PARAMETERS OF EFFECTIVE MANAGEMENT OF TOTAL QUALITY IN HIGHER EDUCATION

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Abstract

This study investigated parameters of effective total quality management practices in the Nigerian educational institution specifically in Rivers state. The study adopted a descriptive survey. One research question was formulated to guide the study. The study is based on the data collected from the stakeholders of selected privates and public universities in Nigeria through the administration of questionnaires. Data collected were analyzed using mean and standard deviation. Findings show that quality input management has an effect on perceived corporate image, quality output management has an effect on perceived corporate image, there is no difference between private and public universities as regards their total quality management and how students perceive the corporate image. Based on the findings, it was recommended that the concerted efforts of the stakeholders must be harnessed and geared towards improving the quality standards of Nigerian universities.

Introduction

Determining quality in education is a monumental exception considering the underlying beneficiary is us, Humans. It is the quality of education that shapes the incessant wealth and security of both societies and their people (Babbar, 1995). What is the relevance of education for the evolution of brilliance and proficiency of a person that will lead to a progressive economy that should not be subverting? This has used a powerful scheme for the improvement of higher education in almost all countries all over the world. The higher educational system was proven effective in producing remarkable professionals to rule the nation in the future. But then, quality improvement is a constant process. Thus, perception of the index rate and execution is necessarily precedent (Murad & Rajesh, 2010). To enhance quality service, educational institution needs to know the necessities. These necessities must understand the essence of the characteristics. However, people foresee quality variously. Owlia and Aspinwall (1997) specify that to give a verdict to quality, and correspondingly improve quality, it is vital to find out the characteristics of quality. Thus, it is crucial to determine the characteristics of quality for the measurement of the education process (Cheng & Tam, 1997).

Globalization and competition motivated higher education institutions to change processes to engage with external forces and new technology based on supply and demand (Temple, 2005; Mehralizadeh, 2005; Srikanthan, 2003). at all kinds of institutions work in a university, a bank, a hospital, an airline, a private company, and government organization all these institution competition for a client, for student, for customers for wealth, For money to get high reputation in quality service like price, reliability, durability but the quality is the most important in competition at the current situation (Oakland, 2002). Higher Education is one of the important service sectors in modern business so all the time, any sector is always in a condition of new change and is being motivated by the public, government and economic necessity (Tahar, 2008). The benefit of the development for excellence education, capability and Evolution of knowledge force growth and enlargement in the economy and unstable so, the most institution in higher education around the world should establish a strategy for development in education. TQM is the

most important factor that shapes the strategies of higher education institutions in their attempt to variety stockholders as well as parents, students and society as a whole Ali et al., (2009).

All researchers such as Sirvanci, (2004), Guzman et al., (2004), And Najafabadi et al., (2008) adopted that TQ Institution applied TQM had been successfully and enhance the difficulty and challenges for the educational centrepiece that operates in an environment of quality. While their research in higher education focuses on r sharing learning and knowledge through department and function, it was ironic that they have been lagging behind other organizations in approval and implementing TQM as shown by Sirvanci, (2004). Where this inactivity in the adoption of TQM shows usual characteristics and traditional structure of higher education academy still through challenges are not encountered in other institutions services. Finally, Quality education is aimed at quality-motivated activity efforts and practices. Philosophy of TQM is the most important subject in educational management on the way to identify how 14 institutional preparation and planning is works plus how benchmarking is practised and adapted, taking into account the university's levels and rank of capability and cope-facility (Guzman et al., (2004).

TQM means handling all the components of organization principles and procedures, patterns, arrangement, and all those who are affected in any way by the quality of the product or service (Stanciu, 2003). The main objective of TQM is to generate within the organization an environment in which all the assets are used ingeniously and effectively to provide quality service the institution needs to adapt to in this fast-paced world (Vinni, 2011). TQM has been acquired as a management epitome by many organizations worldwide. The quality movement started with a quality improvement project at manufacturing companies. But afterwards, it dispersed to other service organizations including banking, insurance, nonprofit organizations, health care, government and educational institutions. TQM moulds rooted in imparting of prime instructors, more often than not, demands several rules such as cooperation, top management leadership, customer focus, employee engagement, consistent advancement tool, training, etc. (Murad & Rajesh, 2010).

