Technological Resources: A Pre-requisite for Quality Education Delivery in Tertiary Institutions in Rivers State, Nigeria

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ABSTRACT
This study examined the technological resources as a pre-requisite for quality education delivery in tertiary institutions in Rivers State. The study was guided by three research questions. The quantitative research approach and the descriptive survey research design were adopted. A sample size of 268 respondents was selected from a population of 811 administrative staff in the six tertiary institutions in Rivers State. A structured questionnaire was used to elicit data from the respondents while the mean and standard deviation were used for data analysis. The findings revealed that the extent of provision of technological resources is quite low for quality education delivery in tertiary institutions. The study also revealed that the extent of utilization of technological resources in the teaching and learning process in tertiary institutions in Rivers State is very low. The study equally revealed that dearth of funds, embezzlement of public funds by government officials, shortage of skilled manpower to handle ICT devices, lack of adequate staff training on the use of ICT facilities and politicization of technological resource provision based on institution type by the government as the major challenges hindering the provision and utilization of technological resources in tertiary institutions in Rivers State. Based on the findings, it was recommended that the federal and state governments should provide more technological resources in their respective institutions in Rivers State as it would enhance quality education delivery.

Keywords: Technological resources, provision of ICTs, utilization of technological resources, challenges, quality education delivery, tertiary institutions.

INTRODUCTION
Tertiary education has been recognized as a vital instrument for the development of human capital all over the world (World Bank, 2004). It serves as a facilitator and the power house for driving a strong socio-economic, political, cultural and industrial development of a nation (Peretomode in Asiyai, 2013). Jegede (2016) posits that tertiary education is the bedrock for producing not only creative and productive citizens, but also culturally and socially tolerant people who exercise ethical and moral considerations in national and local affairs, with an entrepreneurial spirit which helps to create employment opportunities and reduce poverty in a nation. Considering the importance of tertiary education to national development, it becomes imperative for tertiary institutions to deliver quality tertiary education to the citizens.

Quality education is a pre-requisite for achieving national development. According to Majasan in Asiyai (2013), quality education is expected to address critical issues like the dignity of labour, quality leadership and committed citizenship, industrial harmony, political stability, religious tolerance, self-reliance and security. He further stated that if a society expects quality manpower for rapid development and transformation, quality education is a must do affair. Quality education is that education that produces a complete person. A complete person here refers to a person who is...
intellectually, physically, emotionally, socially, economically and morally developed (Ekong, 2006). Akinpelu (2000) argues that education with quality is like a person having no education, stressing that without quality, education has no value. In order to ensure quality education delivery in tertiary institutions in Nigeria, there must be adequate provision of technological resources.

Technological resources are essential ingredients for quality education delivery in the 21st century. Okorosaye-Orubite (2008) defined technological resources as those information and communication technologies used in the teaching and learning process. Agbolade (2011) defined Information and Communication Technology (ICT) as the automation of processes, controls, and information production using computers, telecommunications, software and other gadget that ensure smooth and efficient running of activities. Examples of information and communication technologies (ICT) are computer set, laptops, internet facilities, projectors, projector screen, video camera, compact disk, television set, radio cassette, printers, scanners, photo copiers, fax machine and handset (Adeyemi, 2011). Other ICT devices include data recognition equipment, factory automation hardware and services, telecommuting and teleconferences using real time and online system (Adeoti, in Agbolade, 2011). Each of these ICT provides relevant, accuracy, factual, and detail information to the recipient.

The availability of technological resources is vital for quality education delivery in tertiary institutions. According to Bakwai (2014), the ability to maintain a balance between supply and demand in education is dependent on the availability of technological resources. He further stated that where the demand for education does not commensurate with the supply of technological resources, the quality of education is therefore at stake. Okebukola (2005) noted that lack of adequate technological resources will surely affect the quality of education provided in tertiary institutions. To ensure quality education delivery, these modern technologies must be made available and at the right quantity. Okoroma (2007) posits that the availability of technological resources will enable tertiary institutions deliver quality education that will meet the standard set by the NUC, NBTE and NCCE. It is against this backdrop that this study intends to examine technological resources as a pre-requisite for quality education delivery in tertiary institutions in Rivers State.

