Re-Engineering Nigerian Higher Education for Sustainable Development and Global Competitiveness

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Abstract

The study investigated re-engineering Nigerian higher education for sustainable development and global competitiveness. The study which adopted descriptive survey design was guided by two research questions and two hypotheses. The population of the study consisted of the three thousand, six hundred and twenty (3,620) lecturers in the three public universities in Rivers State. A sample of seven hundred and twenty-four (724) lecturers comprising of 408 male and 316 female lecturers. The sample size drawn through stratified random sampling technique represented 20% of the population. Data for the study was collected with a questionnaire entitled “Re-engineering Nigerian higher education for Sustainable Development and Global Competitiveness Questionnaire (RENHESDGCQ)”. The instrument which contained 18 items was properly validated and the test of reliability yielded 0.80 through Cronbach Alpha Method. Mean, percentages, standard deviation and mean set were used to answer the research questions while z-test was used to analyse the hypotheses at 0.05 level of significance. The results showed that the justifications for re-engineering Nigerian higher education for sustainable development and global competitiveness include among others the need to review higher education curriculum, address funding, infrastructural, and management issues. While the strategies that could be adopted for re-engineering higher education in Nigeria include among others reviewing of programmes and curriculum; internationalization of higher education; and addressing funding and other issues facing higher education in Nigeria. Based on the findings conclusion was drawn and the following recommendation was made among others: government should review academic programmes and curriculum of higher institutions in Nigeria in line with global demands for knowledge, skills and technology.

Keywords: Education, Higher Education, Re-engineering, Sustainable Development and Global Competitiveness.


Introduction

Education has been universally accepted as the bedrock of development in every society. There is a positive relationship between education and technological, health, agricultural, economic, social etc developments in most countries in the world. According to Akpa (2019), given the intricate relationship between education and the development of other sectors of the economy such as health, defence, industry, technology, population, environment as well as judicial and legislative systems, education deserves a pride of place in the development equation. It is a veritable means of solving virtually all the problems confronting various societies. Through education, various developmental changes such as innovations in: knowledge, technology, values, attitude and life styles that are desirable in the society are achieved. In many countries, the rate of development is on the increase due to increase in literacy rate and human capital development.
Higher education is education that someone receives after the completion of senior secondary school. Higher education plays a key role in the economic development process. It has the mandate of supplying high level manpower that will contribute to economic growth and sustainable development; conduct research that will proffer solutions to various problems facing the society; render community service; produce and disseminate knowledge. It is expected that, higher education will equip its graduates with the required knowledge and skills for self reliance. To achieve all these, our educational system especially higher education needs to be functional and be driven by well conceived and articulated plans, policy and management, that are visionary and consistent with the needs of the society.

The overwhelming challenges confronting higher education system in Nigeria has resulted to inadequate inputs, processes and outputs. This has led to maladjustments, imbalance and various other problems facing the system. We have had several cases of complains of inadequate infrastructures, inadequate manpower and poor conditions of service of workers in higher institutions. We have had several cases of industrial actions by various unions in higher institutions. The climax being the eight months strike by Academic Staff Union of Universities in 2022. We have also had several complains from different quarters about poor standard of higher education in Nigeria and the lack of employable skills by higher institution graduates. Employers of labour have complained that they have to spend extra money in retraining graduates from Nigerian tertiary institutions in order to enable them become employable. This has resulted to a display of apathy by some people and lack of confidence in higher education system due to the pervasive instability characterizing the system. This has made many people to prefer private universities and universities abroad to public universities in Nigeria. The system of education in public tertiary institutions in Nigeria has encouraged craziness for paper qualification and pursuit of white collar jobs without acquiring appropriate knowledge and skills.

Many scholars have doubted the relevance and appropriateness of academic programs in higher institutions in Nigeria due to the inability of these institutions to provide life long skills and requisite knowledge that will aid their graduates to become self reliant and independent. Hence, many parents today in Nigeria send their children to learn one professional skill or the other after their graduation from tertiary institutions. This imposes a double cost of training their children in terms of finance and time. This situation has made a lot of people to loose hope and confidence on our higher education systems because to them, it does not provide functional education which can guarantee sustainable development and global competitiveness.

Sustainable development appears not to have any clear cut definition. This is based on the fact that different scholars have explained the concept as it appeals to them. Sustainable development according to Worgu and Amadi (2020) has to do with the best possible ways of improving the standard of living of the citizens in a society, without compromising the survival of the future generation. It is the capability of any nation to achieve all round progress or growth in various areas of life such as: economic, political, religious, cultural, environmental, educational etc, remain and even improve activities at that level for many years. Sustainable development is that developmental activities that meet the needs of the present generation without compromising the ability of future generation to meet their own needs. Sustainable development can not be relevant and attainable if it does not have synergy with education. Higher education is a very important means of achieving sustainable development goals because it targets at helping people to develop the attitudes, skills, knowledge and perspectives to make informed and seasoned decisions in the socio-economic activities and act upon them for the benefit of themselves and others, now and in the future (Ohia, 2018).

