

## **BENCHMARKING TEACHING PRACTICES FOR QUALITY IMPROVEMENT IN UNIVERSITIES IN DELTA STATE**

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### **ABSTRACT**

This study investigated benchmarking teaching practices for quality improvement in universities in Delta State. Three research questions and three corresponding hypotheses guided the study. The population of this study consisted of all the 1,562 lecturers in the two public and four private universities in Delta State. The sample size for the study consisted of three-hundred and fifty-one (351) lecturers in these public and private universities in Delta State; representing 22.5% of the population. The stratified proportionate sampling technique was used for the study. An 18-item questionnaire titled: “Benchmarking Teaching practices for quality improvement in universities questionnaire” (BTPQIPPUQ) was used for data collection. Test-Re-test method was used to determine the reliability of the instrument which was 0.77. The Mean, Standard Deviation and Rank Order were used to answer the research questions while the z-test statistics was employed to test the hypotheses at 0.05 level of significance. The result amongst others revealed that in benchmarking, courses of action to solve existing teaching problems are identified and in managing classroom activity through benchmarking, lecturers are periodically given induction on how they can maintain a highly supportive learning environment where students are prohibited from using any form of gadgets during teaching and learning to avoid class disruption. It was also found that, ICT facilities in universities are used to provide ICT skill acquisition for students and lecturers use resources from the Internet to support and prepare their lessons. Meanwhile, in benchmarking teaching practices, course content is used to set limit for lecturers on what to teach in a particular course. It was recommended that universities should through benchmarking always note areas of teaching that are successful and benchmark teaching activity by developing teaching strategies that will work best for the university.

**Keywords:** Benchmarking, Teaching Practices, University Education, Public and Private Universities and Quality.

### **INTRODUCTION**

Education is the key factor for the development of a country’s economic, political, social and technological sectors and Nigeria is not an exception. It is on this uncommon concern that several efforts have been made in the areas of policy formulation, implementation, and reforms in the various sectors of the economy for the nation’s growth, development and wealth creation, but all these are solely dependent on education and its quality. However, quality improvement involves a systematic approach towards increasing the performance of an institution. It is a deliberate effort towards the provision and utilization of necessary human and non-human resources needed for the enhancement of productivity in the education sector (Olimahi, 2013). We cannot deny the fact that education remains the doorway out of ignorance and poverty as one can be said to be educationally bankrupt if adequate skills and knowledge were not acquired. Regarding university operation on this note, universities are said to have three main

functions on this outlook; the research and education functions are two sides of a coin; research makes a higher level of education possible and education, in turn, develops the human resources to do research.

This means that universities need to have activities to ensure that accumulated knowledge is circulated directly back to society and that they do not become “ivory towers.” In order to understand what practices are necessary to reach world class standards, many organizations have begun to use benchmarking as a way of acquiring knowledge to grow their organization. Benchmarking is about comparing one thing with the other for possible results. It means learning best practices of other organization and adapting them to one’s organization in order to improve or upgrade obsolete practices. Cowan University as cited in Adiele and Sergeant-Awuse(2016) defined benchmarking as a continuous and systematic process of comparing products, services, processes and outcomes with other organizations or exemplars, for the purpose of improving outcomes by identifying, adapting and implementing best practice approaches. Benchmarking thus, offers a way of identifying better and smarter ways of doing things.

On the other hand, Mark (2014) explained that benchmarking teaching entails uniformity in teaching process as stipulated by National University Commission in Nigeria and other relevant agencies. He stressed that benchmarking teaching in the tertiary education could be in form of using appropriate instructional materials. In this study, benchmarking teaching practices for quality improvement in education in the universities focuses on the practices adopted in benchmarking teaching, use of information and communication technology and covering of course content respectively. On this note, the best practices include: speed of delivery, research and development technology, the process of production, marketing, cost of training among others. In a school setting best practice can be identified in teaching and learning practice for quality enhancement especially in the university education. Hence, teaching is the impartation of knowledge from a more experienced individual to a less experienced person in a well-organized environment such as the school. The essence of teaching in school is to improve the performance of the learner especially, in the acquisition of skills, knowledge and values for positive development of the individual and the society at large.