Statement of the Problem
The quality of education delivered in tertiary institutions in Rivers State is declining on a daily basis. This falling standard in tertiary education could be attributed to the inadequate supply of technological resources. For quality education to be achieved, technological resources must be adequately provided. A keen observation shows that available technological resources in the tertiary institutions in Rivers State do not match the growing population of students. Given this situation, the Federal Government set up a Committee on Needs Assessment to look into the resources need of its own university in Rivers State, while the State government has also done the same. Both Committees confirmed that the tertiary institutions in the State are not well equipped to deliver the expected quality of education because they are lacking technological resources. However, ever since the Committees submitted their reports to the government, it is not yet certain whether the needed resources have been made available to the institutions. Even the extent of utilization and maintenance of the available technological resources for quality education delivery in these institutions is yet to be properly investigated. This has created a vacuum in empirical literature which the present study intends to fill.

Purpose of the Study
The purpose of this study is to examine technological resources as a pre-requisite for quality education delivery in tertiary institutions in Rivers State. The specific objectives of the study are:

1. To determine the extent of provision of technological resources for quality education delivery in tertiary institutions.
2. To ascertain the extent of utilization of technological resources in the teaching and learning process in tertiary institutions.
3. To examine the extent of maintenance of technological resources for quality education delivery in tertiary institutions.
Research Questions
In order to address the objectives of the study, the following questions are put forward:

1. To what extent are technological resources provided for quality education delivery in tertiary institutions?
2. To what extent are technological resources utilized in teaching and learning process in tertiary institutions in Rivers State?
3. To what extent are available technological resources maintained for quality education delivery in tertiary institutions?

Literature Review
Concept of Technological Resources
Technological resources are multi-dimensional concept which Okorosaye-Orubite (2008) defined as those information and communication technologies used in the teaching and learning process. Ololube in Ololube, Eke, Uzorka, Ekpenyong and Nte (2009) defined information and communication technology as the acquisition, processing, storage and dissemination of vocal, pictorial, textual and numeric information via the microelectronic-based combination of computer and telecommunication. Lucy in Ololube et al (2009) posits that information and communication technology is a field that covers texts handling, data storage and referencing, computer output on microform, document image processing, telecommunication, e-mail, voicemail, networking, value-added network services, teleconferencing and videoconferencing and data transmission. Others include internet technology, multi-media projectors, electronic white boards, and automation of lecture halls and lecturers offices (Asiyai, 2013).

The application of digital technologies in educational institutions has revolutionized teaching and learning activities. Egwa (2016) posits that ICT adoption promotes teaching and learning. According to him, the multimedia internet-based technologies have provided opportunities for teaching and learning at a distance. ICT also facilitates the management information system (MIS) into the administrative processes, on-line libraries provide access to current books, journals and other information resources through global networking (Egwa, 2016). Ololube, Eke, Uzorka, Ekpenyong and Nte (2009) argue that information and communication technology (ICT), when applied to education, enhances the delivery of and access to knowledge, and improves the quality of the curriculum. It produces richer learning outcomes when compared with ICT-poor education. ICT-enriched learning encourages critical thinking and offers a much broader spectrum of means for achieving educational goals (Iloanusi & Osuagwu, in Ololube et al, 2009).

Concept of Quality Education
Quality education is that education that is relevant and adapted to the needs of the society (Ndiomu, in Asiyai, 2013). Ndiomu argues that such needs must meet the standards in health, growth, and physical survival in a complex and globalized world. He further stated that quality education is that education that is worthwhile, and which empowers the recipients with relevant skills, knowledge, ideas, values and attitudes needed for him /her to make informed decisions and live a self-sustaining life. Oyebade, Oladipo and Adetoro (2007) argue that quality education is value-loaded; it produces disciplined and well behaved people. It also produces people who are hard working and have mutual respect for others. Peretomode and Chukwuma (2007) posit that a society that expects quality manpower for rapid industrial and economic development must make quality education a must do affair. This is because quality education helps to foster dignity of labour, committed citizenship, quality leadership, political stability, industrial harmony, religious tolerance and self-reliance.