Global competitiveness refers to the ability of a nation to supply high quality goods and services at reasonable costs, resulting in satisfactory returns. It is the ability of a country to achieve sustained high rates of growth in gross domestic products. Looking at our higher education system, it is appalling to note that millions of graduates from our higher institutions are roaming in the streets looking for job. These able-bodied men and women are supposed to be engaged on productive ventures that will enhance the supply of quality goods and services, as well as sustainable growth and development but the situation is far from this. This situation has prevailed in Nigeria for a long time and this indicates that our higher
education system is not functioning well and does not meet the expectations of parents and the entire society hence the need for re-engineering it.

Re-engineering of higher education in this paper could be seen as restructuring or reforming of higher education to meet individual, national and global needs.

Re-engineering of higher education will address the gaps or challenges in content, provisions and management of higher education, as well as many other issues that have hindered the functionality of the system. Re-engineering of the present state of higher education system will encourage the attainment of sustainable development and global competitiveness of our economy. It is against this backdrop that the researcher was motivated to carry out this study.

Statement of the Problem

The rate of unemployment among graduates from various higher institutions in Nigeria increases every year because most of these people do not possess adequate employable skills. They lack the skills and resources that could enable them to become self employed, and many of them are interested in white-collar jobs which have become very limited and highly competitive. There is no doubt that our higher education system, inspite of its admirable structure has not met the aspirations of parents and the youths who go through it.

The present situation of things in our higher institutions result to high level of wastage of human, material and financial resources. Parents and the entire society are not getting adequate returns to their investments on higher education, and it appears that our higher education system is not effectively enhancing sustainable development and global competitiveness. Hence, the problem of this study is to investigate re-engineering of higher education in Nigeria for sustainable development and global competitiveness.

Aim and Objectives of the Study

This study aimed at investigating re-engineering of higher education in Nigeria for sustainable development and global competitiveness. Specifically, the study sought to:

1. determine some of the justifications for re-engineering of higher education in Nigeria for sustainable development and global competitiveness.
2. ascertain some of the strategies that can be adopted for re-engineering of higher education in Nigeria for sustainable development and global competitiveness.

Research Questions

The following research questions provided direction for this study:

1. What are some of the justifications for re-engineering higher education in Nigeria for sustainable development and global competitiveness.
2. What are some of the strategies that can be adopted for re-engineering higher education in Nigeria for sustainable development and global competitiveness?

Research Hypotheses

The following hypotheses were tested at 0.05 level of significance:

1. There is no significant difference between the mean scores of male and female lecturers on the justifications for re-engineering of higher education in Nigeria for sustainable development and global competitiveness.
2. There is no significant difference between the mean scores of male and female lecturers on the strategies that can be adopted for re-engineering higher education in Nigeria for sustainable development and global competitiveness.
Literature Review

Theoretical Literature Review

This study is anchored on the classical social process theory propounded by Getzel and Guba in 1967. The theory states that the different subsystems of a social system work independently but also together in order to achieve organizational set goals. It obtains its inputs from outside, transforms them, refines them into outputs and it finally empties them into the larger society. According to Kpee (2015) the outputs basically are refined and better than they were at the input stage. They consist of human beings who have been moulded and changed to meet up the needs of the society from where they were drawn and to where they are returned. Outputs may go beyond well refined human beings to include the employee satisfaction, better production and improved efficiency at the work place and good labour turnover.

The classical social process theory explains and discusses all behaviours of the input components of the organization as to determine how these interactions help in the transformation process and the modification of the output to meet up with the current demand of the society. In all systems, the input components must have their own desires, needs, expectations and demands while the organization must also have its expectations and goals that the inputs are supposed to work toward to achieve. Often times, a clash may be eminent among these two strategic dimensions in the organization. Once this happens, it is necessary to discover the missing link and restructure the subsystem in order to meet the demands of the society.

Higher education system as a subsystem in a social system absorbs her students from the society, they are expected to mould, refine and transform these human beings according to the demands of the society to enable them contribute to sustainable development and global competitiveness. Anything that affects higher education system especially in the delivery of their mandate will definitely have adverse effect on sustainable development and global competitiveness of the society. This is evident when higher education fails to impact appropriate skills and knowledge to their students to enable them become independent and gainfully employed after their graduation. Thus creating room for unemployment, high rate of dependency and under development. This situation calls for re-engineering of higher education system, and repositioning them to achieve their mandates and enhance the attainment of sustainable development and global competitiveness.

