels?

Literature Review

This section presents a review of the literature that relates to this study. It includes three themes: the concept of total quality, total quality in higher education, and total quality assurance in higher education.

The Concept of Total Quality

The concept of total quality in practice has its roots in ancient civilizations located in Egypt, Greece, and China. Throughout history, total quality was an essential aspect of operations and production. In the early twentieth century, the contribution of Frederick Taylor led to a new approach in management by focusing on quality of production and eliminating the errors and defects (Kemp, 2006; Evans & Lindsay, 2017). Then, the total quality movement was high in demand after World War II, as it had been established in the manufacturing sector. During the second half of the twentieth century a significant body of literature and knowledge emerged on total quality by several scholars and experts including Deming, Juran, Crosby, Feigenbam, and Iskikawa. Thus, the total quality concept was applied to education, healthcare, governments, and other profit organizations. Total quality has been an important concept for services, processes, operations data, and products (Defeo, 2017; Sallis, 2005).

There is a critical argument between scholars and practitioners to define quality. Thus, total quality has many different definitions. In this regard, Evans and Lindsay (2017) emphasized that "it is important to understand the various perspectives from which quality is viewed" (p. 7). Crosby (1979) pointed out that total quality includes defect avoidances in processes, services, and outcomes. Juran and Gryna (1993) stated that total quality can be seen as the entire collection of activities through fitness for use, no matter where these activities are performed. Harvey and Green (1993) defined total quality as "exceptional as perfection, as fitness for purpose, as value for money, and as transformation" (p. 9). Total quality definitions can be confusing, allowing for many different ways of defining it, as Evans and Lindsay

(2017) stated six different perspectives: "transcendent, product, value, user, manufacturing, and customer" (p. 7).

The principles of total quality have been developed by philosophers around the world. They provided their insights and thoughts to produce a foundation of knowledge for total quality. The prior and most notable individual was Edwards Deming. He created his principles based on four essential elements: system theory, variation theory, knowledge theory, and psychology. To apply the total quality successfully in any organization, Deming provided 14 principles: 1) managing commitment and creating a vision; 2) learn the new philosophy; 3) understand the inspection; 4) stop to make decisions based on the cost; 5) improve constantly; 6) institute training; 7) institute leadership; 8) drive out fear; 9) optimize team efforts; 10) eliminate exhortations; 11) management by objectives; 12) remove barriers to pride in workmanship; 13) encourage education and self-improvement; and 14) take action (Deming, 1986).

The second philosopher who contributed to total quality concept was Joseph Juran. He wrote his book called Basic Concepts: Ouglity Control Handbook which has been published in its ninth edition. He stated that the total quality has multiple meanings it refers to "the feature of products and freedom of deficiencies" (Juran & Godfrey, 1999, pp. 2-3). More recently, Juran defined total quality for the twenty first century as "a set of universal methods that any organization, whether a business, an agency, a university, or hospital can use to attain superior results by designing, continuously improving, and ensuring that all product services, and processes meet customer and stakeholder needs" (Defeo, 2017: 33). Juran developed managerial principles according to three concepts: managerial process, statistics, and technology. His total quality approach included three quality processes: "quality planning, quality control, and quality improvement" (Defeo, 2017: 3). To manage quality Juran recommended that the organization must establish a vision, goals, policies, strategic plan, and comprehensive managerial processes (Defeo, 2017).

Another famous philosopher was Philip Crosby. In his book *Quality* is Free: The Art of Making Quality Certain focused on quality improvement approaches. He defined quality as conformance to requirements. His approach includes: identifying the problem, doing it right the first time, performance measurement, and the performance

standard allows zero defects. Crosby pointed out that the basic total quality improvement needs basic principles including: determination, education, and implementation (Crosby, 1979). Crosby's approach "is primarily behavioral and fits well within existing organizational structures" (Evans & Dean, 2003: 57).

Additionally, Feigenbaum provided the concept of the total quality control throughout all processes of the organization. He established a quality system by providing managerial and technical procedures that will ensure quality of the products and services and in turn ensure customers' needs are met and satisfied (Feigenbaum, 1991). He defined a total quality control approach as "an effective system for integrating the quality development, quality maintenance, and quality improvement efforts of the various groups in an organization" (Feigenbaum, 1991: 6).