Tertiary institutions in Nigeria are facing increasing pressure to deliver quality education so as to produce knowledge workers to respond to the needs of industrial organizations and the society at large (Okebukola, 2010). The general public has been concerned over the quality of education delivered by universities in Nigeria as the quality of output does not reflect the desire and expectations of the public. Considering the public demand for quality education delivery in tertiary institutions, the Federal Government via National Universities Commission (NUC), National Board for Technical Education (NBTE) and National Teachers Institute (NTI) and the National Council of Colleges of Education (NCCE) has employed various mechanisms to determine the quality assurance of educational programmes in tertiary institutions. These mechanisms as outlined by Adepoju and Akinola in Asiyai (2013) include: setting of minimum academic standard, impact assessment,
visitation, carrying capacity and admission quota, accreditation, publications and research assessment, structures, infrastructures and utilities, accreditation of programmes or institutions, monitoring, assessment and evaluation of existing staff strength, students and facilities, capacity building for teaching and non-teaching staff, exchange programme for teaching personnel and students, institutional ranking in terms of undergraduate and post graduate courses and programmes, prescription of benchmarks and periodic review and production of documents on minimum standards, and external moderation system.

However, despite the supervisory role played by these regulatory agencies, the quality of education delivery in tertiary institutions is still very low (Babatope, 2009). Muktar in Isa & Yusuff (2015) identifies the factors responsible for the poor quality of education in Nigerian tertiary institutions to include: poor funding, lack of infrastructures, lack of frequent curriculum review, inadequate staff training and welfare, students’ overpopulation, frequent strikes by both the academic and supporting staff and so on. Other factors include inadequate facilities such as lecture halls, laboratories, libraries, chemicals and equipments for practical and power supply (Babatope, 2009). Peretomode (2014) believes that quality education delivery can be achieved if there are adequate facilities and good infrastructures in the institutions.

**Technological Resources and Quality Education Delivery in Tertiary Institutions**

Some empirical studies have been conducted on the influence of technological (ICTs) resources on quality education delivery in tertiary institutions. For example, Anyanene, Nwokolo and Anyachebelu (2012) empirically examined the extent of availability and use of information communication technology resources for counseling university students in South-East universities in Nigeria. The researcher employed the survey research design where a structured questionnaire was used to collect data from 10,800 students in nine universities in the South-East, Nigeria. The data collected were analyzed using percentage and mean scores. The results indicated that information communication technology (ICT) facilities are limited in the universities in the South East States. The study also revealed that the level of utilization of information communication technology in these institutions is very low. The study equally reported that the availability and utilization of ICT in South-East universities would enhance quality education delivery.

Ololube, Eke, Uzorka, Ekpenyong and Nte (2009) investigated the instructional technology in higher education. This study applied the Need Assessment Approach (NAA) and used a self-designed questionnaire to gather data from 125 respondents in two universities in the Niger Delta region. After analyzing the data collected using simple percentages, t-test and chi-square and Statistical Packages for Social Sciences (SPSS) version 17, the researcher found a significant relationship between the impact of instructional technology, the usage of instructional technology and students’ academic achievement. The study also reported that absence of ICT instructional materials, ineffective policy implementation and a lack of other resources (infrastructures) to aid teaching and learning are responsible for short comings in the effective implementation of ICT in education.

Etuk (2006) empirically investigated quality assurance in Nigerian universities and its implication for the management ICT education in Nigeria. His data were collected from administrative and academic staff in the two universities in Cross River State. The researcher used a structured questionnaire as the main instrument for data collection. The data collected were analyzed using descriptive statistics such as mean and standard, and influential statistics like Z-test statistics. After analyzing the data, the researcher found out that the quality of education provided by Nigerian universities is very low. The study also confirmed that inadequate utilization of ICT in the teaching and learning process is responsible for the decline quality of education provided by Nigerian universities.

Idowu, Esere and Omotosho (2011) examined the challenges of information and communication technology and higher education system in Nigeria. Their study focused on the availability and utilization of ICT for quality higher education. The researcher collected data from academic staff and students in the two universities in Lagos State using a structured questionnaire. The data collected were analyzed using percentage, frequency, mean, standard deviation and t-test. Their findings showed that inadequate ICTs in the two universities in Lagos State. The study also reported that ICTs are not adequately utilized in the teaching and learning process. The study concluded that lack of adequate ICT is responsible for the poor quality of education in Nigerian universities.