Conceptual Literature Review

Higher education re-engineering is a dramatic change initiative or restructuring that is aimed at improving quality of education in higher institutions. According to Akpa (2019) educational system re-engineering will deal with such issues of contradiction, maladjustment and paradox that inhibit the functionality of the system. Re-engineering of higher education is necessary in order to overcome the challenges inhibiting effectiveness and efficiency of higher education system and its responsiveness to the needs of individuals and the society. It pays attention to the functionality of higher education. Functional higher education according to Asaju and Adagba (2014) is higher education that equips its recipients with the knowledge and skills needed for the performance of productive tasks. It is the type of higher education that helps individuals and societies to meet their development needs. This implies that we need quality higher education. The term quality describes the standard of something or services provided compared to what is obtainable in other places. According to Yusuf and Alabi (2012), quality is related to a body of knowledge, about products, services and customer/client satisfaction. Arcaro (2005) sees quality as creating an environment in which educators, parents, government officials and community representatives work together to provide students with the resources they need to meet the current and future academic and social needs.

The condition of society determines educational roles and functions. Society and education compliment each other. The need of society is ever-evolving and as it changes, the modes of education and educative processes, as well as content of instruction has to change too. Re-engineering higher education requires educational managers to understand the dynamics of society and its expected evolution. It requires a shift
from the problems generated by the present system which according to Ogonor and Igenegbai (2019) include the following:

1. **Individualistically Competitive:** Our educational system is structured in a manner that it seems the winner takes it all. Reward or grading system in practice in our school places emphasis on individual achievement. This places self over the collective goal, places emphasis on certificates and status. Team spirit or work which advances societal development and global competitiveness is given little or no attention.

2. **Teacher-Centered:** A major dynamic of today’s higher education in Nigeria is “Teachers’ talk and chalk’ the students are often expected to listen and take down notes and in their evaluation, they earn high or low scores depending on their ability to regurgitate what they were taught by their teacher. This situation makes students to face and receive education that does not fit or equip them to succeed in the emerging society in which they live. Critical thinking is hardly encouraged as everybody wants quick answers to life challenges.

3. **Curricular-Centered:** The content of curriculum in schools is predefined with little or no room for any modification by the teachers and students. The process of modification of the curriculum is often very slow and most often occurring very late. This results in a situation where teaching and learning are obsolete in comparison to the level of human development. According to Akpa (2019) the curriculum is not enduring or having sustainable development relevance. It has not taken due cognizance of the enormous natural resources of the environment. It shows yawning gaps and implementation difficulties, especially lack of creativity and innovation which accounts for weaker teacher-pupil control, thus encouraging lateness, absenteeism and truancy in higher institutions.

4. **Poor development of Technical and Scientific Skills:** Universities and Polytechnics are established with varied intentions. It is expected that universities develop high-level manpower, while polytechnics provide training and skills for the production of technicians, technologists and other skilled personnel that will be enterprising and self-reliant. According to FRN (2014), 60% of admissions in conventional universities should be allocated to sciences and science-oriented courses, and about 80% in universities of technology. Practically, in both categories of institutions, the reverse is the case. Universities seem to admit more students into the non science courses.

Other reasons that may necessitate the re-engineering of higher education according to Akpa (2019); Ojule (2020); and Jones (2020) include the following:

1. Unemployment in the face of shortage of manpower in key sector as well as graduates’ skill gaps and employability, given the mismatch between theories learnt at school and the practical skills needed at work places.

2. Weak leadership and poor governance in higher institutions. There is weak managerial capacity, poor inspectorial and supervisory services, poor visionary and transformational leadership, and inadequate entrepreneurial capacity.

3. Poor resource allocation, management and utilization. There is gross ineffectiveness and inefficiency in the management and utilization of resources in higher institutions which according to Akpa (2019) fails to guarantee optimal relationship between inputs and outputs. Higher education is equally under funded as budgetary provision for education is less than minimum of 26% recommended by UNESCO for developing countries.

4. Lecturers are poorly rated, ill-motivated, with irregular salaries, allowances and fringe benefits. This encourages brain drain and inadequate teaching force.

5. Labour restiveness is now a common experience in higher institutions in Nigeria. This results to huge loss of man hours, inadequate curricula coverage, inadequate and ineffective teaching and learning as well as poor skills development and half baked graduates.
6. Basic infrastructures to support effective teaching and learning are inadequate and obsolete. Student-friendly learning environment are poorly provided. There are poorly equipped libraries, laboratories, workshops and studios for proper skills development.