Total Quality in Higher Education

Recently, the total quality movement has been more essential and global issue in higher education institutions (Harvey & Green, 1993; Nair, Webster, & Mertovo, 2010; Sallis, 2005). Thus, most of the colleges and universities around the world realize the advantages of total quality and in turn take action in order to tackle the quality of their education. Philips and Kinser (2018) emphasized the needs for total quality in higher education because "the quality of education will enrich society and the individuals within it. A quality institution offers such education and also itself grows-not in size, not in wealth, but in capacity and efficiency" (p. 15). Increasingly, the need for change and improvement in higher education have been urgent and necessary.

In higher education institutions, total quality is important for reasons including: competition issues, growing number of students, changing needs and expectations of stakeholders, financial challenges, the concept of public accountability, public cost and government funding, and institutional effectiveness (Mukhopadhyay, 2016; Nair et al., 2010). Additionally, Ruben (1995) added some reasons including the needs for increasing faculty accountability and productivity, the lack of community services, and the gap between research, learning, and practice. Adopting total quality in higher education institutions aims to

address the issues: increasing the role of higher education in social and economic changes, growing the number of higher education institutions, and increasing the accessibility and availability of higher education (Srikanthan, 1999). Clearly, all these issues and reasons have encouraged universities and colleges to actively seek total quality and see it in action.

Total quality is employed in the higher education as a tool to achieve continuous improvement. In fact, higher education institutions began to incorporate the body of knowledge developed by Deming, Juran, Crosby, Feigenbaum, and Baldrige to enrich the quality and improvement. This provides academic leaders and faculty with opportunity to establish models and approaches for quality improvement of academic programs and research (Dew and Nearing, 2004).

A body of related literature includes some approaches for total quality in higher education. Harvey and Green (1993) provided five comprehensive approaches. The first approach is *quality as exceptional*, which means quality as distinctive, as embodied in excellence, and as a required standard. The second approach is *quality as consistency* or *perfection* that focuses on process and functions in order to achieve zero defects and perform the things right first time. The third approach is *quality as fitness for purpose* that means the extent to which the services and outcomes relate and fit the identified purpose. The fourth approach is *quality as value for money*. It relates to cost, competition, investment, and funding. The last approach is *quality as transformation*. It indicates that the quality is related to the concept of qualitative change.

According to Srikanthan and Dalrymple (2003), there are specific approaches for total quality in higher education such as the transformative model, engagement model, learning model, and responsive university model. Clearly, these approaches and models of quality underscore the quality of products and services provided by universities and colleges in three majors functions that are teaching and learning, research, and community service.

More recently, Malcolm Baldrige established his approach by integrating total quality principles and management practice and performance. Baldrige's approach is called the criteria for performance excellence. This approach is built upon a set of seven core concepts:1) leadership; 2) strategic planning; 3) customers, stakeholders and

market focus; 4) measurement, analysis, and knowledge management; 5) human resources focus; 6) process management; and 7) organization performance results (Brown, 2014). Baldrige provided an excellent total quality approach that helps assess and measure the improvement of the higher education institutions. More specifically, "the Baldrige criteria for education, first published in 1999 provide a comprehensive structure for educational institutions to align their mission, vision, values, and goals with the resources essential for long-term improvement effort" (Sorensen, Furst-Bowe, & Moen, 2005: 2).

Leadership is recognized and conceptualized by philosophers and scholars as an important factor for total quality (Crosby, 1979; Deming, 1986; Feigenbaum, 1991; Juran, &Godfrey 1999). The higher education institutions always strive to achieve an academic excellence and total quality as valuable goals (Freed, Klugman, & Fife, 1997). To achieve these goals, academic leaders must address institutional performance, governance, and students' and stakeholders' expectations (Sorensen et al., 2005).

Total Quality Assurance in Higher Education

Total quality assurance has been considered as an essential issue in higher education institutions. Sallis (2005) stated that total quality assurance is "about designing quality into process to attempt to ensure that the product is produced to predetermined specification" (p. 17). Total quality assurance in higher education can be defined as "the system and processes to ensure higher education quality" (Suskie, 2015: 12). More precisely, total quality assurance is "about ensuring that standards are specified and met consistently for product or service" (Ellis & Hograd, 2019: 3). In fact, total quality assurance in higher education addresses several concepts of quality such as academic excellence, value, consistency, and reaching the expectations and needs of stakeholders.

Total quality assurance in higher education was discussed in the literature worldwide. Total quality assurance in higher education "tends to focus more on the production environment or processes to produce services or product. Quality assurance assesses the subject in the production process over time." (National Institution for Academic

Degree and University Evaluation, 2012: 7) Clearly, total quality assurance focuses on three points: sustaining the quality of higher education, increasing the quality of higher education, and continuous by checking the quality of higher education.

