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REPOSITIONING HIGHER EDUCATION THROUGH INNOVATIONS IN RIVERS STATE, NIGERIA

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Abstract

The study investigated the repositioning of higher education through innovations in Rivers State, Nigeria. Two research questions and two hypotheses guided the study. The study adopted the descriptive survey research design. The population of the study consisted of 5,970 (1,616 lecturers, 4,354 postgraduate students) respondents of Rivers State University and Ignatius Ajuru University of Education. The stratified random sampling technique was adopted to obtain the sample size of 997 (162 lecturers, 835 students) respondents. A validated self-structured 10-item instrument tagged "Repositioning Higher Education Through Innovations Questionnaire" was used for data collection. The questionnaire was structure using the four point modified Likert rating scale response pattern of Very High Extent (VHE), High Extent (HE), Low Extent (LE), and Very Low Extent (VLE). A reliability index of 0.79 was obtained using Pearson r. Mean and standard deviation was used to answer the research questions while z-test was used to test the hypotheses at 0.05 level of significance. Out of the 997 copies of questionnaire administered, only 984 copies were retrieved constituting 99% retrieval rate. The findings of the study revealed among others that to a high extent, ICT and TETFUND as educational innovations can enhance the repositioning of higher education in Rivers State. It was recommended among others that the Rivers State government should take a cursory view of the forms of innovation to adopt in order to enhance the repositioning of higher education in the state, the government should adequately fund educational innovation agencies/programmes and provide reliable statistical data in order to effectively promote the repositioning of higher education.

Keywords: Repositioning, Higher Education, Innovation, Information and Communication Technology, Tertiary Education Trust Fund, Rivers State.

Innovation is critical in repositioning higher education in Nigeria. Innovating and transforming the higher educational system of a country is a function of government. A responsive government through different innovation programmes and policies tries to bring changes and improvements in her tertiary institutions of learning across the country (Abali, 2018). Repositioning higher education in the country, however, does not come about just because the government in power decided it wants a change. There must be an event which inform her that the present system of education is either not achieving or is incapable of enabling the achievement of developmental goals. Once that decision is made, what remains is the attempt to carefully identify not only why the old system can no longer be continued in the present form, but also how to provide a more acceptable alternative. Therefore, repositioning higher education in Nigeria may evolve in response to changing political and economic circumstances and so are the measures that need to be put in place from time to time (Aina, 2009).

Within the context of this study, the term 'repositioning' is used to mean 'reforming'. Repositioning or reforming refers to change that is made to a social system, an organization, etc in order to improve or correct it. It is to improve a system, an organization, a law etc by making changes to it (Hornby, 2010). The road-map to repositioning or reforming the Nigerian higher educational system lies within the context of structural changes (Abali & Suanukordo, 2015). The Nigerian nation cannot afford to lag behind modernity in this digital era. Therefore, for the country to be in tandem with modern trends, it must initiate planned changes in her higher educational system (Abali, 2018).

The concept 'innovation' is derived from the Latin word 'innovatus' which means to alter or to make change (Abali, 2018). Hornby (2010) avers that innovation is a new idea; way of doing something that has been introduced or discovered. Nduanya in Bassey (2009) asserts that innovation is any thought behaviour or thing that is new because it is qualitatively different from existing forms. It is any idea, practice, or material artifact perceived to be new by the relevant unit of adoption (Zaltman & Lin in Bassey, 2009). Agabi (2002) opines that innovation is positive planned and specific changes that are initiated to facilitate the achievement of some defined goals. Mkpa and Izuagba in Anekwe and Abe (2015) point out that innovation is the invention, which involves the creation of something new. It is a specific change or alteration in education that in initiated to facilitate the achievement of a predetermined goal. It is a strategy for intervention in a national reform that modifies organizational structure (Anyaogu, 2015).

The introduction of ICT in education, in recent times, is a technological innovation. For a nation to be in tandem with modern trends in this digital era, it should be able to boost of a viable and functional ICT driven education, especially in this fast changing world where

globalization is the order of the day (Abali, 2018). Globalization has made it necessary the use of ICT, as ICTs such as e-mail, cellular telephone and teleconferencing enable people share knowledge without having to be in the same place. It is, therefore, required of everyone to have ICT competence to survive in this technology-driven age (Bema & Uwaezuoke, 2011; Ogbuechi & Olawolu, 2011 in Abali, 2018).