Benchmarking teaching entails choosing the best teaching approaches or materials in order to ensure high quality outcome. It includes using the best lecturers, classrooms, teaching aids, and other best teaching processes for effective teaching and learning outcome (Mark, 2014). To achieve benchmarking in teaching, Alestete as cited in Ebongand Asodike(2016) noted that various internal, external, competitive, functional and generic types of benchmarking could be used. In the same vein, ICT is one of those veritable assets in education which can be used for instruction delivery that tends to influence workers to achieve specific organizational objective as well as administrative excellence. Achim, Cabulea, Popa and Mihalache (2012) stated that benchmarking is a way of finding and adopting the best practices for collaborative evaluation of services and processes with the aim of emulating best available administrative practice. He further stated that benchmarking helps to focus the process of change and ensure comparison elsewhere that the new target is relevant and achievable and that proposed new way of doing things will work.

O’Reagan and Keegan cited in Egbuta (2011) described the four steps involved in benchmarking as:

1. Understanding in detail one’s own processes
2. Analysing the process of others

3. Comparing your performance with that of others analyzed; and
4. Implementing the steps needed to close the performance gap. The benchmarking framework was developed to provide a tool that could be used by institutions to:
  - ascertain performance trends and initiate self-improvement
  - enable groups of universities to be able to compare their performance and;
  - enable universities to ascertain their competitive position(s). (Mckinnon, Walker and Davies as cited in Egbuta, 2011).

### **Practices adopted by universities lecturers in benchmarking teaching methods for quality improvement in Delta State**

Benchmarking practices can only be effective if they are applied properly. The various steps must be followed accordingly depending on the study. There is no one benchmarking method that has been widely accepted. Boxwell cited in Egbuta (2011) adopted twelve stages of benchmarking. This methodology includes: Select subject ahead, Define the process, Identify potential partners, Identify data sources, Collect data and Select partners, Determine the gap, Establish process differences, Target future performance, Communicate, Adjust goal, Implement, as well as Review.

These twelve methodologies were divided into four phases by Arora (2010). They are:

1. planning phase – step 1 – 5, (2) analysis phase – step 6 – 8, (3) integration phase – step 9 – 10, (4) action phase – step 11 – 12.

**The Planning Phase:** This stage is the starting point of benchmarking process. This stage takes care of the critical success factors deciding the benchmarking partner, collection of information about possible partners, partner selection and visiting the site for preparation of questions to the selected partner.

**Analysis phase:** Analysis phase covers analysis of performance gap, comparison of process definition documents, comparing flow chart, analysis of work practices, developing a better process, adapting superior practices and goal setting for improvement process. The activities in this stage require analytical skills, creativity and innovation.

**Integration phase:** The integration phase covers communication, funding and security commitment. It is necessary that all stakeholders are informed of the change and innovation, academic staff, non-academic, customer etc.

**Action phase:** It involves developing action plan for implementation, implementing the action plan and monitoring progress and keeping the process continuous.

However, in this study, the focus is on the most acceptable types of benchmarking that were identified by Alestete cited in Asodike and Ebong, (2016). They include:

- **Internal benchmarking:** Internal benchmarking is a comparison that is made between departments, courses and sites within the same institutions of learning. It looks at different levels of performance within the institution, and knowing the best practice in other to disseminate to other areas.
- **External competitive benchmarking:** This type of benchmarking talks about measuring the performance of institutions which are seen as competitors in key areas that is based on information from them. It is comparison with one's direct competitors. The goal is to study, analyze and understand the approaches and methods used by competitors and improve on them to stay on top. In universities this can take the shape of comparing staff and student's recruitment strategies with the school's main competitors.

- **Functional benchmarking:** It is comparison of one's practice with other organizations performing the same functions. The best in that function has to be the company serving as a benchmark.
- **Generic benchmarking:** This is also known as best in class, and is similar to functional benchmarking but it goes beyond comparison of qualitative data. It focuses much more on multi-functional business process and holistic approach. According to Ayamele and Uche, (2016; 82) generic benchmarking is comparing the processes of an organization to another organization which operates in a different context but are known to be innovative and market leaders in their field.