Yusuf (2005) examined the integration of information and communication technologies (ICTs) in Nigeria’s tertiary education. The researcher adopted the quantitative research design and the positivist
paradigm where a structured questionnaire was used to gather data from 212 students and 200 academic staff from two public universities in the northern region of Nigeria. The data collected were analyzed using mean, standard deviation and Chi-square. The findings revealed that ICT resources provided for public universities in the northern region of Nigeria are grossly inadequate to meet the growing population of students. The study also revealed that inadequate ICTs in public universities occur as a result of poor funding of the institutions.

Aramide and Bolarinwa (2010) examined the availability and use of audiovisual and electronic resources by distance learning students in Nigerian Universities. Their study employed the quantitative research approach and the descriptive survey design. The researchers used a questionnaire to elicit data from 240 students of National Open University of Nigeria (NOUN), Ibadan Study Centre. The data collected were analyzed using mean, standard deviation and Z-test. After analyzing the data collected for the study, the researcher discovered that there are inadequate audiovisual and electronic resources in NOUN. The study also revealed that the available audiovisual and electronic resources are not adequately utilized by distance learning students in NOUN. The study also confirmed that lack of adequate ICT has affected the quality of distance education in NOUN.

Faloye and Oparah (2007) examined the relevance of information and communication technology (ICT) in education. Their study focused on the tertiary educational sector. The researchers adopted the descriptive survey and used a self-developed questionnaire to obtain data from academic and non-academic staff of the two universities in Lagos State. The data collected were analyzed using mean, standard deviation and Chi-square. The findings revealed that there are insufficient ICTs in the federal and state universities in Lagos State. The study also revealed that lack of adequate ICTs has contributed to the fall standard of education provided in the institutions.

Agba, Kigongo-Bukenya and Nyumba (2004) empirically examined the utilization of electronic information resources by academic staff at Makerere University. The researchers adopted the descriptive survey design where questionnaire was used to collect data from a sample of 320 academic staff at Makerere University. The data collected were analyzed statistically using both descriptive statistics such as percentage, frequency, mean and standard deviation and inferential statistics such as ANOVA. The findings revealed that the information and communication technologies available at Makerere University are too inadequate to meet the large number of students. The study also revealed that inadequate ICTs have negatively affected the quality of education provided in the university. The study equally reported that adequate ICTs would enhance quality education delivery in Makerere University.

METHODOLOGY
The descriptive survey research design was adopted in this study. All the 811 administrative staff in the six (6) tertiary institutions in Rivers State constitutes the population of the study. A sample size of 268 senior administrative staff was drawn from the 811 administrative staff in the six tertiary institutions after the sample size has been determined mathematically using the Taro Yamen’s formula. The stratified random sampling technique was used to select the sample size from the population of the study. A structured questionnaire was used to elicit data from the respondents. The questionnaire was structured on four (4) points rating scale which range from Strongly Agree, Agree, Disagree to Strongly Disagree. The questionnaire was validated through a face and content analysis while its reliability was determined using the test-retest method. A total of 268 questionnaires were administered to the respondents across the six tertiary institutions in Rivers State with the aid of five trained field assistance. Out of the 268 questionnaires administered, 243 copies were completed and collected. The data collected were analyzed using mean and standard deviation. The research questions were answered with mean and standard deviation after a criterion mean of 2.50 was set for any item to be accepted.

RESULTS AND DISCUSSION
The results that emanated from the study are presented in tables and interpreted accordingly.