According to Kundishora in Abali, Nabie and Dike (2019), ICT is a generic term referring to technologies that are used for collecting, storing, editing and passing on information in varied forms. Sarkar in Abali (2018) avers that ICT is the varied collection of technological gears and resources, which are made use of to communicate, generate, distribute, collect and administer information. ICTs are tools and processes to retrieve, store, organize, manipulate, produce, present and exchange information through electronic and other automated means (Abali, 2018). Ejesu (2015) avers that ICT provides higher interactive potential for users to develop their individual, intellectual and creative ability. ICT brings greater efficiency in schools as communication channels are increased through the use of e-mail and discussion groups. The regular uses of ICT in different curriculum subjects have beneficial motivational impact on students teaching and learning (Elmo, 2014).

Camilus (2015) asserts that the introduction of ICT has enhanced the access to library and research materials. Therefore, lecturers/teachers are trained to develop competencies of carrying out effective searches on the web and other electronic database in order to enhance the performance of their professional work role; lecturers in higher institutions are made to acquire ICT skills in database management and web applications, web navigation, e-mail management skills, window explorer skills, and others. Oyenike (2010) opines that ICT tools have been proven to be of importance in teacher professional development as quality in education is dependent on teachers' competencies; which are achieved through accessing online journals, joining discussion forums, down loading lesson ideas and plans, exploring teacher resources, and keeping of records. Anyaogu (2015) posits that obtaining research findings in any subject area through the internet and e-learning has not only brought about qualitative improvement in what is taught in the classroom but has also encouraged personal and professional advancement.

As an educational innovation in teaching and learning, ICT has enhanced the reformation of the educational system by increasing the engagement and motivation of learners; by ensuring learners' acquisition of basic skills; and by facilitating the training of teachers (ICT Advantages & Disadvantages, 2011). ICT Advantages & Disadvantages further avers that ICT enable people have access to current student and school data at anytime and anywhere and brings about higher quality lessons through collaboration between teachers in planning of school resources. According to Egu, Ememe and Njoku

(2011), ICT has the potential for improving the problem-solving skills in students, as it is possible for students to browse the internet to source materials or information with which to do their assignments or research work using current and high quality materials retrieved online.

There have been several commissions, committees and panels set up by the Federal Government of Nigeria over the years to examine and recommend ways and means of adequately financing higher education in the country. The Longe Commission Report as cited in Nwangwu (2001, p. 116) identified the following as viable sources of funds for the rehabilitation, restoration and consolidation of higher education: revenue allocation from the Consolidated Fund (Federal Account); a higher education tax (2%) imposed by government on all profits declared by companies operating in Nigeria; the annual budgetary allocations to education by Federal and State Governments from which higher education will receive its share; internal institutional revenue generation through business ventures; partial recovery of academic costs through fees, etc; funds from Alumni Associations; private sector contributions; and voluntary agency contributions and donations from philanthropic individuals.

Onyeike (2015) posits that the Nigerian government established TETFUND under the TETFUND Act in 2011 with a view to repositioning the higher educational system. This agency of the government is charged with the responsibility of directing, organizing, monitoring, and disbursing tax generated revenue solely for public tertiary institutions of learning. Onyeike reiterates that the disbursed funds are used in providing and maintaining physical infrastructure for teaching and learning; instructional materials and equipment; research and publication; academic staff training and development; and other critical and essential projects agreed by the Board of Trustees capable of improving the quality and maintenance of standards in the public tertiary educational institutions across Nigeria. The structural composition of TETFUND is such that the funds generated from education tax are utilized to improve the quality of tertiary education; promoting creativity and innovative approaches to educational learning and services, in line with international standards.

Statement of the Problem

Citizens across Nigeria have raised the issue that the country's higher educational system has, in the contemporary period, experienced quantitative expansion but the problems facing the nation have remain unresolved. Despite the critical position of the higher educational system to the development of the Nigerian economy, its potential in enhancing the attainment of the nation's national goals is frequently thwarted by changes arising from the pressures and demands of the political, economic, cultural, scientific, and technological

environments with their attendant challenges. This calls for the repositioning of the higher educational system which can only be achieved through a deliberate process of educational innovations in the area of structure, curriculum and methods.