The higher education sector at both government and institution level has been progressively introducing high-quality management systems over the last two decades, the urge for accurate quality measures and security methods has been increased boost swiftly. Most especially in the USA and Europe, as well as in the Middle and Near East, Africa, China, South East Asia, the UK, Australia and New Zealand (Srikanthan & Dalrymple, 2003; Haug, 2003; Materu, 2007; Brookes & Becket, 2007). At the same time, huge funds from governments make it very crucial for those who handle education to guarantee that education provided in schools, universities and institutions of learning will be fruitful. Furthermore, some other circumstantial demands called for a more competent and exceptional quality of learning. These consist of developing surroundings in the figure of students, intensifying clash in higher education institutions, intensive challenges to students, and more adaptable programs for both in undergraduate and graduate-level (Becket & Brookes, 2006).

Nevertheless, the education sector is not completely comfortable with the TQM method. Schools thought that TQM methods are not suitable for them having the fundamental concept of "Customer Satisfaction" they felt uneasy with the thought of them just pleasing their students who are their valuable customers (Barnard, 1999). Alternatively, schools can use the quality method such as the European Foundation for Quality Management (EFQM) excellence model, ISO 9000, Malcolm Baldrige National Quality Award to boost up the students' performance. Even the most known service quality procedure, SERVQUAL (Parasuraman *et al.,* 1985; 1988), is also used to calibrate the quality in the education context. Models and concepts, such as EFQM, Singapore Quality Award (SQA), School Excellence Model (SEM) and Malcolm Baldrige National Quality Award (MBNQA), are widely used in educational institutions. These posers adopt the methodology of TQM which has been adjusted for the school environment. Most

schools and universities recognize the welfare of these quality models, and comprehensive research has been done in this area to investigate the school performances about the quality management philosophy.

This has led to a substantial deliberation within academic institutions on the essence of such systems to higher education. Antagonist aim on concerns about the parameters to academic freedoms, risk-averse processes that may restrain diversity and the evolution of managerialism, or the bloom of administrative control, when in fact advocates alluded to the advantage of potent change management, constant progressive cycles, higher academic standards, increased staff and students' fulfilment and cutting edge planning (Hoecht, 2006; Mizikaci, 2009; Williams, 2009).

This research aims to determine how quality is acknowledged by diverse groups of people, namely the students, parents, faculty members and employers, regarding the effectiveness of TQM in Higher Education. The perception acquired from the study will configure the benchmarking with TQM methods which will lead to focus on the general principles of TQM. It will also stimulate the question of how these methods can be used to boost the quality of an academic institution, which is the primary purpose of this work.

Literature Review

Masters of total quality management like Deming, Juran, Crosby, Ishikawa and Feigenbaum characterized the theory in various ways but still, the significance and soul stays the same. According to Deming, "quality is a consistent quality development procedure towards the anticipated degree of consistency and perseverance. Deming also describes 14 fundamentals of quality management to boost project outputs and the achievement of the organization. Juran identified quality as "fitness for use". According to him, each individual in the organization should participate in the exertion to make products or services that are fit for use. Feigenbaum defined total quality as consistent work procedures, beginning with customer necessities and finalizing with customer's satisfaction (Evans & Dean, 1999). Crosby defines quality as a correspondent to demands. He focalizes on zero defects and setting things straight by doing it correctly the first time. Ishikawa (1985) also accentuate the relevance of total quality control to boost organizational performance. According to him, quality does not mean the quality of the product only, but also of the quality of management, or the reputation of the company.

Definitions of quality have been altered with the transition of time, modification of customer's needs and demands. But the vitality has more or less been progressed to resolve the issue, compliance to standards for customer satisfaction. With management routine getting complicated, attacks to managing quality in operational areas are becoming unmanageable. Institutions that have victorious outcomes with TQM principles have customer and quality integrated into their corporate scheme (Jha and Joshi, 2007). Any institution is a system of interconnected units. For total quality management to be victorious, all of the elements within the organization must be conjointly engaged.

Total Quality Management in Higher Education

Total quality management is an approach of management to get better effectiveness, efficiency, cohesiveness, flexibility, and competitiveness of a business as a whole (Samuel, et al., 1996) Consistent with Ali, et al., (2009) The total quality management commonly may be able to define as making right things for the initial time, determined for continuous development, satisfying customers, requirement, making the quality of the responsibility of each member of staff. Sahney et al.,(2002) appointed to TQM in education as complicated, It contains within its domain the quality of inputs in the form of learners, support employees and connections of the processes quality in the form of the education and teaching activity and the quality of outputs in the form of the enlightened students that go out of the system. Moreover, Sangeeta et al., (2004) considered a learning system as an alteration process comprising of inputs of students, educators, administrative staff, physical facilities and processes.