### **Ways Universities use ICT in Benchmarking Teaching Practices for Quality Improvement in Delta State**

ICT refers to the use of computer, internet and other computer appliances that assist the teacher in teaching. ICT is a collection of processes, methods and productions of electronic and technologies related to communication for improving the productivity (both teachers and students), circulating and competence of pre-arranged activities that are directed towards achievement of pre-set objectives (Onyemechi, 2018). This implies that ICT improves the importance of both teachers and students. Universities through ICT have played a similar historical role – as incubators of nationalistic ideas and provider of the technical knowhow necessary for nation-building in other parts of the developing world (Philip 2009). Through the incorporation of ICT into university education, national universities in many developing countries have consistently served as central institutions for building strong nations in terms of research and training. Universities are no doubt responsible for educating business executives, engineers, architects and other professionals with appropriate knowledge, skills and attitude necessary in reaching their goals. ICT in the universities is used practically in ordering activities involving local economic and human development, social justice, health, education, and poverty reduction (Ugwu&Oboegbulem, 2011).

According to Akinade, Ilishan-Remo and Adekunle (2013;10), ICT in the university is used to coordinate and monitor several administrative activities and processes of universities which include:

- Operations and maintenance of library-e-journals provision
- Student account and courses management
- Students enrolment monitoring, students' record keeping and Student's verification of exam results
- Financial reports preparation to the open of various centres
- Fraudulent acts and events prevention and detection with institutions of learning or centres.
- Workers' authorization limits control in the various institutions.
- A clear and effective information flow between all internal and external bodies that have stakes in the institution.
- Detailed capturing of transactions that takes place in the various centres.
- Activities of operation in different units, sections, Departments and divisions of the University. According to them, an instructional purpose is another aspect to be considered.

**Lecturers' coverage of course contents in benchmarking teaching practices for quality improvement in Delta State**

The comprehensive sense of course contents is evident in the stated objectives in which it considers issues of infrastructure, curriculum and content, training and capacity development, planning procurement and administration, management, support and sustainability and monitoring and evaluation of the systemic operation (Hare, 2007). Nevertheless, the curriculum cannot be separated from the instructional process because of their synergy. The instructional process involves a lot more which includes the use of instructional materials, information technology, appropriate instructional methods, techniques and strategies, the creation of a healthy, safe and conducive learning environment etc.

According to Olimahi (2013) lecturers' coverage of course contents in benchmarking teaching practices is something that is yet to align well with university teaching yardstick as teaching of courses by lecturers appears to be most privately concerned. Nevertheless, it is necessary that lecturers who are most qualified to teach in specific areas of specialization be employed without minding the height of their degrees and also lecturers who are not directly specialized in some fields should not be recruited based on familiarity with personnel since the capacity and professionalism to meet their course content might not be met. In benchmarking teaching practices according to Olimahi (2013), university sometimes employs manpower through informal recruitment method which involves rehiring former employees and choosing from among those who had previous working experience who may meet up with their course areas while some may not meet up due to the nature of their engagement.

In the same vein, Emekwema (2013) explained that for teaching to be effective, course content must be prepared and strictly adhered to; and also, such content must be duly covered. More so, if teachers are to be well monitored to be restricted to the content of their course coverage, a mechanism must be established to monitor the system to ensure the standard of operation is followed consistently. Course content is a sequence of planned teaching action to be followed by a teacher in any given teaching and learning process. Olimahi (2013) stressed that in most learning situation, course content gives direction on how teaching and learning is to be carried out and in line with educational objectives. Proper covering of course content helps in quality improvement in the education sector at any given level. For schools to stay competitive they must be able to follow the trend of times both in curriculum and otherwise. Due to technology, new methods of delivery have been introduced and Universities should follow suit.

**Statement of the Problem**

It seems that quality has been compromised in the Nigerian education system especially in Universities education system. This situation appears to be true in both private and public universities in the country and Delta State is not an exception. Poor teaching process in universities in the area seems to be the order of the day in recent times. It appears that lecturers do not make adequate use of Information and Communication Technology (ICT) for teaching (projectors, large screen displays, public address systems, internet & emails, e-libraries, amongst others), do not cover course contents as designed and expected (including adequate assignments and continuous assessments) and universities appear to lack adequate and qualified manpower across board (such as doctorate degree holders, senior lecturers and professors) and maximum lecturer to students ratio as well as proper classroom management – all of which are global best practices.