Purpose of the Study
The main purpose of this study was to investigate the repositioning of higher education through innovations in Rivers State. Specifically, the objectives were to:-
Examine the extent to which Information and Communication Technology (ICT) as an innovation can enhance the repositioning of higher education in Rivers State.
Determine the extent to which Tertiary Education Trust Fund (TETFUND) as an innovation can promote the repositioning of higher education in Rivers State.

Research Questions
The following questions were posed to guide this study:
To what extent can information and Communication Technology (ICT) as an innovation enhance the repositioning of higher education in Rivers State?
To what extent can Tertiary Education Trust Fund (TETFUND) as an innovation promote the repositioning of higher education in Rivers State?

Hypotheses
The following hypotheses were tested in this study at 0.05 level of significance:
There is no significant difference in the mean responses of lecturers and students on the extent to which Information and Communication Technology (ICT) as an innovation can enhance the repositioning of higher education in Rivers State.
There is no significant difference in the mean responses of lecturers and students on the extent to which Tertiary Education Trust Fund (TETFUND) as an innovation can promote the repositioning of higher education in Rivers State.

Methodology
The study adopted the descriptive survey research design. The population for the study comprised 5,970 (1,616 lecturers and 4,354 postgraduate students) respondents of Rivers State University (RSU) and Ignatius Ajuru University of Education (IAUE). The sample size for the study consisted of 997 (162 lecturers and 835 students) respondents from the two universities, representing 10% of the population. The stratified random sampling technique was adopted in obtaining the sample size. A validated 10 – item self-designed

instrument tagged "Repositioning Higher Education Through Innovations Questionnaire (RHETIQ)" was used for data collection. The reliability of the instrument was determined through test-retest technique. The responses were collated and analyzed using Pearson Product Moment Correlation coefficient which yielded a reliability index of 0.79. 997 copies of questionnaire (lecturers 162, students 835) were administered by the researcher to the respondents with the aid of two research assistants, out of which 984 copies (lecturers 160, students 824) were retrieved, constituting 99% retrieval rate. Mean and standard deviation were used to answer the research questions while z-test was used to test the hypotheses at 0.05 level of significance. Any value from 3.50 – 4.00 was regarded as Very High Extent (VHE), 2.50 – 3.40 was regarded as High Extent (HE), 1.50 – 2.49 was regarded as Low Extent (LE), and 0.50 – 1.49 was regarded as Very Low Extent (VLE). A null hypothesis was accepted if the calculated z-value was less than the critical z-value of ±1.96, and rejected if the calculate z-value was greater than the critical z-value of ±1.96.

Analysis of Data and Results
Research Question 1: To what extent can Information and Communication Technology (ICT) as an innovation enhance the repositioning of higher education in Rivers State?

Table 1: Extent to which ICT can Enhance the Repositioning of Higher Education in Rivers State

S/N	Questionnaire Items	Lecturers (N = 160)		Remarks	Students (N = 824)		Remarks
		$\overline{X}_L$	SD_L		$\overline{X}_S$	SD_S	
1.	By providing higher interactive potentials for users to develop their creative ability, ICT can enhance repositioning of higher education.	2.82	0.98	High Extent	3.15	0.99	High Extent
2.	Through ICT teachers are trained to develop competencies of carrying out effective searches on the web and this can enhance the repositioning of higher education.	2.91	1.04	High Extent	2.92	1.12	High Extent
3.	Through ICT learners' motivation and engagement in the learning process is increased and this can	2.82	1.17	High Extent	3.15	0.99	High Extent

	enhance the repositioning of education.						
4.	By enabling people to have access to current student and school data, ICT can enhance the repositioning of higher education.	3.23	0.93	High Extent	3.09	1.04	High Extent
5.	ICT brings about higher quality lessons through collaboration between teachers in planning of school resources and this can enhance the repositioning of higher education	3.18	1.08	High Extent	3.15	0.00	High Extent
6.	By bringing greater efficiency in schools as communication channels are increased through the use of e-mail and discussion groups, ICT can enhance the repositioning of higher education.	3.29	0.67	High Extent	3.14	0.67	High Extent
	Grand Mean/DS	**3.04**	**0.98**		**2.10**	**0.97**	

Source: Field Survey, 2020.