Some scholars argue that TQM can be implemented in both administrative and academic departments in higher education. Moon and Smith (1998) consider that TQM can be implemented in any public organization including higher education in all departments. They found that it was successfully applied in two public organizations in the UK: Her Majesty's Custom and Excise and the Benefit's Agency. These two cases are government administration departments where improvements had taken place such as reducing waiting and answering call times, but the study does not include any successful evidence in academic departments in universities. Antony and Preece (2002) argue that TQM is continuous improvement through self-assessment, where performance is compared to an excellent model to find gaps and ways for their suitable bridging and this can be implemented in higher education. It is important to point out that academic freedom is essential for professors to approach any course from a variety of directions and tailor their courses and teaching to students; a professor has to use foundational principles that are applied differently in each case rather than replicable practices (Deem, 1998). Professors who teach in the same way and deliver the same lectures provide a minimal opportunity for students to learn (Roettger, Roettger and Walugembe, 2007, p. 126). Sousa (2006) points out that there is no one type of best teaching, but it is essential to incorporate different approaches in teaching for optimal learning. Aly and Akpovi (2001) support the use of TQM in universities and argue that a lack of leadership and resources to encourage continuous improvement causes TQM to fail in academic departments. In their case study of TQM practices in the University of California (UC) and California State University (CSU), questionnaires were sent to the two university campuses to both administrative and academic managers to check on TQM programs offered by their schools. Half of both universities used TQM concepts, and seventy-six per cent of them reported that they are using them in the administrative departments only (Aly and Akpovi, 2001).

According to Schargel (1996), TQM is a very successful management system that should not be applied from the business sector to higher education only as it should also start in schools. Based on results from an empirical study, he argues that TQM helps in creating well-educated students and thus a well-skilled workforce that will thrive when they work in the industry; otherwise, they need to be trained and educated in their workplaces that cost billions of dollars. His study is a case analysis of initiating the 'Westinghouse Education Quality Initiative' in the 'George Westinghouse Vocational and Technical High School', which introduced a TQM program. The school had many problems including high-aged teachers, entry students with poor math and reading skills and high rates of failure. Schargel (1996) explains how TQM was introduced to the high school through training a group of voluntary teachers about the TQM model and then writing down a mission, choosing a quality steering committee and a quality coordinator.

The first target was increasing the morale of staff through choosing a staff member to be recognized every month by writing up his/her name on a bulletin board for everyone to see (Schargel, 1996). Since this practice is similar to giving young children stars on their work, scholars and academics are cynical about this kind of activity, as it is not based on scholarly practices and standards. Schargel (1996) explains that the philosophy of TQM was also introduced to students and a class of children was chosen as a quality leader who used to meet with the principal every month to discuss students' improvements and last year students were assisting their peers in the first year where dropout rates dwindled.

Effectiveness and Efficiency
Sahney (2010) pointed out that efficient leadership is a precondition for the successful functioning of any instructional organization and educational leadership is all-pervasive and implies: Keeping a balance among a strong leadership role and maximum self-rule for teachers. Providing a structural institutional model in which teachers can carry out effectively. Being a firm disciplinarian and providing a role model for teachers and students the same. Performing all managerial functions; from planning to control, setting a strong administrative set-up, providing

resources and facilities as said by Oakland, (2003). Effective leadership and total quality management together construct results in the company or organization doing the right things, the right first time. Furthermore, clarifying effective leadership begins with the chief executive's and his top team's vision, capitalizing on market or service opportunities, continues through a strategy that will give the organization competitive or another benefit, and leads to business or service success. It goes on to hold all the beliefs and values held, the results taken and the plans made by anyone or anywhere in the organization, and focusing on them into effective, value-adding action, together, effective leadership and total quality management result in the company or organization doing the right things.