This worrisome scenario has led to the continuous drift of students of Delta State origin abroad or other parts of the country in search of qualitative and pragmatic education. Currently, the

best practices in benchmarking teaching in the universities in Delta State seem not to have been fully adopted. The near absence of foreign students in public and private universities in Delta State seems to suggest that all is not well with teaching practices. It is on this note that the study focused on the practices adopted in benchmarking teaching for quality improvement, communication technology and covering of course content by lecturers in universities in Delta State.

### **Aim and Objectives of the Study**

The study investigates practices adopted in benchmarking teaching for quality improvement in universities in Delta State. The specific objectives are to:

1. Find out practices adopted by universities lecturers in benchmarking teaching methods for quality improvement in Delta State.
2. Determine the ways universities use ICT in benchmarking teaching practices for quality improvement in Delta State.
3. Examine the ways lecturers' use course contents in benchmarking teaching practices for quality improvement in Delta State.

### **Research Questions**

1. What practices do universities adopt in benchmarking teaching for quality improvement in Delta State?
2. In what ways do universities use ICT in benchmarking teaching for quality improvement in Delta State?
3. In what ways do universities use course content in benchmarking teaching practices for quality improvement in Delta State?

### **Hypotheses**

1. There is no significant difference between the mean scores of public and private universities lecturers on the practices adopted in benchmarking teaching for quality improvement in Delta state.
2. There is no significant difference between the Mean scores of public and private universities lecturers on ways universities use ICT in benchmarking teaching practices for quality improvement in Delta State.
3. There is no significant difference between the mean scores of public and private universities in the ways lecturers' use course contents in benchmarking teaching practices for quality improvement in Delta State.

### **Methodology**

The research design for this study is a descriptive survey. The population of this study consisted of all the 1,562 lecturers in the two public and four private universities in Delta State; 478 lecturers from Delta State University, Abraka; 400 lecturers from Federal University of Petroleum Resources, Effurun; 168 lecturers from Novena University, Ogume; 171 lecturers from Michael and Cecilia University; 160 lecturers from Edwin Clark university; and 185 from Western Delta University (Source: Office of the Registrar of the universities 2018 staff). Three-hundred and fifty-one (351) lecturers representing 22.5 % of the entire population size of 1562 lecturers were sampled for this study. The stratified proportionate sampling technique was used to draw 22.5 % of the lecturers in each of the universities to arrive at 351 lecturers.

The instrument that was used for data collection in this study was a self-designed questionnaire titled "Benchmarking Teaching practices for Quality Improvement in Universities

Questionnaire (BTPQIPPUQ). The questionnaire was divided into two sections: Section A was for collection of demographic data on the respondents. While section B was based on the questionnaire items using the 4- Points modified Likert rating scale of (Strongly Agree (SA) = 4 points; Agree (A) = 3 points; Disagree (D) = 2 points; and Strongly Disagree (SD) = 1 point) respectively. The test re-test method was used to determine the reliability of the instrument (BTPQIPPUQ). By this, 20 copies of the instrument were administered to 20 lecturers who were not part of the sample for the study. After an interval of two weeks, the same instrument was administered to the same sample. The initial and retest scores was correlated using Pearson Product Moment Correlation Coefficient and a reliability coefficient of 0.77 was derived.

Out of the 351 copies of questionnaire administered, 309 copies of the questionnaires were retrieved and used for data analysis. The Mean scores and Standard Deviation was used to answer the research questions while the z-test statistics was used to test the null hypotheses at 0.05 level of significance. A criterion mean of 2.50 or above was accepted while any mean below 2.50 was rejected.

## RESULTS AND DISCUSSION

### Data Analysis and Empirical Results

**Research Question 1:** What practices do universities adopt in benchmarking teaching for quality improvement in Delta State?

**Table 1: Mean Responses of Public and Private Universities lecturers on the practices adopted in benchmarking teaching for quality improvement in Delta state.**

