



Total Quality Management and Instructional Delivery of Business Education in Rivers State Universities

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ABSTRACT

The study investigated the Total quality management principles practiced in instructional delivery of Business Education in Rivers State universities and the extent to which the principles are practiced. The research design adopted in this study is the descriptive survey design and was guided by two null hypothesis. The population of the study was 51 Business Educators drawn from Ignatius Ajuru University of Education and Rivers State University, Port Harcourt. The entire population was adopted as the sample since the number is manageable. The instrument for data collection was a structured questionnaire on a four point rating scale titled “Total Quality Management and Instructional Delivery Questionnaire (TQMIDQ). The instrument was validated by two experts in Business Education. The reliability of the instrument was established using Pearson Product Moment Correlation and a correlation coefficient of .87 was obtained. The data obtained was analyzed using mean to answer the research questions. A mean score of 2.50 was used as the benchmark for acceptance, while the null hypotheses were tested using t-test. All hypotheses were accepted at 0.05 level of significance. The results revealed that engagement of qualified and experienced teachers, knowledge of the subject and proper management of students’ records are principles of TQM practiced in instructional delivery of Business Education in Rivers State University universities. the study found also that the principles of TQM practiced in instructional delivery of Business Education are practiced to a low extent in Rivers State University universities. It was therefore recommended that Management of Rivers State universities should adopt and enforce principles of TQM in instructional delivery for quality output and that continuous monitoring and evaluation of instructional delivery process of Business Education should be encouraged in Rivers State Universities.

Keywords: Management System, Instructional Delivery, Quality Control, Total Quality Management,

INTRODUCTION

Total quality management (TQM) is a term used to describe laid down and acceptable standards used to measure quality management policy and maintenance procedures of an organization, institution or group. Every organization differs in terms of its cultures, management practices, processes and procedures used to create and deliver its products and services. TQM covers the concepts and models of business and social excellence that is sustainable for organization’s competition, efficiency improvement, leadership and partnerships. The International School of Management (2018) described Total quality management (TQM) as a philosophy, methodology and system of tools aimed at creating and maintaining mechanisms for organisation’s continuous improvement culture, involving all departments and employees into improvement of processes for better service delivery. It highlights cost reduction to meet and exceed needs and expectations of customers and other stakeholders of an organization. According to the author, quality management, in the past, have been mistaken in most organizations to be the responsibility of the

production department and was wrongly assumed to be synonymous with physical examination of goods before they left the organisation. The modern view is that quality control and management are the responsibility of everybody in the organisation, starting with the Heads of Units and all the way down to the cleaners and even some external stakeholders. In agreement to this, Murray (2017) wrote that Total Quality Management (TQM) is an approach that takes into account all quality related measures, functions and processes at all levels, involving all employees and seeks to improve quality and performance to meet or exceed customer expectations.

The American Society for Quality (ASQ) (2018) described TQM as a management approach to long-term success through customer satisfaction; and summarized TQM as a management system for a customer-focused organization that involves all employees in continual improvement, using strategy, data, and effective communications to integrate the quality discipline into the culture and activities of the organization. The author came up with 8 principles present in total quality management. They include:

1. Customer focused
2. Total employee involvement
3. Process centred
4. Integrated system
5. Strategic and systematic approach
6. Continual improvement
7. Fact-based decision making
8. Communications

These principles have been summarized into a four-phased model of continuous and iterative cycle proposed by Edward Deming who is considered the father of TQM. The model is the PDCA (Plan-Do-Check-Act or Plan-Do-Check-Adjust) Cycle, which is also known as the Deming Cycle as shown in figure 1 below.