Research Question 1
To what extent are technological resources provided for quality education delivery in tertiary institutions in Rivers State?
Table 1: Mean responses of male and female administrative staff on the extent to which technological resources are provided for quality education delivery

<table>
<thead>
<tr>
<th>S/N</th>
<th>Extent of provision of the following technological resources in tertiary institutions</th>
<th>Male Administrative Staff = 139</th>
<th>Female Administrative Staff = 104</th>
<th>Mean Set</th>
<th>SD Set</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Desktop Computer sets</td>
<td>$X_1$ = 2.48, $SD_1 = 0.78$</td>
<td>$X_2$ = 2.42, $SD_2 = 0.73$</td>
<td>$X_1 \times X_2$ = 2.45, $SD_{1,2} = 0.76$</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Laptops</td>
<td>$X_1$ = 2.40, $SD_1 = 0.71$</td>
<td>$X_2$ = 2.35, $SD_2 = 0.66$</td>
<td>$X_1 \times X_2$ = 2.38, $SD_{1,2} = 0.69$</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Internet facilities</td>
<td>$X_1$ = 2.46, $SD_1 = 0.75$</td>
<td>$X_2$ = 2.42, $SD_2 = 0.70$</td>
<td>$X_1 \times X_2$ = 2.44, $SD_{1,2} = 0.73$</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Projectors</td>
<td>$X_1$ = 2.43, $SD_1 = 0.72$</td>
<td>$X_2$ = 2.45, $SD_2 = 0.72$</td>
<td>$X_1 \times X_2$ = 2.44, $SD_{1,2} = 0.72$</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Video cameras</td>
<td>$X_1$ = 2.34, $SD_1 = 0.63$</td>
<td>$X_2$ = 2.41, $SD_2 = 0.69$</td>
<td>$X_1 \times X_2$ = 2.42, $SD_{1,2} = 0.66$</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Compact disk</td>
<td>$X_1$ = 2.39, $SD_1 = 0.68$</td>
<td>$X_2$ = 2.45, $SD_2 = 0.71$</td>
<td>$X_1 \times X_2$ = 2.42, $SD_{1,2} = 0.70$</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Television set</td>
<td>$X_1$ = 2.43, $SD_1 = 0.73$</td>
<td>$X_2$ = 2.40, $SD_2 = 0.70$</td>
<td>$X_1 \times X_2$ = 2.41, $SD_{1,2} = 0.72$</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Photocopier &amp; Printers</td>
<td>$X_1$ = 2.47, $SD_1 = 0.77$</td>
<td>$X_2$ = 2.41, $SD_2 = 0.69$</td>
<td>$X_1 \times X_2$ = 2.44, $SD_{1,2} = 0.73$</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Fax machine</td>
<td>$X_1$ = 2.58, $SD_1 = 0.91$</td>
<td>$X_2$ = 2.52, $SD_2 = 0.86$</td>
<td>$X_1 \times X_2$ = 2.55, $SD_{1,2} = 0.89$</td>
<td>Rejected</td>
<td></td>
</tr>
</tbody>
</table>

Grand Mean/SD: $2.44 \times 0.72 = 2.42 \times 0.71 = 2.43 \times 0.74$ Accepted

Table 1 shows the mean responses of male and female administrative staff on the extent of provision of technological resources for quality education delivery in their institutions. The table indicates that 1-8 listed in the table are rejected since their mean scores are less than the criterion mean of 2.50; while item 9 is accepted because its mean score is greater than 2.50. Consequently, it is accepted that the extent of provision of technological resources such as desktop computers, laptops, internet facilities, projectors, video cameras, compact disk, television sets, photocopiers and printers are quite low for quality education delivery in tertiary institutions in Rivers State.

Research Question 2
To what extent are the technological resources utilized in the teaching and learning process in tertiary institutions in Rivers State?

Table 2: Mean responses of male and female administrative staff on the extent of utilization of technological resources in the teaching and learning process

<table>
<thead>
<tr>
<th>S/N</th>
<th>Extent of utilization of the following technological resources in the teaching and learning process in tertiary Institutions</th>
<th>Male Administrative Staff = 139</th>
<th>Female Administrative Staff = 104</th>
<th>Mean Set</th>
<th>SD Set</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>Desktop computer sets</td>
<td>$X_1$ = 2.43, $SD_1 = 0.76$</td>
<td>$X_2$ = 2.47, $SD_2 = 0.79$</td>
<td>$X_1 \times X_2$ = 2.45, $SD_{1,2} = 0.78$</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Laptops</td>
<td>$X_1$ = 2.40, $SD_1 = 0.72$</td>
<td>$X_2$ = 2.45, $SD_2 = 0.76$</td>
<td>$X_1 \times X_2$ = 2.43, $SD_{1,2} = 0.74$</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Internet facilities</td>
<td>$X_1$ = 2.37, $SD_1 = 0.65$</td>
<td>$X_2$ = 2.40, $SD_2 = 0.70$</td>
<td>$X_1 \times X_2$ = 2.36, $SD_{1,2} = 0.68$</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Projector screens</td>
<td>$X_1$ = 2.31, $SD_1 = 0.60$</td>
<td>$X_2$ = 2.39, $SD_2 = 0.64$</td>
<td>$X_1 \times X_2$ = 2.35, $SD_{1,2} = 0.62$</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Compact disk</td>
<td>$X_1$ = 2.41, $SD_1 = 0.71$</td>
<td>$X_2$ = 2.45, $SD_2 = 0.72$</td>
<td>$X_1 \times X_2$ = 2.43, $SD_{1,2} = 0.72$</td>
<td>Rejected</td>
<td></td>
</tr>
</tbody>
</table>