S/N	Practices Adopted in Benchmarking Teaching for Quality improvement	Public Universities (178)		Private Universities (131)		$\bar{X}_1\bar{X}_2$	Remark	Rank Order
		$\bar{X}$	SD <sub>1</sub>	$\bar{X}$	SD <sub>2</sub>			
1.	Areas of teaching that needs improvement are usually identified	3.22	1.33	2.68	1.14	2.95	Agreed	4 <sup>th</sup>
2.	Courses of action to solve existing teaching problems are identified	3.14	1.29	3.18	1.31	3.16	Agreed	2 <sup>nd</sup>
3.	University managers usually refer to some source of benchmarking information on teaching	3.42	1.45	3.08	1.26	3.25	Agreed	1 <sup>st</sup>
4.	Usually develop teaching strategies that will work best for the university	1.99	1.23	1.94	1.25	1.97	Disagreed	6 <sup>th</sup>
5.	Determine areas of teaching that are successful	2.01	1.22	3.44	1.46	2.73	Agreed	5 <sup>th</sup>
6.	Compare areas of teaching that they are successful with those of other universities	3.11	1.27	2.94	1.20	3.03	Agreed	3 <sup>rd</sup>
<b>Grand mean and standard deviation</b>		<b>2.82</b>	<b>1.30</b>	<b>2.88</b>	<b>1.27</b>			

Table 1 indicate that item number 3 had the highest mean score of 3.25, followed by item 2 with 3.16, item 6 with 3.03, item 1 with 2.95, item 5 with 2.73 and item 4 with 1.97. The various scores were above 2.50 which is the criterion mean except item 4. This clearly indicate that ‘university managers usually refer to some source of benchmarking information on teaching and usually develop teaching strategies that will work best for the university’ has the highest and lower rank order respectively. This is to say that the practices adopted in benchmarking teaching for quality improvement include that university managers usually refer to some source

of benchmarking information on teaching, identify courses of action to solve existing teaching problems, compare areas of teaching that they are successful with those of other universities and determine areas of teaching that are successful.

Meanwhile, from the responses of lecturers in public universities, it is clear that they do not benchmark teaching by usually developing teaching strategies that will work best for the university and do not also benchmark teaching by obviously determining areas of teaching that are successful. Nevertheless, both public and private university lecturers fail to consent to the fact that universities usually develop teaching strategies that will work best for the university in benchmarking.

**Research Question 2** In what ways do universities use ICT in benchmarking teaching for quality improvement in Delta State?

**Table 2: Mean Responses of public and private universities lecturers on ways universities use ICT in benchmarking teaching practices for quality improvement in Delta State.**

S/N	Ways Universities use ICT in Benchmarking Teaching Practices for Quality improvement	Public Universities (178)		Private Universities (131)		$\bar{X}_1\bar{X}_2$	Remark	Rank Order
		$\bar{X}$	SD <sub>1</sub>	$\bar{X}$	SD <sub>2</sub>			
1.	In university, lecturers use resources from the Internet to support and prepare their lessons.	3.16	1.30	3.33	1.39	3.25	Agreed	3 <sup>rd</sup>
2.	In university, it is compulsory for lecturers to use computers to assess students' performance to determine strength and weaknesses.	1.89	1.27	2.12	1.18	2.06	Disagreed	6 <sup>th</sup>
3.	Lecturers use audio-visual materials to support teaching and learning in the classroom.	3.01	1.23	3.40	1.43	3.21	Agreed	4 <sup>th</sup>
4.	ICT facilities in university are used to provide ICT skill acquisition for students	3.23	1.34	3.60	1.57	3.42	Agreed	2 <sup>nd</sup>
5.	In university, students are compulsorily trained to by lecturers on the application of ICT	1.99	1.23	3.28	1.36	2.65	Agreed	5 <sup>th</sup>
6.	Students often submit computer-typeset assignments to teachers.	3.43	1.45	3.57	1.55	3.5	Agreed	1 <sup>st</sup>
<b>Grand mean and standard deviation</b>		<b>2.79</b>	<b>1.30</b>	<b>3.21</b>	<b>1.41</b>			

Table 4.2 indicate that item number 6 had the highest mean scores of 3.5 followed by item 4 with 3.42, item 1 with 3.25, item 3 with 3.21, item 5 with 2.65 and item 2 with 2.06 respectively. The various scores were above 2.50 which is the criterion mean except item 2. Thus, students often submit computer-typeset assignments to teachers and in university, it is compulsory for lecturers to use computers to assess students' performance to determine strength and weaknesses has the highest and lower rank order respectively. It simply implies that, the ways universities use ICT in Benchmarking teaching practices for quality improvement is that students often submit computer-typeset assignments to teachers, ICT facilities in universities are used to provide ICT skill acquisition for students and lecturers use resources from the Internet to support and prepare their lessons, lecturers also use audio-visual materials to support teaching and learning in the classroom.