Table 1 revealed that items with serial number 1 – 6 have mean values that fell within the range of high extent. Therefore, with a grand mean of 3.04 for lecturers and 3.10 for students, it was evident that lecturers and students agreed to a high extent that ICT as an innovation can enhance the repositioning of higher education in Rivers State.

Research Question 2: To what extent can Tertiary Education Trust Fund (TETFUND) promote the repositioning of higher education in Rivers State?

Table 2: Extent to which TETFUND can promote the repositioning of Higher Education in Rivers State

S/N	Questionnaire Items	Lecturers (N = 160)		Remarks	Students (N = 824)		Remarks
		$\overline{X}_L$	SD_L		$\overline{X}_S$	SD_S	
7.	By disbursing funds used in providing and maintaining physical infrastructure for teaching and learning, TETFUND can promote the repositioning of higher education.	3.08	0.95	High Extent	2.91	1.04	High Extent
8.	By disbursing funds for procuring of instructional materials and equipment in schools, TETFUND can promote the repositioning of higher education.	3.09	1.04	High Extent	2.92	1.12	High Extent
9.	By providing funds for conducting researches and publications, TETFUND can promote the repositioning of higher education.	3.18	1.08	High Extent	2.85	1.07	High Extent
10.	Funds disbursed by TETFUND are used for academic staff training and development and this can promote the repositioning of higher education.	3.27	1.01	High Extent	2.92	0.95	High Extent
	Grand Mean/SD	**3.16**	**1.02**		**2.90**	**1.05**	

Source: Field Survey, 2020.

Table 2 revealed that items 7 – 10 have mean values that fell within the range of high extent. Therefore, with a grand mean of 3.16 for lecturers and 2.90 for students, it was evident that lecturers and students agreed to a high extent that TETFUND as an innovation can promote the repositioning of higher education in Rivers State.

Hypothesis 1: There is no significant difference in the mean responses of lecturers and students on the extent to which ICT as an innovation can enhance the repositioning of higher education in Rivers State.

Table 4: Z-test Analysis of Difference Between Lecturers and Students on the Extent to which ICT can Enhance the Repositioning of Higher Education

Respondents	N	$\bar{X}$	SD	DF	Level of Sign.	Z-Cal	Z-Crit.	Decision
Lecturers	160	3.04	0.98	982	0.05	-0.23	$\pm$1.96	Ho_1
Students	824	3.10	0.97					Accepted

Source: Researcher's Analysis, 2020

Table 4 showed that the z-test statistics calculated and used in testing the hypothesis stood a - 0.23 while the critical z-value stood at $\pm$1.96, using 982 degree of freedom at 0.05 level of significance. Since the calculated z –value was less than the critical z-value; hypothesis 1 was therefore accepted by the researcher, which indicated no significant difference.

Hypothesis 2: There is no significant difference in the mean responses of lecturers and students on the extent to which TETFUND as an innovation can promote the repositioning of higher education in Rivers State.

Table 5: Z-test Analysis of Difference Between Lecturers and Students on the Extent to which TETFUND can Promote the Repositioning of Higher Education

Respondents	N	$\bar{X}$	SD	DF	Level of Sign.	Z-Cal	Z-Crit.	Decision
Lecturers	160	3.16	1.02	982	0.05	2.94	$\pm$1.96	Ho_2
Students	824	2.90	1.05					Rejected

Source: Researcher's Analysis, 2020

Table 5 showed that the z-test statistics calculated and used in testing the hypothesis stood at 2.94 while the critical z-value stood at $\pm$1.96, using 982 degree of freedom at 0.05 level of significance. Since the calculated z-value was greater than the critical z-value, hypothesis 2 was therefore rejected by the researcher, which indicated a significant difference.

Discussion of Findings
The discussion of findings of this study was done under the following sub-heads:

ICT for Repositioning Higher Education

On the extent to which ICT as an innovation can enhance the repositioning of higher education in Rivers State, the findings of this study revealed that by providing higher interactive potentials for users to develop their creative ability, ICT can enhance the repositioning of higher education. This discovery is in tandem with Ejesu's (2015) assertion that ICT as an instructional technology provides higher interactive potential for the users to develop their individual, intellectual and creative ability. The study also discovered that through ICT teachers are trained to develop competencies of carrying out effective searches on the web and this can enhance the repositioning of higher education. In support of this finding Camilus (2015) opined that the introduction of ICT has enhanced the access of library and research materials. Therefore, teachers are, trained to develop competencies of carrying out effective searches on the web and other electronic database in order to enhance the performance of their professional work role. Lecturers are made to acquire ICT skills in database management and web applications, web navigation, e-mail management skills, windows explorer skills, and others.