7. Poor visible deployment of ICT, even in this technological age. Higher education in this modern era requires optimal deployment of technology for functionality and efficiency.

8. Weak international collaborations/partnerships: International Collaboration/partnership of higher institutions in Nigeria with those in other countries could shape and reshape the academic agenda and organizational structure of higher educational institutions that form such collaborations (Agih and Major, 2013). This collaboration is relevant in capacity building, migration of skilled workers in a global economy that requires generally accepted standards; the economic desire of institutions to generate extra revenue from exchanges; and the desire to build a more dedicated workforce capable of favourable competition in the global market (UNESCO, 2009). According to Agih and major (2013) the absence of a workable national strategy for internationalization of higher education in Nigeria has given room for weak and unguided partnerships springing up from individual institutions which could be disadvantageous to home institutions.

9. Higher institutions in Nigeria is bedeviled by anti-social behaviours such as corruption, cultism and banditry. So many students in higher institutions in Nigeria engage in internet fraud and other criminal activities. Some of them sexually harass and threaten their fellow students and their female lecturers.

Re-engineering of higher education in Nigeria will address most of these issues and their ugly effects on the functionality of higher education in Nigeria. The following strategies have been suggested by some scholars.

The curriculum and programs of higher institutions in Nigeria needs to be redesigned to reflect individual, national and global demands. They should be responsive to societal needs. The world today is driven by knowledge and technology. Therefore emphasis should be placed on science, technology, engineering and mathematics (STEM), with relevant practical skills impacted into the students. According to Obanya (2010) this will require a paradigm shift in our teaching methods and strategies, providing a heavier dose of technology rather than theory.

Re-engineering of higher education in Nigeria lies so much on improved funding and curbing of corrupt practices by management of public tertiary institutions in Nigeria. According to Nwakudu, Boreh and Ogbara (2014) dwindling funds available to education sector especially higher education has generated a lot of negative issues in the system. Higher institutions can no longer employ the right quality and quantity of academics for effective administration of higher education. There is poor motivation of academic and non-academic staff, caused by poor salaries and conditions of services. These issues have major implications on quality of teaching; quality of research output; examination malpractice; knowledge production; capital flight; work load; international rating of our universities; and efficiency and effectiveness. Without good salaries and conditions of service, it will be difficult to control corrupt practices among staff of public tertiary institutions in Nigeria.

Deployment of Information and Communication Technology (ICT) in every aspect of our higher education services. ICT according to Hill and Solemn (2005) as well as Lucey (2010) provided valuable support in personnel human resource management; students and online administration, finances, assets, maintenance, documentation, effective communication and office automation. This increases staff performance efficiency and productivity. The deployment of ICT in many public tertiary institutions in Nigeria is very low. This is to the extent that in some cases students results cannot be accessed online.

The provision of adequate infrastructure in terms of power supply, water supply, good road network, good lecture halls and lecturers’ offices, good library facilities, laboratories, ICT facilities, workshops and studios in all the public tertiary institutions in Nigeria must be given adequate priority. A visit to many tertiary institutions in Nigeria reveals gross inadequacy of infrastructural facilities. Addressing these challenges will create room for a more functional and innovative higher education in Nigeria.
Another very important measure is the institution of quality assurance measures in higher institutions that are honest and transparent in the discharge of their duties. Quality assurance according to Hayward (2006) is a planned and systematic process of an institution or programme to determine whether or not acceptable standards of education, scholarship and infrastructure are being met, maintained and enhanced. Okebukola (2004) sees quality assurance in Nigerian Universities as a continuous process of improvement in the quality of teaching and learning activities achieved through employing mechanisms that are internal and external to universities. Quality assurance is part of the life wire of every higher institution. Unfortunately, this unit of our tertiary institutions are not effective in the performance of their tasks. Hence, we experience all forms of examination malpractices, students who didn’t attend lectures being allowed to write exams, and some lecturers handling their courses with care free attitudes. All these issues affect the quality of education in higher institutions in Nigeria.

Quality assurance will monitor the input and output processes to ensure that each stage meets acceptable standards. It can also be used to check the indecent behaviours of some lecturers and students. In the process of re-engineering higher education for sustainable development in Nigeria, quality assurance (internal and external) must be enhanced to ensure that every unit of our higher educational institutions is functional and effective.