Meanwhile, from the responses of lecturers in private universities, students are compulsorily trained by lecturers on the application of ICT which is not compulsorily undertaken in public

universities as they responded. On the other hand, both lecturers in public and private universities do not consent to the fact that they compulsorily use computers to assess students' performance to determine strength and weaknesses.

**Research Question 3:** In what ways do universities use course content coverage in benchmarking teaching practices for quality improvement in Delta State?

**Table 3: Mean Responses of public and private universities on ways lecturers' use course contents in benchmarking teaching practices for quality improvement in Delta State.**

S/N	Extent Lecturers' Use Course Contents in Benchmarking Teaching Practices for Quality improvement	Public Universities (178)		Private Universities (131)		$\bar{X}_1\bar{X}_2$	Remark	Rank Order
		$\bar{X}$	SD <sub>1</sub>	$\bar{X}$	SD <sub>2</sub>			
1.	Course contents are usually developed at all levels for teaching in the university	<b>3.3.8</b>	<b>1.43</b>	<b>3.05</b>	<b>1.26</b>	<b>3.22</b>	<b>Agreed</b>	<b>1<sup>st</sup></b>
2.	A body exists in your university that monitor lecturers' compliance with standard course contents	<b>2.99</b>	<b>1.24</b>	<b>3.07</b>	<b>1.27</b>	<b>3.03</b>	<b>Agreed</b>	<b>2<sup>nd</sup></b>
3.	Lecturers are monitored through examination committee to ensure that course contents are adequately followed	<b>2.02</b>	<b>1.23</b>	<b>2.13</b>	<b>1.19</b>	<b>2.08</b>	<b>Disagreed</b>	<b>5<sup>th</sup></b>
4.	Course content is used to set limit for lecturers on what to teach in a particular course.	<b>3.09</b>	<b>1.26</b>	<b>2.68</b>	<b>1.31</b>	<b>2.89</b>	<b>Agreed</b>	<b>3<sup>rd</sup></b>
5.	Courses are allocated to more than one lecturer to be able to use the course content for each semester	<b>3.11</b>	<b>1.27</b>	<b>2.61</b>	<b>1.27</b>	<b>2.86</b>	<b>Agreed</b>	<b>4<sup>th</sup></b>
6.	The head of department consistently monitor lecturers through the students to ensure course content is strictly covered by the end of each semester	2.01	1.22	<b>2.12</b>	<b>1.18</b>	<b>2.07</b>	<b>Disagreed</b>	<b>6<sup>th</sup></b>
<b>Grand mean and standard deviation</b>		<b>2.77</b>	<b>1.38</b>	<b>2.61</b>	<b>1.25</b>			

Table 4 indicate that item number 1 has the highest mean scores of 3.22 followed by item 2 with 3.03, item 4 with 2.89, item 5 with 2.86 respectively. The scores were above 2.50 which is the criterion mean. This means that course contents are usually developed at all levels for teaching in the university and the head of department consistently monitor lecturers through the students to ensure course content is strictly covered by the end of each semester has the highest and lower rank order respectively. This simply implies that the way lecturers use course contents in benchmarking teaching practices for quality improvement is that course contents are usually developed at all levels for teaching in the university and a body exists in the universities that monitor lecturers' compliance with standard course contents, course content is used to set limit for lecturers on what to teach in a particular course and courses are allocated to more than one lecturer to be able to cover the course content for each semester. Notwithstanding, both public and private universities lecturers do not consent to the fact that head of department consistently monitor lecturers through the students to ensure course content is strictly covered by the end of each semester and lecturers are not monitored through examination committee to ensure that course contents are adequately followed.

**Test of Hypotheses**

**H01:** There is no significant difference between the mean scores of lecturers in public and private universities on the practices adopted in benchmarking teaching for quality improvement in Delta state.

**Table 4: z-test Analysis of the Difference between the mean Opinions of lecturers in Public and Private Universities on the practices adopted in benchmarking teaching for quality improvement in Delta state.**

Subject	N	$\bar{X}$	SD	df	z-cal	z-crit	Level of sig.	Remark
<b>Lecturers in Public Universities</b>	178	2.82	1.30	2				
<b>Lecturers in Private Universities</b>	131	2.88	1.31	307	-0.41	$\pm 1.96$	0.05	(not significant) Accepted

The result on table 7 showed that the z-calculated value of -0.41 is less than the z-critical value of  $\pm 1.96$  at degree of freedom of 2 and 307 at 0.05 level of significance. Therefore, we fail to reject the null hypothesis and uphold that, there is no significant difference between the mean scores of public and private universities lecturers on the practices adopted in benchmarking teaching for quality improvement in Delta state.