Quality assurance is a system and evaluation process to achieve quality products and continuous improvement. Establishing such system requires quality standards. In Saudi Arabia, the National Commission of Academic Accreditation and Assessment (NCAAA) has established a set of standards for quality assurance in higher education. The old version of these standards included eleven broad standards: "1) mission, goals, and objectives; 2) governance and administration; 3) management of quality assurance and improvement; 4) learning and teaching; 5) student administration and support services; 6) learning resources; 7) facilities and equipment; 8) financial planning and management; 9) employment process; 10) research; and 11) relationship with community" (NCAAA, 2015: 1). Recently, the NCAAA (2018) reviewed and developed a new quality assurance. The new standards are eight: "1) mission, vision, and strategic planning; 2) governance, leadership, and management; 3) teaching and learning; 4) students; 5) faculty and staff; 6) institutional resources; 7) research and innovation; and 8) community partnership". (p. 2). These eight quality standards are more concentrated and this is why were used in this study rather than the older version.

The higher education system in Saudi Arabia is a centralized system, because the Ministry of Education administers all universities and colleges in the whole country. The Ministry of Education is led by a minister and vice ministers. They are responsible to provide support, allocate capital and human resources, and approve academic polices for all higher education institutions (Al- Salloom, 1995). Each university has a committee who works with the university president and vice president to manage the university. The committee is responsible to guide the university based on policies of the Ministry of Education.

The Saudi Arabia government established colleges before 1975 in the western region and in the Saudi capital. The first established university is King Saud University in Riyadh that was created in 1977. After that many universities were established. More notable, in the last two decades, the number of higher education institutions in Saudi Arabia has grown rapidly. This is becoming a key issue as the country

enters the twenty-first century. According to the General Authority for Statistics (2018) there are 28 public universities in Saudi Arabia. In fact, the total quality of higher education has been a concern of the government to ensure quality of academic programs, quality of the faculty and staff, the use of quality resources, and quality of processes and services. This will assist universities and colleges to achieve the institutional accreditation, which enables these institutions be successful and competitive.

Methodology

This section presents the methodology of the study. It describes the research design, the sample of the study, the type of data, the data collection procedures, and the data analysis.

Research Design

This study is a descriptive qualitative research design in nature. The qualitative research is an "effort to understand situations in their uniqueness as a part of a particular context and the interactions there" (Patton, 2002: 1). Specifically, the qualitative research "focuses on meaning in context" (Merriam & Tisdell, 2016: 2), and uses "nonnumerical data such as words and pictures" (Johnson & Christensen, 2008: 388). Therefore, the qualitative research usually provides a rich description for phenomena that has been studied (Johnson & Christensen, 2008; Merriam, 2016). Since the purpose of this study aimed to describe the administrative procedures of total quality assurance in the universities, the documentary research design is particularly appropriate. Documentary research design "focuses on analyzing and interpreting recorded material to learn about human behavior" (Ary, Jacobs, Sorensen, & Razavieh, 2010: 29). Documentary research is valuable in order to study the visible phenomena and its dynamic situation (Cohen, Manion, & Morrison, 2007).

Study Sample

The sampling technique used in this qualitative study was a purposive and nonrandom sample. "In purposeful sampling, researchers intentionally select individuals and sites to learn or understand the central phenomenon" (Creswell, 2012: 206). The purposive nonrandom sampling is used in this qualitative study "because it seeks to obtain insights into particular practices that exist within a specific location, context, and time" (Gray, 2009: 180). More specifically, this purposive sampling technique is categorized as comprehensive sampling, which means that all individuals, groups, settings and unites are examined in the research (Patton, 2002). Thus, the researcher selected nine Saudi public universities that were accredited by the National Commission for Academic Accreditation and Assessment until February 2019. These selected universities were: King Abdulaziz University. Abdulrahman bin Fasial University, Islamic University Madinah, Majmaah University, King Khalid University, King Saud University, King Fahd University for Petroleum and Minerals, Najran University, and Taibah University. These universities were selected as a purposeful sample of this study from which to acquire data.

The Type of Data

The type qualitative data used in this study were documents. Written documents are used in qualitative research as data sources to obtain a deep understanding of the phenomena under study. "These sources provide valuable information in helping researchers understand central phenomena" (Creswell, 2012: 223). The documents also "are stable sources of data and can help ground a study in its context" (Ary et al., 2010: 443). The documents include planning documents, organizational documents, policy documents, reports and statistic documents, formal record documents, prospectus and directory documents. These documents are considered as primary sources of the data. In this document analysis research design, using documents is the particularly appropriate type of data.