Internationalization of higher education could also be part of the re-engineering strategies for sustainable development and global competitiveness of our higher education. This will help in the improvement of the curricula contents of our higher education programmes. According to Knight (2003), internationalization of higher education has two dimensions; one is internationalizing at home which refers to the international and intercultural dimension of curricula, the teaching/learning process, research, extra-curricular activities, and other host of activities that help students develop international understanding and intercultural skills without ever leaving their campus. The second according to Kritz (2006) is internationalization abroad which has to do with cross-border education and often referred to as transnational education. This involves teachers, students, scholars, programmes, courses, curriculum and projects moving between countries and cultures. This has a lot of advantages in terms of skills development, technological advancement and revenue generation.

Methodology

This study adopted descriptive survey research design. The population of the study consisted of all the three thousand six hundred and twenty (3,620) lecturers in the three public universities in Rivers State. Source: Academic Planning Unit of the Universities (2022 Report). A sample of seven hundred and twenty-four (724) lecturers comprising of 408 male and 316 female lecturers representing 20% of the population was selected. This sample was drawn through stratified random sampling technique. The instrument for data collection was a self structured questionnaire entitled: “Re-engineering Higher Education in Nigeria for Sustainable Development and Global Competitiveness Questionnaire (ReHENSDGCQ)”. The instrument which had 18 items was structured with Four Point Likert rating scale of Strongly Agree (4 points), Agree (3 points), Disagree (2 points) and Strongly Disagree (1 point). The instrument was well validated and reliability index of 0.80 was obtained through Cronbach Alpha method. Mean, percentages, standard deviation and mean set were used to analyze the research questions while z-test was used to test the hypotheses at 0.05 level of significance.

Results

Research Question One

What are some of the justifications for re-engineering higher education in Nigeria for sustainable development and global competitiveness?

Table 1 (Appendix) shows that all the items had weighted mean scores that were greater than the criterion mean of 2.50 except item number 9. Items 1 to 8 were accepted as the justifications for re-engineering
higher education in Nigeria for sustainable development and global competitiveness. The aggregate mean scores of 2.93 and 2.97 for the male and female lecturers respectively which were greater than the criterion mean indicated that the respondents shared the same opinion on the reasons for re-engineering higher education in Nigeria.

Therefore, the justifications for re-engineering higher education in Nigeria for sustainable development and global competitiveness include the following: the need to equip students with appropriate knowledge and skills required for self-reliance and performance of productive tasks; the need to review higher education curriculum; the need to address funding issues; the need to address weak leadership and poor governance in higher institutions; the need to address infrastructural deficits and poor ICT deployment; the need to review salaries and conditions of service of the staff of higher institutions in Nigeria; the need to strengthen international collaborations and partnerships; and the need to address the escalating anti-social behaviours in tertiary institutions in Nigeria.

Research Question Two

What are some of the strategies that can be adopted for re-engineering of higher education in Nigeria for sustainable development and global competitiveness.

Table 2 (Appendix) indicates that all the items had weighted mean scores that were greater than the criterion mean of 2.50 except item number 9. Item 1 to 8 were accepted as the strategies that can be adopted for re-engineering higher education in Nigeria for sustainable development and global competitiveness.

The aggregate mean scores of 2.96 and 3.00 for the male and female lecturers respectively which were greater than the criterion mean revealed that the respondents unanimously agreed on the strategies that can be adopted for re-engineering of higher education in Nigeria for sustainable development and global competitiveness.

Therefore, the strategies that can be adopted for re-engineering of higher education in Nigeria for sustainable development and global competitiveness include the following: review of programmes and curriculum of tertiary institutions in Nigeria; improving funding and curbing corrupt practices among management of public tertiary institutions; adequate motivation of staff/improved conditions of service; addressing infrastructural deficits; setting up strong internal and external quality assurance units; employment of adequate number of qualified and experienced lecturers; internationalization of public tertiary institutions in Nigeria; and massive deployment of ICT in teaching/learning as well as in administration.

Test of Hypotheses

\( H_0: \) There is no significant difference between the mean scores of male and female lecturers on the justifications for re-engineering of higher education in Nigeria for sustainable development and global competitiveness.

Table 3 shows a summary of the mean, standard deviation and z-test of difference between the male and female lecturers on the justifications for re-engineering of higher education in Nigeria for sustainable development and global competitiveness. The z-test calculated which was used in testing the hypothesis
stood at 0.771 while the critical z-value was ± 1.960 at 722 degrees of freedom using 0.05 level of significance. The calculated z-value was by far less than the z-critical value. Therefore, the null hypothesis of no significant difference between the mean scores of male and female lecturers on the justifications for re-engineering of higher education in Nigeria for sustainable development and global competitiveness was retained.

\[ H_0: \] There is no significant difference between the mean scores of male and female lecturers on the strategies that can be adopted for re-engineering higher education in Nigeria for sustainable development and global competitiveness.