**H02:** There is no significant difference between the mean scores of public and private universities lecturers on ways universities use ICT in benchmarking teaching practices for quality improvement in Delta State.

**Table 5: z-test Analysis of the Difference between the Opinions of Lecturers in Public and Private Universities on ways universities use ICT in benchmarking teaching practices for quality improvement in Delta State.**

Subject	N	$\bar{X}$	SD	df	z-cal	z-crit	Level of sig.	Remark
<b>Lecturers in Public Universities</b>	178	2.79	1.30	2				
<b>Lecturers in Private Universities</b>	131	3.21	1.41	307	-2.67	$\pm 1.96$	0.05	(not significant) Accepted

The result on table 7 showed that the z-calculated value of -2.67 is less than the z-critical value of  $\pm 1.96$  at degree of freedom of 2 and 307 at 0.05 level of significance. Therefore, we fail to reject the null hypothesis and uphold that, there is no significant difference between the mean scores of public and private universities lecturers on ways universities use ICT in benchmarking teaching practices for quality improvement in Delta State.

**H03:** There is no significant difference between the mean scores of public and private universities in the ways lecturers use course contents in benchmarking teaching practices for quality improvement in Delta State.

**Table 6: z-test Analysis of the Difference between the Opinions of Lecturers in Public and Private Universities on the ways lecturers' covers course contents in benchmarking teaching practices for quality improvement in Delta State.**

Subject	N	$\bar{X}$	SD	df	z-cal	z-crit	Level of sig.	Remark
Lecturers in Public Universities	178	2.77	1.38	2				
Lecturers in Private Universities	131	2.61	1.25	307	0.06	±1.96	0.05	(not significant) Accepted

The result on table 6 shows that the z-calculated value of 0.06 is less than the z-critical value of  $\pm 1.96$  at degree of freedom of 2 and 307 at 0.05 level of significance. Therefore, we fail to reject the null hypothesis and uphold that, there is no significant difference between the mean scores of public and private universities on the ways lecturers' use course contents in benchmarking teaching practices for quality improvement in Delta State.

### Summary of Findings

1. It was found that the practices adopted in benchmarking teaching for quality improvement is that university managers usually refer to some source of benchmarking information on teaching, identify courses of action to solve existing teaching problems, compare areas of teaching that they are successful with those of other universities and determine areas of teaching that are successful but do not benchmark teaching by developing teaching strategies that will work best for the university and they do not also benchmark teaching by obviously determining areas of teaching that are successful.
2. It was found that, the ways universities use ICT in Benchmarking teaching practices for quality improvement is that students often submit computer-typeset assignments to teachers, ICT facilities in universities are used to provide ICT skill acquisition for students and lecturers use resources from the Internet to support and prepare their lessons, lecturers also use audio-visual materials to support teaching and learning in the classroom.
3. It was found that the ways lecturers use course contents in benchmarking teaching practices for quality improvement is that course contents are usually developed at all levels for teaching in the university and a body exists in the universities that monitor lecturers' compliance with standard course contents, course content is used to set limit for lecturers on what to teach in a particular course and courses are allocated to more than one lecturer to be able to cover the course content for each semester. Meanwhile, head of department do not consistently monitor lecturers through the students to ensure course content is strictly covered.
4. From the hypotheses one tested, we failed to reject the null hypothesis and upheld that, there is no significant difference between the mean scores of public and private universities lecturers on the practices adopted in benchmarking teaching for quality improvement in Delta state
5. From the hypothesis two tested, we failed to reject the null hypothesis and upheld that there is no significant difference between the mean scores of public and private universities lecturers on ways universities use ICT in benchmarking teaching practices for quality improvement in Delta State.
6. From the hypothesis three tested, we failed to reject the null hypothesis and upheld that, there is no significant difference between the mean scores of public and private universities on the ways lecturers use course contents in benchmarking teaching practices for quality improvement in Delta State.