Grand Mean/SD: $2.38 \times 0.69 = 2.43 \times 0.72 = 2.41 \times 0.71$ Rejected

Table 2 shows the mean responses of male and female administrative staff on the extent of utilization of technological resources in the teaching and learning process in their institutions. The data in the table indicates that both male and female administrative staff disagreed with items listed in the table with mean scores lesser than the criterion mean of 2.50. The grand mean scores of 2.38 and 2.43 for male and female administrative staff respectively are less than the criterion mean of 2.50. Therefore, it is accepted that extent of utilization of technological resources in the teaching and learning process in tertiary institutions in Rivers State is very low.
Research Question 3
What are the challenges hindering the provision and utilization of technological resources in tertiary institutions in Rivers State?

Table 3: Mean responses of male and female administrative staff on the challenges hindering the provision and utilization of technological resources in tertiary institutions

<table>
<thead>
<tr>
<th>S/N</th>
<th>Challenges hindering the provision and utilization of technological resources in tertiary institutions</th>
<th>Male Administrative Staff = 139</th>
<th>Female Administrative Staff = 104</th>
<th>Mean Set</th>
<th>SD Set</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$X_1$</td>
<td>SD$_1$</td>
<td>$X_2$</td>
<td>SD$_2$</td>
<td>$\bar{X}_1 \bar{X}_2$</td>
</tr>
<tr>
<td>15.</td>
<td>Dearth of funds hinders the provision and utilization of technological resources in our institution.</td>
<td>2.87</td>
<td>0.92</td>
<td>2.76</td>
<td>0.73</td>
<td>2.82</td>
</tr>
<tr>
<td>16.</td>
<td>Embezzlement of public funds by government officials hinders the provision and utilization of technological resources in our institution.</td>
<td>2.81</td>
<td>0.86</td>
<td>2.65</td>
<td>0.71</td>
<td>2.73</td>
</tr>
<tr>
<td>17.</td>
<td>Shortage of skilled manpower to handle ICT devices hinders the use of technological resources in the teaching and learning process in our institution.</td>
<td>2.74</td>
<td>0.82</td>
<td>2.57</td>
<td>0.62</td>
<td>2.65</td>
</tr>
<tr>
<td>18.</td>
<td>Lack of adequate staff training on the use of ICTs hinder the utilization of ICTs in the teaching and learning process.</td>
<td>2.70</td>
<td>0.75</td>
<td>2.68</td>
<td>0.70</td>
<td>2.69</td>
</tr>
<tr>
<td>19.</td>
<td>Politicization of technological facilities provision based on institution type hinders the provision and utilization of ICTs in our institution.</td>
<td>2.84</td>
<td>0.87</td>
<td>2.79</td>
<td>0.74</td>
<td>2.82</td>
</tr>
</tbody>
</table>

Grand Mean/SD | 2.79  | 0.84   | 2.69  | 0.70   | 2.74     | 0.77          |

Table 3 presents the mean responses of male and female administrative staff on the challenges hindering the provision and utilization of technological resources in their institutions. The table indicates that both male and female administrative staff agreed with all the items listed in the table with their mean scores greater than the criterion mean of 2.50. The grand mean scores of 2.79 and 2.69 for male and female administrative staff respectively are greater than the criterion mean of 2.50. Hence, it is accepted that the challenges hindering the provision and utilization of technological resources in tertiary institutions in Rivers State include dearth of funds, embezzlement of public funds by government officials, shortage of skilled manpower to handle ICT devices, lack of adequate staff training on the use of ICT facilities and politicization of technological resource provision based on institution type by the government.