Table 4. z-Test of Difference between the Mean Scores of Male and Female Lecturers on the Strategies that Can be Adopted for Re-Engineering Higher Education in Nigeria for Sustainable Development and Global Competitiveness

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>( \bar{X} )</th>
<th>STD</th>
<th>Df</th>
<th>z-cal.</th>
<th>z-crit.</th>
<th>Level of sign.</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male lecturers</td>
<td>408</td>
<td>2.96</td>
<td>.65</td>
<td>722</td>
<td>0.836</td>
<td>±1.960</td>
<td>0.05</td>
<td>Ho(_2) not significant</td>
</tr>
<tr>
<td>Female Lecturers</td>
<td>316</td>
<td>3.00</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 reveals a summary of the mean, standard deviation and z-test of difference between the male and female lecturers on the strategies that can be adopted for re-engineering higher education in Nigeria for sustainable development and global competitiveness. The z-test calculated which was by far less than the z-critical and was used in testing the hypothesis stood at 0.836 while z-critical was ±1.960 at 722 degrees of freedom using 0.05 level of significance. Since the z-calculated value is less than the z-critical value, the null hypothesis was retained. This implies that, there was no significant difference between the mean scores of male and female lecturers on the strategies that can be adopted for re-engineering of higher education in Nigeria for sustainable development and global competitiveness.

**Discussion of Findings**

The study shows that the reasons for re-engineering of higher education for sustainable development and global competitiveness include the following: the need to equip students with appropriate knowledge and skills required for self reliance and productive tasks performance. This is necessary because many graduates from higher education in Nigeria require re-training due to various skills gap seen in them. Many of them are not employable and do not possess skills that can help them to become self reliant. Hence, they are not productive, do not contribute to sustainable development and global competitiveness. This finding is supported by Ojule (2020) as well as Jones (2020). This problem is prevalent because the curriculum of tertiary institutions in Nigeria does not reflect the realities of our time and the needs of the society. It should be reviewed in line with the skills, knowledge and technology that drive the world or global economy. This is in line with Akpa (2019) who states that the curriculum is not having sustainable development relevance. Hence, it sets the country back in terms of knowledge economy and global competitiveness.

Other issues calling for the re-engineering of higher education in Nigeria include funding issues, weak leadership and poor governance in higher institutions. Higher institutions in Nigeria are grossly under funded. The budgetary allocation to the education sector is far below the UNESCO 26% minimum annual budgetary allocation recommendation for developing countries. Budgetary allocation to the education sector has ranged from 5.5% to 11% since 1999. This is further worsened by the discrepancy between what is in the budget and what is eventually released by the government which is often much lower than the actual budget. The weak leadership, poor governance and corrupt practices in tertiary institutions provide further damage to the whole situation. This results to poor infrastructural development, weak curriculum implementation, inadequate facilities, inadequate lecturers, poor
teaching/ learning environment, poor knowledge and skills development, poor ICT deployment and so on.

The issue of poor motivation of staff of tertiary institutions in Nigeria should be urgently addressed. This is necessary because re-engineering of higher education without reviewing the salaries and conditions of service of the staff will be efforts in total futility. They need to be adequately remunerated with improved conditions of service. This will curb frequent strakes often embarked upon by staff unions in tertiary institutions in Nigeria, brain drain and capital flight due to students preferring to school abroad to Nigeria.

The need to strengthen international collaborations and partnership is very necessary because it could help to shape and reshape our academic programmes, mindsets and funding strategies. Supporting this finding Agih and Major (2013) stated that such collaboration would enhance capacity building, migration of skilled workers, generation of extra revenue, and building of dedicated workforce capable of favourable competition in the global market. The results of the study equally shows that we need to re-engineer higher education in Nigeria because of the rising cases of anti-social behaviours. There are rising cases of cultism, sexual harassment, internet fraud, ritual killing, insecurity, examination malpractice and so on. Most of the students do not believe in hard work. They want the cheapest means of obtaining certificates without acquiring necessary skills and knowledge. Some of them are members of one secret cult or the other and use such positions to intimidate their fellow students. Some are internet fraudsters who cruise big cars on campus and attempt to intimidate and influence lecturers with their ill gotten money. The activities of these students give bad image of higher institutions.

All these factors discussed above hinder higher education institutions in Nigeria to deliver on their mandates. These issues must be addressed urgently to enhance the quality of education and service delivery in higher institutions in Nigeria to enable them impact positively on sustainable development and global competitiveness.