Osseo-Asare et al.,(2007) suggested three things about managerial leadership, Firstly, that even though there are many alternative bases for exercising leadership, deliberate people-oriented management and leadership behaviours are more likely to lead to a major improvement in the degree of efficiency and degree of effectiveness of quality management practices in higher education. Secondly, there is a perception gap being between leadership effectiveness in deciding the correct academic quality improvement objectives and management efficiency in the way resources are used to achieve predetermined quality improvement objectives. Finally, additional research is needed to provide a strong explanation of the strategic role of managerial leadership in the successful implementation of TQM in higher education.

Statement of the Problem
There has been a report in social and academic circles in Nigeria to the effect that university managements are inefficient, and that the majority of universities in the country 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. Most often than not, decisions are taken at the highest level at the top of the administrative hierarchy, 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. Most public universities in Nigeria are poorly managed to the extent that the overall system will be yawning messianic intervention for a total overhaul of the system.
Consequently, researchers have tried to dig deep into the well of unanswered questions to ferret for possible answers on challenges of total quality in higher education but not much is known on the parameters of effective management of total quality in higher education. Therefore, the researcher the objective of this study gears towards ascertaining the parameters that could be adopted in determining effective management of total quality in higher education in Rivers State. Consequent to the above objective the researcher sought to answer the following question;
1. What are the parameters of effective management of total quality in higher education?

Methodology
The study adopted a descriptive research design to investigate parameters of effective management of total quality in higher education in Rivers State. Okwo&Walson (2016) defined a descriptive survey design as a design concerned with describing events as they are without any manipulation of what caused the event or what is being observed. Ajoku (2006) posit that descriptive research design describes "what is" by recording, analysing and interpreting conditions that exist. The process involves the collection of data to test hypotheses or answer research questions generated in the study. The research design is appropriate for the study as it investigates parameters of effective management of total quality in higher education in Rivers State.

The population of the study consisted of all the stakeholders and policymakers in higher education in Rivers state Area Rivers State. A stratified random sampling technique was adopted in selecting the sample. To carry out the random sampling technique, the ballot system was used with the inscription "S" for selected and "N" for not selected. The sample size of the study was 200 respondents.

The instrument for data collection was a self-developed 12 item instrument. It was titled "Parameters of Effective Management of Total Quality in Higher Education Questionnaire". PEMTQHEQ was used to get the desired information from the women (respondents). The instrument was divided into two sections (A and B). Section A is called demographic data. While section B consisted of questions that elicited responses from the respondent's base on their perceptions, feelings and opinion.

The designed instrument was validated by two experts from the Department of Educational management who vetted and made corrections. These corrections were incorporated and they contributed immensely in structuring the final draft of the instrument. To determine the reliability of the instrument, a test-retest technique was used.

The researcher visited and administered the same instrument to a sample of 25 respondents in the state which is outside the sample respondents. A reliability coefficient of 0.82 was established using the Pearson Product Moment Correlation. The instrument was, therefore, judged as dependable for the study. Means rating was used to answer the research questions.

Research Question One
1. What are the parameters of effective management of total quality in higher education in Rivers state?

Table 2: parameters of effective management of total quality in higher education

Variable	N	Mean	SD	C. MEAN
Prudent management of the available fund	100	3.52	0.94	2.5
Adequate provision of learning facilities	48	2.58	0.73	
Conducive learning environment	34	2.63	0.95	
Desired learning outcome in higher education	18	2.94	0.78	

The result in the table reveals that all the items are above the criterion mean of 2.5 with prudent management of available funds having the highest mean of 3.52 with a standard deviation of 0.94, followed by desired learning outcome in higher education with a mean of 2.90 and standard deviation of 0.78., then conducive learning environment and adequate provision of learning facilities with mean of 2.63, 2.58 and standard deviation of 0.95 and 0.73 respectively. This indicates that prudent management of the available fund, adequate provision of learning facilities, conducive learning environment and desired to learn outcome in higher education are parameters of effective management of total quality in higher education.

Discussion on Findings

From the analysis of data, table 1revealed that prudent management of the available fund, adequate provision of learning facilities, conducive learning environment and desired to learn outcome in higher education are parameters of effective management of total quality in higher education in Rivers State. The finding is in agreement with the views of Sahney et al., (2002) who observed that total quality management in education is complicated, It contains within its domain the quality of inputs in the form of learners, support employees and connections of the processes quality in the form of the education and teaching activity and the quality of outputs in the form of the enlightened students that go out of the system.