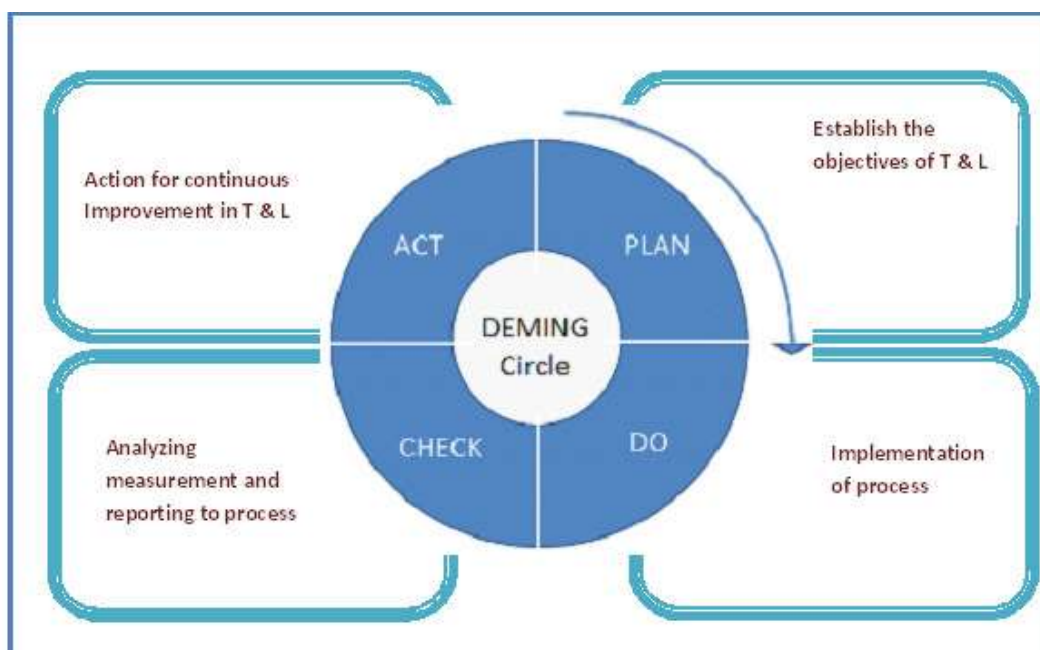


Figure 1: The Deming cycle/PDCA model

Source: Bunglowala and Asthana (2016). A total quality management approach in teaching and learning process.

Murray (2017) and American Society for Quality (ASQ) (2018) both informed that Total quality management evolved from the quality assurance method called “quality inspection” which led to the introduction of Statistical Quality Control (SQC); a theory by Dr. W. Edwards Deming, which was first developed in the 1950s, after the First World War, following the large scale manufacturing efforts that often resulted in poor quality production. As a corrective to this, quality inspectors were introduced on the production line to minimize the level of failures due to quality.

This quality control method provided a statistical approach based on sampling. Where it was not possible to inspect every item, a sample was tested for quality. The theory of SQC was based on the notion that a variation in the production process leads to variation in the end product. The new wave of quality control became known as Total Quality Management, which was used to describe the many quality-focused strategies and techniques that became the center of focus for the quality movement. Bunglowala and Asthana (2016) wrote that to attain the improvement and goals of TQM, the following continuous PDCA phases must be observed. The Quality management Cycle phases are:

1. Plan: Set up goals and measures to carry out significant outcomes in line with the aims. This phase contains:
 - Adopt TQM methodology
 - Set quality policy of teaching and learning
 - Develop vision and mission statement of quality management
 - Strategic quality planning.
2. Do: Implement the plan and gather data for analysis. This phase entails:
 - Education and training process
 - Student focus
 - Involvement of teachers/Team work
 - Development projects
3. Check: To analyze, evaluate, audit and study the results. This phase entails:
 - Comprehensive evaluation
 - Continuous follow up
 - Measurement
 - Audit for improvement in teaching and learning process
4. Act: Take action where necessary to regulate or improvements the procedure. This phase entails:
 - Continuous improvement
 - Motivation and rewards

Bucki (2018) highlighted the purpose of TQM as building a positive reputation for reliability and consistency when it ensures a level of consistent quality in its products or services to strengthen consumer trust and confidence in the business and positions the business for strategic competition with other businesses in the same market. Richard (2000) emphasized that one of the most important elements to consider when embarking on a TQM program is recognizing that TQM is an employee involvement process, that capturing the ideas of individuals performing the actual work is essential to the success of any TQM endeavor, adding however that, most managers too often get caught up in their busy daily schedules that they fail to listen to the workers. This, according to the author, can result in missing the bottom-line successes that TQM offers.

Business Education is an aspect of Vocational Education aimed at preparing students to be self-reliant through the inculcation of skills, knowledge and attitudes required to either hold positions in offices or to become entrepreneurs. All the four major aspects of Business Education: Accountancy, Management, Marketing and Office Information Management provide training for the development of skills for work and entrepreneurship in a variety of business enterprises (Wolugbom, 2017).