## **Discussion of Findings**

### **Practices Adopted in Benchmarking Teaching for Quality improvement**

It was found that the practices adopted in benchmarking teaching for quality improvement are that university managers usually refer to some source of benchmarking information on teaching, identifies courses of action to solve existing teaching problems, compare areas of teaching that they are successful with those of other universities and determine areas of teaching that are successful but do not benchmark teaching by usually develop teaching strategies that will work best for the university and they do not also benchmark teaching by obviously determining areas of teaching that are successful. This study is in consonance with the findings of Egbuta (2011) who adopted twelve stages of benchmarking which includes; select subject ahead, define the process, identify potential partners, identify data sources, collect data and select partners, determine the gap, establish process differences, target future performance, communicate, adjust goal, implement, as well as review. This is also in line with Anyamele and Uche (2016) who found generic benchmarking as a system of comparing the processes of an organization to another organization which operates in a different context but is known to be innovative and market leaders in their field.

### **Ways Universities use ICT in Benchmarking Teaching Practices for Quality Improvement**

It was found that, the ways universities use ICT in Benchmarking teaching practices for quality improvement is that students often submit computer-typeset assignments to teachers, ICT facilities in universities are used to provide ICT skill acquisition for students and lecturers use resources from the Internet to support and prepare their lessons, lecturers also use audio-visual materials to support teaching and learning in the classroom. This is in consonance with the work of Akinade, Ilshan-Remo and Adekunle (2013) who found ICT to be used in the university for operations and maintenance of library-e-journals provision, student account and courses management, students enrolment monitoring, students' record keeping and Student's verification of exam results, financial reports preparation to the open of various centres, fraudulent acts and events prevention and detection with institutions of learning or centres, workers' authorization limits control in the various institutions and lots more.

In the same vein, Ajayi (2007) found that teachers make use of ICT to support traditional instruction technique limits teachers' service delivery because of limited information at the disposal of the teacher. In the traditional instructional technique, textbooks and other printed documents like newspapers, note books, magazines, among others are sources of teachers' information. However, because of the limited information they provide, there is need for the introduction of ICT facilities for lecturers in universities.

### **Ways Lecturers use Course Contents in Benchmarking Teaching Practices for Quality improvement**

It was found that the ways lecturers use course contents in benchmarking teaching practices for quality improvement is that course contents are usually developed at all levels for teaching in the university and a body exists in the universities that monitor lecturer's compliance with standard course contents, course content is used to set limit for lecturers on what to teach in a particular course and courses are allocated to more than one lecturer to be able to cover the course content for each semester. Meanwhile, head of department do not consistently monitor lecturers through the students to ensure course content is strictly covered. This does not correspond with Olimahi (2013) who found that lecturers' use of coverage of course contents in benchmarking teaching practices is something that does not align well with university teaching yardstick as teaching of courses by lecturers appears to be most privately concerned.

In this vein, Emekwema (2013) found that for teaching to be effective course content must be prepared and strictly adhere to; and also, such content must be duly covered. More so, if teachers are to be well monitored to be restricted to the content of their course coverage, a mechanism must be established to monitor the system to reflect the standard of operation to be followed consistently.

## CONCLUSION

In the light of the findings of this study, it was concluded that; in benchmarking, university managers usually refer to some source of benchmarking information on teaching by identifying courses of action to solve existing teaching problems and also comparing areas of teaching that are successful with those of other universities to ascertain areas of teaching that are not successful. Engaging in this, lecturers must be trained periodically through induction, workshop and other vital programmes to update their knowledge on how they can maintain a highly supportive learning environment in order to give students the desired knowledge that will project them as productive people to add to the value of our national economy. In achieving this, ICT facilities and other necessary equipment in universities must be provided and personnel that will monitor the benchmarking processes must also be in place.

## RECOMMENDATIONS

Based on the findings of the study, the researchers recommended that:

1. Universities should through benchmarking always determine areas of teaching that are successful and benchmark teaching activities by developing teaching strategies that will work best for the university
2. University authorities should ensure that lecturers in public universities compulsorily train students on the application of ICT. On the other hand, lecturers should compulsorily use computers to assess students' performance to determine strength and weaknesses.
3. Lecturers should periodically be trained through induction, workshop and other vital programmes to update their knowledge so that they can be more productive in the teaching profession.

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