The study heightened some of the strategies that could be adopted in re-engineering higher education in Nigeria. These strategies include reviewing of higher education programmes and curriculum. Programmes and curriculum should reflect the knowledge and skills required in the job market and establishment of business enterprises for self reliance. Entrepreneurship education should be integrated into every programme in tertiary institutions in Nigeria. This will enable them to understand the business opportunities available to them upon their graduation from the school. This finding agrees with Obanya (2010) who states that we need a paradigm shift in our programmes and curriculum, providing a heavier dose of technology and skills rather than theory.

The study equally revealed the need to improve funding of higher education. Funding has become a serious challenge that has affected infrastructural development, provision of amenities/facilities, employment of workers and the general conditions of service of staff of tertiary institutions. The funding challenge has been compounded by high level of corruption and mis-management of resources in public tertiary institutions in Nigeria. Government should increase their budgetary allocation to higher education according to Nwakudu, Boreh and Ogbara (2014). They should also tackle corruption and ensure efficient and effective management of resources by managers of higher institutions in the country. Improving funding of higher education will enhance infrastructural development, provision of facilities, establishment of new programmes, improvement of conditions of service of staff, staff motivation, and adequate employment of staff.

The study also revealed that re-engineering of higher education in Nigeria for sustainable development and global competitiveness will require setting up quality control units. Both internal and external quality assurance units that are honest and transparent are required to monitor the input/output processes to ensure that each stage meets acceptable standards. This observation agrees with Okebukola (2004) and Haywood (2006) who state that quality assurance/control units will ensure that standards are met, maintained and enhanced through employing mechanisms that are internal and external to the institutions.
The study revealed the need to internationalize tertiary institutions in Nigeria in terms of programme contents, facilities, infrastructure, quality of staff and students, intercultural curricula, teaching/learning processes, research and other activities that develop students understanding and intercultural skills without travelling abroad. This prepares the students for global competitiveness. The higher institutions in Nigeria can also set up cross-border or transnational education centres. This findings according to Knight (2003) and Kritz (2006) has a lot of advantages in terms of teachers and students moving between cultures and countries, skills development, technological advancement and revenue generation. Internationalization of higher education will require huge deployment of ICT in tertiary institutions in Nigeria. ICT skills are very important in todays activities both for work, business and personal lifes. It is of paramount significance in modern day science and technology, efficiency and effectiveness in various service deliveries. Full deployment and inculcation of ICT skills in tertiary institutions in Nigeria will enhance quality service delivery and the employability skills of graduates of tertiary institutions in Nigeria.

Conclusion

Based on the findings of the study and discussions carried out. It may be concluded that higher education as it is presently carried out in Nigeria may not guarantee quality and functional education for sustainable development and global competitiveness. Quality and functional higher education for sustainable development and global competitiveness are attainable only to the extent that higher education is offered under well articulated and implemented: curriculum, quality control measures, adequate funding practices, committed stakeholders participation, efficient management of resources, adequate teaching/ learning environment and committed well motivated staff. The challenges posed by the inefficiency of these factors have made re-engineering of higher education necessary to enhance sustainable development and global competitiveness.

Recommendations

1. Government through the various higher education regulatory agencies should review academic programmes and the curriculum of higher institutions in Nigeria in line with global demands for knowledge, skills and technology.

2. Government should increase the funding of higher education in Nigeria in order to address infrastructural, facilities, manpower and staff motivation demands.

3. There should be regular and effective supervision and monitoring of the activities of personnel and programmes for quality control and effective service delivery.

References


Table 1. Mean Scores, Percentages, Standard Deviation and Mean Set of the Responses of Male and Female Lecturers on the Justifications for Re-Engineering Higher Education in Nigeria for Sustainable Development and Global Competitiveness