Pourrajab, Basri, Daud and Asimiran (2011) wrote that as TQM is applied to industry to achieve minimal or zero-defect products, TQM has likewise become conceptualized in education. Educators believe that TQM can be applied in classroom instruction delivery for educational reforms. This may be significant in

maintaining a culture of student centred teaching and learning and process, improving the curriculum to achieve more than mere student success in examination and help to eradicate obsolete teaching and learning approaches and focus more on a complete student centred approach where students become motivated to set and reach their own goal, as well as being able to evaluate the quality of their own outcomes.

Generally, TQM is seen to be receiver-centred, therefore, applying TQM to instructional delivery in Business Education can only be achieved instructional delivery is learner centred. Alamina (2018) proposed a strategy for teaching title “Imagination Stretch”. The strategy is a conceptual change-based teaching approach rooted in the constructivist theory, using a systematic presentation of a known phenomenon or interrelated concepts by stretching the students’ imagination from the concrete or macroscopic level of observable physical state and moving progressively to the abstract level, using prompting questions.

Statement of the problem

Despite all attempts by regulatory bodies like National Universities Commission (NUC) and the National Policy on Education (NPE) to articulate relevant policies aimed at placing Nigeria’s education system at a balance with international standards, there continues to be the problem of poor education output. In view of the increasing importance of ethics in present times, graduates of Business Education are expected to behave in a way that maintains professional standards and principles in their places of work or given endeavours. For a developing country like Nigeria to thrive in a global knowledge based world, the education of the citizens is fundamental. Regrettably, Nnamani and Oyibe (2016) observed that education in Nigeria has become merely bookish, with little or no attention given to the development of the attitudes and behaviours of the learners. In support of this, Akpomi and Ohaka (2018) perceived that the quality of higher education in Nigeria is unfortunately tending towards a decline as there seemed to be gradual and noticeable shift from the pattern in which higher education was administered in the early 1960s; the period following the independence of Nigeria. In their opinion, schools are no longer properly administered and discipline in schools is gradually being eroded, adding that, higher education is changing for the worse. Ogbari and Borishade (2015) wrote that the adoption of TQM has been hampered most often due to noncompliance with the principles of TQM implementation. Salami and Ufoma (2013) concurred to this, stating that universities have been slow in recognizing the values of TQM application in their operations. The authors added that the most critical factor leading to this breakdown is the poor attitude of top management in realizing and endorsing principles for quality culture in the educational system. This study therefore is aimed at investigating the TQM principles practiced in Rivers State universities and the extent to which the principles are practiced.

Purpose of the Study

The study aimed to investigate the Total quality management principles practiced in instructional delivery of Business Education in Rivers State universities. The specific objectives of the study are:

1. To identify the principles of Total quality management practiced in instructional delivery of Business Education in Rivers State universities.
2. To determine the extent to which the principles of Total quality management are practiced in instructional delivery of Business Education in Rivers State universities.

Research Questions

The following research questions were formulated for the study:

1. What are the principles of Total quality management practiced in instructional delivery of Business Education in Rivers State universities?
2. To what extent are the principles of Total quality management practiced in instructional delivery of Business Education in Rivers State universities?

Hypotheses

The study was guided by the following null hypotheses:

1. There is no significant difference in the mean ratings of Business Educators in Ignatius Ajuru University of Education and Rivers State University on the principles of Total quality management practiced in instructional delivery of Business Education in Rivers State universities.
2. There is no significant difference in the mean ratings of Business Educators in Ignatius Ajuru University of Education and Rivers State University on the extent to which the principles of Total quality management are practiced in instructional delivery of Business Education in Rivers State universities.

RESEARCH METHODS

The research design adopted in this study is the descriptive survey design. The population of the study was 51 Business Educators drawn from Ignatius Ajuru University of Education and Rivers State University, Port Harcourt. The entire population was adopted as the sample since the number is manageable. The instrument for data collection was a structured questionnaire titled “Total Quality Management and Instructional Delivery Questionnaire (TQMIDQ)”. The questionnaire contained two sections: A and B. Section A entailed the participants’ data while section B contained 13 items in relation to the research questions. A four-point rating scale of Strongly Agree (SA) – 4 points, Agree (A) – 3 points, Disagree (D) – 2 points and Strongly Disagree (SD) - 1 point was used to rate research question 1, while Very High Extent (VHE) – 4 points, High Extent (HE) – 3 points, Moderate Extent (ME) – 2 points and Low Extent (LE) -1 point was used to rate research question 2. The instrument was validated by two experts in Business Education. The reliability of the instrument was established using Pearson Product Moment Correlation and a correlation coefficient of .87 was obtained. The instrument was administered to the respondents directly by the researcher. The data obtained was analyzed using mean to answer the research questions while the null hypotheses were tested using t-test at 0.05 level of significance.