To ensure the validity and reliability of the documents, the researcher evaluated and judged the value of documents used in this

study by following these criteria: credibility to ensure the documents were written by universities as primary sources and contain accurate, complete and genuine information as well as insights relating to the research purpose and questions; authenticity to ensure the issues as the history of the document; and representativeness which means the documents are available in the websites of selected universities.

Data Collection Procedures

In this study, the written documents were collected to answer research questions. The data collection procedures were conducted during the academic year 2018-2019. First, the researcher identified the sample of this study from which the data will be collected. Second, the type of intended documents that will be useful were identified. Third, the researcher followed legal processes to collect the data by gathering the documents form selected universities' websites or contacting the appropriate individuals in charge of the documents to use them. Fourth, the researcher began to collect the documents such as quality guidelines, university manuals, quality handbooks, and other official documents that are related to quality procedures and activities. Fifth, the rights of collected documents were maintained. Finally, the collected documents were recorded and saved on organized files to be prepared for analysis process.

Data Analysis

The researcher used the manual analysis of qualitative data through reading the data and marking it by hand. Data from all documents were analyzed through processes that lead to answer the research questions. These processes included: 1) preparing and organizing the data for analysis; 2) initially exploring and analyzing the data through the process of color-coding; 3) by using color to code the data, general themes emerged from the initial analysis; 4) describing the characteristics of existing themes; 5) identifying the major themes and subthemes; 6) presenting the findings and constructing a narrative report to explain what was found in response to the research questions;

and 7) interpreting the findings to make sense and draw a large meaning about the phenomena.

Findings of the Study

This section presents the findings of this study. The data collected in this study were analyzed and reported in this section. The section includes three subsections that are organized around the research questions examined in this study.

The first subsection presents the findings that answer the first question of this study: what are the administrative procedures of total quality assurance at the university level? To answer this question, all data was analyzed using a color-coding system. The findings from this analysis were reported in a description of the administrative procedures of total quality assurance at the university level. In these descriptions, the themes that emerged were departmentalization, line authority, and responsibilities.

Departmentalization, as a division of the work has been considered in the organizational structure of universities. Functional departmentalization is spread throughout the universities and existed to manage the activities and procedures of total quality. For example, most universities established a vice presidency to manage the quality throughout the institution. This vice president has multiple names such as vice president for planning and development, vice president for development and quality, and vice president for development. The organizational structure including of vice president for quality also includes one or more deanships for quality and development such as dean of quality and development, dean of skills development, dean of quality and skills development, dean of quality and academic accreditation, dean of quality and academic development, dean of quality, dean of academic development, and consultants' unit. As another example, some universities established deanships only to manage the quality throughout the institution. In both examples, each deanship included a variety of units such as a quality assurance unit, a teaching and learning unit, a skills development unit, a performance assessment unit, an academic accreditation unit, an institutional accreditation unit, an academic planning and curriculum unit, a strategic planning unit, and a development of regulations and policies unit.

The second theme includes line authority. Quality is managed by the vice president for quality and development who is responsible for everything related to the total quality and accreditation in the university. He reports directly to the president of the university. The vice president for quality established consultants' committee as experts involved on the procedures of total quality assurance at the university. Additionally, the organizational structure of the deanships of quality revealed that each deanship was managed by a dean and vice-deans and they directly reported to the vice president for quality and development. Finally, each unit in the deanship of quality was managed by a chairperson.

The responsibilities of the vice president for quality and dean of quality were clearly identified to carry out the task of quality and development. First, the vice president for quality was the foremost individual who was responsible for quality assurance system across the university. The findings of the study described the responsibilities of the vice president for quality that included: creating a quality system; establishing deanships for quality and academic development; organizing a standing committee for quality; operating the development process; improving the academic practices; increasing the quality of outcomes; supervising the deanships of quality; leading the consultants' committee; implementing a strategic plan for the university; following up on the quality assurance procedures; establishing partnerships with external organizations; providing appropriate systems for performance assessment; ensuring an effective performance; distributing the culture of quality; using quality standards; updating the organizational structures across the university; providing an annual report to the university president; recruiting the quality consultants; and preparing quality guidelines, university manuals, and a quality handbook. These responsibilities describe how total quality and academic development will be ensured at the university.