Conclusion

Finally, from the data analysis and after all discussion above based on literature review and opinion of the researcher, higher education is the most important institution in any country Because the impact in economic and development reflects how the country care of educational and knowledge for the generation as a weapon to fasces others counties. So when there's think about total quality management in the educational sector that's mean the graduates give bad or good reputation in educational processes in university. The data analyzed revealed that prudent management of the available fund, adequate provision of learning facilities, conducive learning environment and desired to learn outcome in higher education are parameters of effective management of total quality in higher education in Rivers State.

Conclusion/ recommendation

Based on the findings, it is recommended that;
• Nigerian universities should ensure that admission policies and procedures for attracting quality students should be based on merits; they should also avoid politicization of admission from the society.
• Stakeholders in the higher education industry should be prudent in managing the resources provided to run the system.
• Concerted efforts of the stakeholders must be harnessed and geared towards improving the quality standards of Nigerian universities.
• Universities should ensure that they maintain quality supply systems that will enable them to purchase quality equipment and materials that will be needed by the lecturers to teach the students.
• Universities should put in place processes, standards and support infrastructure that will enhance the updating of their staff and also to attract graduates to return to the institution to further their studies e.g. master's degree as they will find this most conducive.
• Universities should maintain quality lecture delivery amongst lecturers and students and should adopt continuous professional development for the faculty members to avoid obsolete course content. Also, incentives should be provided by the institutions to encourage lecturers to produce good degrees, in this regards it is possible to establish schemes that reward lecturers for publishing in high impact and reputable journals.

References

Abdul-Aziz, A. R. (2002). The realities of applying total quality management in the construction industry, *Structural Survey, 20*(2) 88-96.

Adams, D. (1993). *Defining educational quality. Improving Educational Quality Project Publication Biennial Report*. Institute for International Research.

Ali, M. & Shastri, R. (2010). Implementation of Total Quality Management in Higher Education. *The TQM Journal, 22*(2), 175-187.

Ariff, M. S. M., Zaidin, N., & Sulong, N. (2007). Total Quality Management Implementation in Higher Education; Concerns and Challenges Faced by the Faculty. In: 12th International Conference on ISO 9000 & TQM (12-ICIT)s, Republic of China.

Babbar (1995). Applying total quality management to educational instruction: A case study from a US public university". *International Journal of Public Sector Management, 8*(7), 35-55.

Barnard, J. (1999). Using total quality principles in business courses: The effect on student evaluations. *Business Communication Quarterly, 62*(2) 61–73.

Becket, N., & Brookes, M. (2005). Analyzing quality audits in higher education. *Brookes e-learning Journal of Learning and Teaching, 1*(2), 1-22.

Becket, N., & Brookes, M. (2006). Evaluating quality management in university departments. *Quality Assurance in Education, 14*(2), 123 – 142.

Brookes, M., & Becket, N. (2007). Quality management in higher education: A review of international issues and practice. *International Journal of Quality Standards, 1*(1): 85–121.

Burnham (1997). *Managing quality in schools: Effective strategies for quality-based school improvement*. Pearson. 32-33

Chapman, D. Adams, D. (2002). *The quality of education: dimension and strategy*. Arab development bank publication stock, 5, 1000701.

Chen, S., Yang, C., Shiau, J. & Wang, H. (2006). *The development of an employee satisfaction model for higher education*. The TQM Magazine, 18(5), 484-500. Emerald Group Publishing Limited.

Cheng, Y. C., & Tam, W. M. (1997). Multi-models of quality in education. Quality Assurance in Education, 5(1), 22 – 31.

Crosby, P. B. (1979). *Quality is Free: The Art of Making Quality Certain*. McGraw-Hill.

Doherty, G. (2008). "*On quality in education Quality Assurance in Education*" 16(3), 255-265*q* Emerald Group Publishing Limited.

Edmonds, C. (2007). Continuous quality improvement: integrating best practice into teacher education. *International Journal of Educational Management, 21*(3), 232-237.

Evans, J.R. & Lindsay W.M. (2006). "*the Management and Control of Quality",* 7th edition Thomson South-Western, Singapore, 70 p.

Farooq, M., & Akhtar, M. (*2007*). "*application of total quality management* Journal" *of Quality and Technology Management Volume III, Issue I1, pg 87-97.*

Guzman A. & Torres j. (2004). *"Implications to Total Quality Education*" by Education Research Institute, 5(1), 88-99.