RESULTS

Research Question 1:

1. *What are the principles of Total quality management practiced in instructional delivery of Business Education in Rivers State universities?*

Table 1: Mean ratings on the principles of Total Quality Management practiced in instructional delivery of Business Education in Rivers State universities.

		N=51				Mean	Decision
S/N	Items	IAUOE		RSU			
		40		11			
		\bar{X}	SD	\bar{Y}	SD		
1	Engagement of qualified and experienced teachers.	2.55	1.16	2.5	0.99	2.53	A
2	Teachers' knowledge of the subject matter.	2.82	1.11	2.73	0.96	2.78	A
3	Adequate management of students' records.	2.55	0.99	2.53	1.02	2.54	A
4	Use of instructional facilities for instruction delivery.	1.5	0.91	1.49	0.86	1.5	D
5	Use of blended learning approach for instructional delivery.	1.45	0.86	1.42	0.82	1.44	D
6	Adequate time allocation for instruction and assessment.	1.59	0.94	1.57	1.00	1.58	D
7	Manageable class population.	1.53	0.91	1.48	0.92	1.51	D
8	Supervision of instructional delivery process.	1.43	0.81	1.46	0.86	1.45	D
Total Mean/SD		15.42	7.69	15.18	7.43	15.33	
Grand Mean/SD		1.93	0.96	1.9	0.93	1.92	D

Source: Research Data, 2018.

The data presented in table 1 shows that the respondents agreed to items number 1-3 with various mean scores of 2.53, 2.78 and 2.54 which indicate that engagement of qualified and experienced teachers, teachers' knowledge of the subject matter and adequate management of student's records are TQM principles practiced for instructional delivery of Business Education in Rivers State Universities. Also, items 4 – 8 had the various mean scores of 1.50, 1.44, 1.58, 1.51 and 1.45 which implies that use of instructional materials for instruction delivery, use of blended learning approach for instructional delivery, Adequate time allocation for instruction and assessment, Manageable class population and Supervision of instructional delivery process are not TQM principles practiced in instructional delivery of Business Education in Rivers State Universities. However, the grand mean of 1.92 indicated a disagreement to the practice of TQM principles in instructional delivery of Business Education in Rivers State Universities.

Research Question 2:

1. *To what extent are the principles of Total quality management practiced in instructional delivery of Business Education in Rivers State universities?*

Table 2: Mean ratings on the on the extent to which principles of Total Quality Management are practiced in instructional delivery of Business Education in Rivers State universities

		N=51					
S/n	Items	IAUOE		RSU		Mean	Decision
		40		11			
		\bar{X}	SD	\bar{X}	SD		
9	Courses are allocated based on specialisation, experience and knowledge of the subject matter.	2.5	1.01	2.67	0.94	2.59	HE
10	Records of students are properly managed.	2.51	1.05	2.54	0.91	2.53	HE
11	Instructional facilities and learning media/technologies are available and up to date	1.56	0.98	1.73	0.97	1.77	LE
12	Time tabling for learning and assessment are designed to meet students' learning needs.	1.07	0.13	1.34	0.47	1.21	LE
13	Instructional delivery process is continually monitored and evaluated to achieve learning goals	1.39	0.76	1.56	0.92	1.5	LE
Total mean/SD		9.03	4.11	9.84	4.21	9.6	
Grand mean/SD		1.81	0.82	1.97	0.84	1.92	LE

Source: Research Data, 2018.

The data in Table 2 shows with the mean scores of 2.59 and 2.53 that courses are allocated based on specialisation, experience and knowledge of the subject matter, also that records of students are properly managed to a large extent in instructional delivery of Business Education in Rivers State Universities. The mean scores of 1.77, 1.21, and 1.5 for items 11-13 however revealed that instructional facilities and learning media/technologies are available and up to date only to a low extent, Time tabling for learning

and assessment are designed to a low extent to meet students' learning needs and Instructional delivery process is continually monitored and evaluated to achieve learning goals also a low extent in instructional delivery of Business Education in Rivers State Universities. The grand mean of 1.92 clearly indicated that the principles of TQM practiced in instructional delivery of Business Education in Rivers State Universities are practised to a low extent.