The findings of this study further revealed that through ICT learners' motivation and engagement in the learning process is increased and this can enhance the repositioning of higher education. This finding conforms to the assertion of ICT Advantages & Disadvantages (2011) that as an educational innovation in teaching and learning, ICT has enhanced the reformation of the educational system by increasing the engagement and motivation of learners. Agreeing with ICT Advantages & Disadvantages, Egu, Ememe and Njoku (2011) opined that ICT has the potential for improving the problem - solving skills in students, as it is possible for students to browse the internet to source for materials or information with which to do their assignments or research work using current and high quality materials retrieved online.

The findings of the study also revealed that by enabling people to have access to current student and school data, ICT can enhance the repositioning of higher education; and ICT brings about higher quality lessons through collaboration between teachers in planning of school resources and this can enhance the repositioning of higher education. Corroborating these findings, ICT Advantages & Disadvantages (2011) averred that ICT enable people have access to current student and school data at anytime and anywhere and brings about higher quality lessons through collaboration between teachers in planning of school resources. The findings of the study equally revealed that by bringing greater efficiency in schools as communication channels are increased through the use of e-mail and discussion groups, ICT can enhance the repositioning of higher education. Elmo (2014)

supported this finding when he asserted that ICT brings greater efficiency in schools as it increases communication channels through the use of e-mail and discussion groups, and that the regular uses of ICT in different curriculum subjects have motivational impact on students teaching and learning.

TETFUND for Repositioning Higher Education

On the extent to which TETFUND as an innovation can promote the repositioning of higher education in Rivers State, the findings of this study revealed that by disbursing funds used in providing and maintaining physical infrastructure for teaching and learning; by disbursing funds for procuring of instructional materials and equipment in schools; by providing funds for conducting researches and publications, TETFUND can promote the repositioning of higher education; and funds disbursed by TETFUND are used for academic staff training and development and this can promote the repositioning of higher education. These findings are in line with Onyeike's (2015) assertion that the structural composition of TETFUND is such that the funds generated from education tax are utilized to improve the quality of tertiary education; promoting creativity and innovative approaches to educational learning and services, in line with international standards. TETFUND disburses funds in providing and maintaining physical infrastructure for teaching and learning, instructional materials and equipment, research and publication, academic staff training and development, and other critical and essential projects capable of improving the quality and maintenance of standards in the public tertiary educational institutions across Nigeria.

The findings of this study revealed in Table 4 that there was no significant difference in the mean responses of lecturers and students on the extent to which ICT as an innovation can enhance the repositioning of higher education in Rivers State. The researcher posits that the lack of significant difference in the lecturers and students responses was attributable to the absence of contradictions of the lecturers' and students' vision and attitude. Furthermore, the study revealed in Table 5 that there is significant difference in the mean responses of lecturers and students on the extent to which TETFUND as an innovation can promote the repositioning of higher education in Rivers State. The researcher averred that the presence of significant difference in the lecturers and students responses was attributable to the difference in status and political consciousness between lecturers and students.

Conclusion

Information and Communication Technology (ICT) and Tertiary Education Trust Fund (TETFUND) to a high extent can enhance or promote the repositioning of higher

education. Today, ICT provides higher interactive potentials for users to develop their creative ability and TETFUND disburses funds used in providing and maintaining physical infrastructure for teaching and learning in public higher institutions of learning across Nigeria.

Recommendations

Based on the findings of this study, the researcher therefore recommended the following:

The Rivers State government should take a cursory view of the forms of innovation to adopt in order to enhance the repositioning of higher education in the state.

The government should adequately fund educational innovation agencies/programmes and provide reliable statistical data in order to effectively promote the repositioning of higher education.

Educational managers and administrators should ensure that faculty is trained to have ICT competence in order to carry out effective searches on the web, which will enhance their instructional delivery and improvement in higher education standard.

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