On the other hand, the dean of quality and development was the second individual in charge of this function. He worked as an assistant to the vice president for quality to ensure continuity of academic development. The findings showed multiple responsibilities for the dean of quality and development. These included, for example:

supervising the units of deanship of quality; conducting the plan for quality assurance and development; reviewing and revising academic programs; overseeing the vision and mission of the university, colleges, departments, administrations, and units across the university: following-up on the accreditation process; suggesting to establish new units and centers for quality; helping to achieve an excellence in academic process; establishing relations with local accreditation agency (NCAAA); provide consulting and support for colleges, units, and academic departments to implement quality standards: providing criteria and indicators for assessment; conducting professional development programs for faculty and staff; and providing quality reports to vice president for quality. The responsibilities of quality deans enabled them to work directly with colleges and units for reviewing and managing the procedures of total quality assurance.

The second subsection presents the findings that answer the second question of this study: what are the administrative procedures of total quality assurance at the college and supportive deanship levels? To answer this question, the data was analyzed using a color-coding system. The data analysis revealed the main themes related to the administrative procedures of total quality assurance at the colleges and supportive deanships level. These main themes were organized around departmentalization, line authority, and responsibilities.

It is most noticeable that departmentalization as division of the work has existed in the organizational structure of colleges and supportive deanships. For example, most colleges and supportive deanships established vice deanship for quality and development or established quality units. It depended on the organizational structure of each college and deanship. More specifically, a vice deanship for quality and development always included several units such as quality assurance unit, academic accreditation unit, evaluation and measurement unit, skills development unit, alumni unit, and data unit. Finally, each college and deanship established a quality assurance committee.

At the level of colleges and supportive deanships, the line authority was that, first, if the college or supportive deanship structure included a vice deanship for quality and development, the vice dean for quality and development was assigned to this task. He reported directly to the dean

of the college or deanship. On the other hand, if the college or supportive deanship structure included a quality assurance unit, a quality assurance officer was assigned to it. He also reported directly to the dean of the college or to the supportive deanship. Moreover, each unit in the vice deanship was managed by a chairperson. Lastly, the dean of the college or supportive deanship was the chairman of the quality assurance committee.

The responsibilities of the vice dean for quality and development and other quality assurance unit officers provided the basis for control and direction of quality task at colleges and supportive deanships. The findings of the study presented the responsibilities of vice deans for quality as follow: managing the total quality in the college and supportive deanship; collecting data; enhancing the quality assurance system; gathering information required for the quality assurance system; ensuring the implementation of quality standards; supporting academic departments and units to apply the quality standards; planning for institutional and academic accreditations; sustaining the culture of quality; establishing strategic plans for development; confronting the obstacles and challenges to implement the quality standards; providing reports about quality and development; conducting self-evaluations and assessments; planning for improving internal environment; obtaining academic accreditations for academic programs; planning for professional development of faculty and staff; and, improving academic performance. These responsibilities describe how the vice dean for quality and development and other quality assurance unit officers guide quality and development procedures at colleges and supportive deanships.

The last subsection provides the findings that answer the third question of this study: what are the administrative procedures of total quality assurance at the academic department levels? To answer this question, the data were analyzed using color-coding system. The findings showed the main themes related to the administrative procedures of total quality assurance at the academic department level.

A theme that consistently emerged from the data was that total quality assurance is everyone's business in the academic department. This meant that all faculty members and staff acted to implement total quality and continuous performance development. In an academic setting, the academic department was the last unit to implement the

total quality standards in order to ensure the quality of the outcomes of the academic program. The findings revealed that the organizational structure of academic department included a coordinator who was assigned by a department chairperson. Additionally, there were temporary committees formed to determine regulations and responsibilities. Examples of these temporary committees include: a self-study committee, a self-assessment committee, a quality plan committee, and an academic accreditation committee.

In academic departments, the department chair, the quality coordinator, and other faculty members have responsibilities, which cover all aspects of quality activities. These responsibilities assist in carrying out the quality standards for institutional accreditation and academic program accreditation and include: mission, vision, and strategic planning; governance, leadership and management; teaching and learning; students, faculty, and staff; institutional resources; research and innovation; and community partnership. These responsibilities reflect how total quality assurance system is managed and governed in academic departments level.