DISCUSSION OF FINDINGS
It was discovered in this study that the extent of provision of technological resources is quite low for quality education delivery in tertiary institutions in Rivers State. This finding was obtained from the result of the analysis carried out on the responses received to first research question. The result of the analysis revealed that provision of technological resources is very low to guarantee quality education.
delivery in tertiary institutions. This finding is supported by Yusuf (2005), Faloye and Oparah (2007), Oolube, Eke, Uzorka, Ekpenyong and Nje (2009), Aramide and Bolarinwa (2010), and Anyanene, Nwokolo and Anyachebelu (2012) as their studies reported a deficiency in the provision of technological resources in tertiary institutions in Nigeria. The implication of this finding is that inadequate supply of technological resources has hindered quality education delivery in tertiary institutions in Rivers State. This study also revealed that the extent of utilization of technological resources in the teaching and learning process in tertiary institutions in Rivers State is very low. This finding was derived from the result of the analysis carried out on the responses received to second research question. The result of the analysis revealed that extent of utilization of technological resources in the teaching and learning process in tertiary institutions in Rivers State is very low. This finding is in consistent with the research conducted by Etuk (2006), Idowu, Esere and Omotosho (2011) and Anyanene, Nwokolo and Anyachebelu (2012) as they all reported that ICTs are not adequately utilized in the teaching and learning process in tertiary institutions in Nigeria. The implication of this finding is that inadequate utilization of technological resources in the teaching and learning process hinders quality education delivery in tertiary institutions in Rivers State. Finally, it was discovered that dearth of funds, embezzlement of public funds by government officials, shortage of skilled manpower to handle ICT devices, lack of adequate staff training on the use of ICT facilities and politicization of technological resource provision based on institution type by the government are the major challenges hindering the provision and utilization of technological resources in tertiary institutions in Rivers State. This finding was deduced from the result of the analysis carried out on the responses received to third research question. This finding is in line the research conducted by Agba, Kigongo-Bukemya and Nyumba (2004) which reported that lack of adequate funding, corruption and embezzlement of public funds and shortage of skilled manpower to handle ICT devices are the major factors hindering the provision and utilization of technological resources in tertiary institutions in Nigeria. Yusuf (2005) also agreed with this finding when he reported that politicization of technological resource provision based on institution type by the government in addition to poor funding and corruption are the major hindrances to the provision and utilization of technological resources in tertiary institutions in Nigeria.

CONCLUSION
From the going analysis, it is evident that technological resources are essential ingredient for quality education delivery in tertiary institutions in Rivers State. However, the empirical results of this study revealed that the extent of provision of technological resources is quite low for quality education delivery in tertiary institutions in Rivers State. The study also revealed that the extent of utilization of technological resources in the teaching and learning process in tertiary education is very low. The study identified dearth of funds, embezzlement of public funds by government officials, shortage of skilled manpower to handle ICT devices, lack of adequate staff training on the use of ICT facilities and politicization of technological resource provision based on institution type by the government as the major challenges hindering the provision and utilization of technological resources in tertiary institutions in Rivers State.

RECOMMENDATIONS
Based on the findings and conclusions, the following recommendations are made:

1. The Federal and State Governments should provide more technological resources facilities in their respective institutions since they have the capacity of improving the quality of education delivery.
2. The management of the various tertiary institutions in Rivers State should provide adequate training and development programme for their staff especially on the use of technological resources (ICTs) as this would enhance the utilization of technological resources in the teaching and learning process in their institution.
3. The various unions in tertiary institutions such as ASUU, NASU, ASUP, etc should continue to mount pressure on the federal government to provide adequate technological resources in their respective institutions as it would enhance quality education delivery.
4. The Federal and State Government should increase the budgetary allocation to their respective institutions in Rivers State and set-up monitoring committee to ensure that the funds are properly utilized. This will no doubt ensure the availability of technological resources in tertiary institutions and improve the quality of education.

REFERENCES


