

# Implementing Quality Management Methodology on the Efficiency of Academic Performance in Higher Educational Sectors

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**Abstract** – This study aims to identify the implementation impact of quality management methodology on the efficiency of the academic performance in Sudanese Educational Institutions. Through the knowledge level of the application of the principles of quality methodology from the view point of its employees (faculty members) and to identify the appropriate quality principles as well as to identify the requirements of the overall quality measures for the educational system. Sudanese education today has to witness radical changes in the entire educational system and also in the establishment of proposed educational objectives that are liable to carried out to secure the country's aspiration for an effective and efficient education system.

**Key Words:** Quality, Quality Management, Methodology, Academic Performance, Higher Education.

## 1. INTRODUCTION

The educational system in Sudan is free and compulsory for the age group of 6-13. The primary education consists of 8 years and followed by 3 years of secondary education. That means students are requested to sit for the board exam in the 8<sup>th</sup> primary and then 3<sup>rd</sup> secondary. Arabic is the primary language for all levels and the schools are concentrated mainly in the urban areas. The Sudanese Education System went through radical changes in the late 1980s and early 1990s. Africa's longest civil war ended in 2005 through the Comprehensive Peace Agreement (CPA). In the Educational Sector, a new Ministry of Education, Science and Technology (MoEST) introduced both at the central level and in each of the 10 newly originated states. In short, there has been drastic progress in creating new system for education in the 4 years since the signing of CPA. But unfortunately from the inception till date, there is neither a quality management system nor a quality methodology was introduced by the Ministry of Education, now called Ministry of Higher Education (MoHE). Even though new systems were introduced, the challenges are more.

According to Sanyal (1979), Basheer (1983), Nasser Essied (1999), the Islamic culture has dominated the life of people in Sudan since the 17<sup>th</sup> century, so that the Sudanese Educational System has its roots from the Islamic teaching. The educational policy during the regime of Turco-Egyptial

forces had a high influence on the Sudanese Educational System. When the Mahadists (1885-1898) took over, the education was replaced by traditional religious schooling system. During the Condominium period, the Sudanese Administration were acting as if they were an independent national, but still there were lack of skilled labours, lack of water, lack of motivation among people in effect the economic situation were deteriorating very fast. There was lack of funding for social development including education. The educational objectives at that time were to help the administration to function, to develop the economy and also to distract the educated people to revolt by offering them employment. More emphasis were given to technical and vocational education to meet the demand for the skilled workers for the political purposes during that period.

The Comprehensive National Strategy (1991-2002) aims at establishing an indigenous educational system which unifies the sources and objectives and it includes all factors that build the Sudanese character. It also aims to provide with spiritual and ideological potentialities and make ready to respond towards any new situation with renewable knowledge, a thing that made the idea of making Khalwa and Kindergarten as an indigenous part of the educational policies.

The present scenario witnessed a number of variables in all areas of life, where contributed technical and scientific progress in increasing the need for changes and development of civilization that led to the educational reforms and gained overall quality of attention.

This study made to find out the extent of interest and the application of educational institutions to quality management principles and to produce outcomes of higher educational level. To achieve the highest quality, continuous improvement and development on the educational process is needed.

## 2. LITERATURE REVIEW

Motwani (1995) titled "The application of TQM in education efforts, modern and future trends" stated four theoretical trends in the quality of education and they are the definition and procedures, normative studies, conceptual models and the application as well as evaluation. The study pointed out on all stages of the application of quality management, that is awareness and commitment, planning,

program implementation and evaluation and finally future trends of those aspects of the proposed methods. But the researcher never made any practical study for the proposed methods and so this became a failure.

Noman Al Musawi (2003) proposed to develop a tool to measure the total quality management in higher educational institutions. In his study, he proposed a tool to measure the TQM in higher educational institutions through the verification from sincerity and persistence and their applicability in the educational institutions. He proposed 4 areas quality management namely quality requirements and follow up, development of human resources and decision making, community services and study the above recommended and to measure in higher educational institutions in the Arab region. Neither the tool was formulated nor implemented.

The education globalization, migration of student's from one country to another are the main causes for concerns to educationalists. The utilization of new teaching and learning methodologies, education delivery changing patterns, course contents- the quality concept has become an integral component of the educational process for its success. Continuous performance improvement and self evaluation among stakeholders like top management, students, faculties other related members is required and the development and encouragement of leadership among the stakeholders in the organization should be made as an ongoing process as well as a system.

## 2.1 Methodology

The sample was collected from the Sudanese Public Universities using a stratified random sampling technique based on the directory provided by the Ministry of Education and Scientific Research in Sudan (MESR). The final number of respondents involved in the study was 174 college faculties within 24 public universities. The hypotheses of the study were tested by applying multivariate statistical data analysis. This study reported that there is a significant relationship between quality management core elements and knowledge management process. From the study it is clear that both quality management methodology core elements and knowledge management processes should be implemented holistically rather than theoretically. Finally the findings from this study provided empirical evidence that quality management has a significant and positive impact on the educational organizations, which in turn significantly affect the organizational performance.

## 2.2 The Study Problem

The problem with the study in the survey of quality management principles applied in Sudanese educational institutions as perceived by its employees through the following 4 principles.

1. A quality requirement in education
2. Educational process follow-ups
3. Manpower development
4. The academic administration decisions.

This research article is trying to attempt to answer the following questions.

- Q1. What is the impact of the application of quality management methodology on the efficiency of academic performance in the Sudanese institutions?
- Q2. What is the impact of the follow-up of the educational process on the efficiency of academic performance?
- Q3. What is the impact of manpower development on the efficiency of academic performance?
- Q4. What is the impact of the administration academy decisions on the efficiency of the academic performance at Sudanese Universities?

## 2.3 The Importance of this Study

This study represents a reference that benefits the scholars, students and those interested in showing the role of senior management in educational institutions in the process of applying the principles of quality management methodology in improving the system of higher education as well as being useful for decision makers in Sudanese Universities. Especially in the preparation of the consolidated university academic staff qualified to lead the process of change and the impact on efficiency, effectiveness, productivity and finally not but the least in access to the learning outcomes of high quality in education.

## 2.4 The Study Objectives

The below lists are the objectives of the research study.

1. To discuss the importance of quality in Sudanese educational institutions
2. To know the actions required for the implementation of the quality management principles.
3. To determine the success of quality management actions through various measures around.
4. Determine the level of application of the principles of quality management in the universities of Sudan from the viewpoint of its faculty members.
5. Identify the most quality management principles applied in the institution as seen by its employees.
6. Activating the role of administrators to apply the principles of quality management.
7. Identify the requirements of the overall quality of the education system.
8. Identify the appropriateness of the education system at the Sudanese Universities.

## 3. RESULTS

Through the previous studies and research conducted on the subject of the quality management can be drawn as follows:-

- The results of all studies conducted in the Arab and foreign countries to the importance of the

application of quality management in the educational process.

- The studies conducted in the field of quality management for the educational process had an effect on the universities and the community as well.
- Researchers benefited from the previous studies for the identification of a set of aspects such as scientific methodology, scientific instruments used, statistical methods and the methods of information processing.

#### 4. CONCLUSIONS

The study showed that there is a positive impact for the application of the principles of quality management on the efficiency of academic performance, a positive impact for the follow-ups on the educational process, a positive impact to the development of human resources on the efficiency of academic performance, and a new and improved strategy to change the actions and behaviors of the administrators in the Sudanese Universities. In turn, the study by the Sudanese universities to seek the presence of the elements of the quality pillars (both physical and human) which is the basis for the implementation philosophy.

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