Discussion

This section provides discussion for the findings of the study in light of the related literature and past empirical studies. The discussion provides explanations of why these administrative procedures of total quality assurance are followed in Saudi public universities. The discussion focuses on various concepts that label the administrative procedures of total quality assurance. Also, the interactions between these concepts are considered for understanding total quality assurance system. In order to provide insights to the discussion, the investigator identified three concepts: structure of higher education administration, history of implementing the total quality, and competition.

The first concept is the structure of higher education administration in Saudi Arabia that is based on an administrative philosophy of centralization. In Saudi Arabia, the higher education institutions are governed by a centralized authority, which is the Ministry of Education. Thus, authority, power and responsibilities are delegated by the Ministry of Education to universities. This explanation

is supported by Al-Sallom (1995) who pointed out that in Saudi Arabia centralized authority plays a key role in organizing and managing universities. An example of this authority follows. To establish a vice presidency for development and quality, as well as a deanship of for development and quality, the university must receive approval from the Ministry of Education. This is also an explanation of how all universities have similar divisions for total quality and development in their organizational structure.

Additionally, the responsibilities and line authority are designed based on the organizational structure of the university and is approved by Ministry of Education. Therefore, this organizational structure will shape the total quality assurance system. This explanation is solidified by Standard 2 of NCAAA 2018 Standards which emphasize that the organizational structure of a university must define all divisions and sub-divisions, functions, authorities and responsibilities. All these will ensure effective and efficient procedures for a total quality assurance system. Hence, the common responsibilities and line authority for total quality and development are similar at universities with slightly differences in some particulars.

The history of implementing total quality in Saudi public universities is the second concept that offers an interpretation for the findings of the study. Total quality began in Saudi public universities in the last 10 years. Additionally, a quality assurance agency was established and is called the National Center for Academic Accreditation and Assessment (NCAAA). This agency is governed by the Education Evaluation Commission and was founded in 2003. The NCAAA ensures the quality system, academic and institutional accreditations in all higher education institutions, offers quality assurance standards, and conducts indicators for performance assessment (National Commission for Academic Accreditation and Assessment, 2015). According to NCAAA (2019) just eleven public universities have been accredited until February 2019, while seventeen public universities are not yet accredited. This emphasizes that implementing total quality in Saudi public universities has recently occurred.

This explanation is consistent with the related literature that emphasized that higher education institutions around the world realize the importance of total quality approach to increase the quality of outcomes (Harvey and Green, 1993; Sallis, 2005; Nair et al., 2010). Also, Georgios, Joshi, & Paivandi (2017) emphasized that globally, higher education institutions implemented quality assurance in recent time as a decisive transformation movement. Thus, total quality as an approach to improve higher education outcomes is a contemporary trend.

Finally, competition plays an important role that influences the procedures of total quality assurance in universities. Recently, there are increased pressures from students and all stakeholders facing higher education to operate efficiently and effectively. This enhances the competition in higher education to meet contemporary changes. The goal of competition in higher education is to provide quality learning, quality research, and quality services. To be competitive, universities set standards and benchmarks to achieve the targets and fulfill students' and public's needs and expectations. This explanation may be consistent with Sorensen et al. (2005) who stated that the universities are required to focus on results, outcomes and accountability. Also, Nair et al. (2010) underscored that total quality assurance is an important function that enables university to tackle the competition factors. Therefore, universities realize that good quality performance is the key to build a good reputation and compete successfully.

Conclusion

The findings of the study described the administrative procedures of total quality assurance in Saudi Public Universities. The findings revealed that there are departmentalization and clear divisions and subdivisions for development and quality through the university. More specifically, the findings showed that all universities have similar divisions and subdivisions for total quality and development. An example of this is universities with a vice presidency for development and quality, a vice deanship for quality and development, and a quality assurance unit. Additionally, the findings of the study identified responsibilities and a clear line of authority for individuals who responsible for total quality and development at all levels of the university system.

Based on the findings of this study some implications are provided here. The academic leaders should work hard to enhance and convey the responsibility of the culture of total quality through all administrative levels and among faculty and staff to be everyone business. Also, to achieve an excellent quality performance and continuous improvement, effective academic leadership is essential and must be taken into consideration. Finally, to be successful on implementing the total quality and development, the technology is extremely required to be used in an appropriate manner.

At the end of this study, further studies are suggested to be conducted. Studying the perceptions of academic leaders regarding the current performance of total quality would be helpful toward the improvement of the culture of total quality. Also, it can be useful to conduct another study to investigate the effectiveness of benchmark assessments of total quality in the universities. Lastly, longitudinal studies can be conducted to address the continuous improvement of the outcomes in the universities over time

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