Hypothesis 1:

There is no significant difference in the mean ratings of Business Educators in Ignatius Ajuru University of Education and Rivers State University on the principles of Total quality management practiced in instructional delivery of Business Education in Rivers State universities.

Table 3: t-test result of the difference in mean ratings of Business Educators on the principles of Total quality management practiced in instructional delivery of Business Education in Rivers State universities.

Group	N	Mean	SD	Df	L/significance	t-cal	t-tab	Decision
IAUOE	40	1.93	0.93	49	.05	0.09	1.68	Accepted
RSU	11	1.90	0.93					

Source: Research Data, 2018.

Table 3 above revealed a t-calculated value of 0.09 at .05 level of significance with degree of freedom of 49, which is less than the t-critical value of 1.68. Thus, hypothesis 1 was accepted, meaning there is no significant difference in the mean ratings of Business Educators in Ignatius Ajuru University of Education and Rivers State University on the principles of Total quality management practiced in instructional delivery of Business Education in Rivers State universities.

Hypothesis 2:

There is no significant difference in the mean ratings of Business Educators in Ignatius Ajuru University of Education and Rivers State University on the extent to which the principles of Total quality management are practiced in instructional delivery of Business Education in Rivers State universities.

Table 4: t-test result of the difference in mean ratings of Business Educators on the extent to which the principles of Total quality management are practiced in instructional delivery of Business Education in Rivers State universities.

Group	N	Mean	SD	Df	L/Significance	t-cal	t-tab	Decision
IAUOE	40	1.81	0.82	49	.05	0.42	1.68	Accepted
RSU	11	1.97	0.84					

Source: Research Data, 2018.

Table 4 above revealed a t-calculated value of 0.42 at .05 level of significance with degree of freedom of 49 which is less than the t-critical value of 1.68. Thus, hypothesis 2 was accepted, meaning there is no significant difference in the mean ratings of Business Educators in Ignatius Ajuru University of Education and Rivers State University on the extent to which the principles of Total quality management are practiced in instructional delivery of Business Education in Rivers State universities.

DISCUSSION OF FINDINGS

The findings in this study revealed that the principles of TQM in instructional delivery of Business Education in Rivers State University universities are practiced to a low extent. Although Business Educators of IAUOE and RSU agreed that engagement of qualified and experienced teachers, knowledge of the subject and proper management of students' records are principles of TQM practiced in instructional delivery of Business Education in Rivers State universities. Oluwadare (2017) argued that Business Education skills acquisition Nigerian universities practiced and complied with quality assurance requirements as stated in the curriculum of three public owned tertiary institutions in Ondo State.

Although this contradicts the finding of this study, Ogbari and Borishade (2015) wrote that the adoption of TQM has been hampered most often due to noncompliance with the principles of TQM implementation.

The finding on research question two revealed that the principles of TQM in instructional delivery of Business Education in Rivers State universities were practiced to a low extent. This is in line with Akpomi and Ohaka's (2018) conclusion that quality of higher education in Nigeria is unfortunately taking a downturn and a shift in administrative pattern in comparison to the early 1960s. This also confirms Salami and Ufoma's (2013) claim that universities have been slow in recognizing the values of TQM application in their operations.

CONCLUSION

It is concluded from the findings of this study that only few principles of TQM are practiced in instructional delivery of Business Education. These principles were also found to be practiced to a low extent. It is true that every university and indeed every department of Business Education too, differs in terms of corporate cultures, management practices, processes and procedures used in instructional delivery but TQM covers the concepts and models of business and educational excellence that is sustainable for quality output. For Business Education to succeed in its objective to build self-reliant individuals in a global knowledge based world, the instruction process must be given due attention.

RECOMMENDATIONS

Based on the findings and conclusion of the study, the following recommendations were made.

1. Management of Rivers State universities should adopt and enforce principles of TQM in instructional delivery for quality output.
2. Continuous monitoring and evaluation of instructional delivery process of Business Education should be encouraged in Rivers State Universities to ensure quality management and control.

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