<table>
<thead>
<tr>
<th>S/ N</th>
<th>Justifications for re-engineering higher education in Nigeria for sustainable development and global competitiveness.</th>
<th>Male Lecturers N = 408</th>
<th>Female lecturers N= 316</th>
<th>Mean Set</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SA A D SD X̄₁ STD</td>
<td>SA A D SD X̄₂ STD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>To equip students with appropriate knowledge and skills required for self reliance and performance of productive tasks.</td>
<td>148 (36%) 164 (40%) 61 (15%) 35 (9%) 3.04 .67</td>
<td>107 (34%) 145 (46%) 34 (11%) 30 (9%) 3.04 .68</td>
<td>3.04</td>
<td>Disagree</td>
</tr>
<tr>
<td>2.</td>
<td>To review higher education curriculum in line with individual, national and global needs.</td>
<td>158 (39%) 166 (40%) 48 (12%) 36 (9%) 3.09 .65</td>
<td>118 (37%) 140 (44%) 32 (10%) 26 (8%) 3.11 .65</td>
<td>3.10</td>
<td>Agree</td>
</tr>
<tr>
<td>3.</td>
<td>To address funding issues facing higher education in Nigeria.</td>
<td>152 (37%) 162 (40%) 64 (16%) 30 (7%) 3.07 .68</td>
<td>120 (38%) 142 (45%) 34 (11%) 20 (6%) 3.15 .62</td>
<td>3.04</td>
<td>Agree</td>
</tr>
<tr>
<td>4.</td>
<td>The need to address the weak leadership and poor governance observed in higher institutions in Nigeria.</td>
<td>140 (34%) 138 (39%) 54 (13%) 56 (14%) 2.94 .75</td>
<td>116 (37%) 134 (42%) 30 (10%) 36 (11%) 3.04 .68</td>
<td>2.99</td>
<td>Agree</td>
</tr>
<tr>
<td>5.</td>
<td>The need to address infrastructural deficit and poor ICT deployment in higher institutions in Nigeria.</td>
<td>146 (36%) 154 (38%) 62 (15%) 46 (11%) 2.98 .72</td>
<td>120 (38%) 130 (41%) 33 (10%) 33 (11%) 3.07 .66</td>
<td>3.03</td>
<td>Agree</td>
</tr>
<tr>
<td>6.</td>
<td>The urgent need to review salaries and conditions of service of the staff of higher institutions in Nigeria.</td>
<td>146 (36%) 160 (39%) 54 (13%) 48 (12%) 2.99 .71</td>
<td>116 (37%) 146 (46%) 38 (12%) 16 (5%) 3.14 .63</td>
<td>3.07</td>
<td>Agree</td>
</tr>
<tr>
<td>7.</td>
<td>The need to strengthen international collaborations and partnerships between higher institutions in Nigeria and those in other countries.</td>
<td>140 (34%) 152 (37%) 64 (16%) 52 (13%) 2.93 .76</td>
<td>110 (35%) 128 (40%) 43 (14%) 35 (11%) 2.99 .71</td>
<td>2.96</td>
<td>Agree</td>
</tr>
<tr>
<td>8.</td>
<td>The need to address the escalating antisocial behaviours experienced in tertiary institutions in Nigeria.</td>
<td>144 (35%) 156 (38%) 60 (15%) 48 (12%) 2.97 .73</td>
<td>112 (35%) 132 (42%) 42 (13%) 30 (10%) 3.03 .69</td>
<td>3.00</td>
<td>Agree</td>
</tr>
<tr>
<td>9.</td>
<td>The need to reduce enrolment in tertiary institutions in Nigeria.</td>
<td>61 (15%) 98 (24%) 184 (45%) 65 (16%) 2.38 .80</td>
<td>32 (10%) 54 (17%) 169 (54%) 61 (19%) 2.18 .73</td>
<td>2.28</td>
<td>Disagree</td>
</tr>
</tbody>
</table>

Aggregate mean and standard deviation

<table>
<thead>
<tr>
<th></th>
<th>Male Lecturers</th>
<th>Female Lecturers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.93 .72</td>
<td>2.97 .67</td>
</tr>
</tbody>
</table>
Table 2. Mean Scores, Percentages, Standard Deviation and Mean Set of the Responses of Male and Female Lecturers on the Strategies that Can Be Adopted for Re-Engineering of Higher Education in Nigeria for Sustainable Development and Global Competitiveness

| S/ N | Strategies that can be adopted for re-engineering higher education in Nigeria for sustainable development and global comp. | Male Lecturers  
N = 408 | Female lecturers  
N= 316 | Mean Set | Decision |
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Review of the programmes and curriculum of tertiary institutions in Nigeria.</td>
<td>SA</td>
<td>158 (39%)</td>
<td>166 (40%)</td>
<td>56 (14%)</td>
</tr>
<tr>
<td>2.</td>
<td>Improving funding and curbing corrupt practices by management of public tertiary institutions.</td>
<td>SA</td>
<td>154 (38%)</td>
<td>160 (39%)</td>
<td>52 (13%)</td>
</tr>
<tr>
<td>3.</td>
<td>Adequate motivation of staff and improvement of conditions of service.</td>
<td>SA</td>
<td>156 (38%)</td>
<td>167 (41%)</td>
<td>54 (13%)</td>
</tr>
<tr>
<td>4.</td>
<td>Addressing infrastructural deficits in public tertiary institutions in Nigeria.</td>
<td>SA</td>
<td>160 (39%)</td>
<td>164 (40%)</td>
<td>56 (14%)</td>
</tr>
<tr>
<td>5.</td>
<td>Institution of strong internal and external quality assurance units.</td>
<td>SA</td>
<td>162 (40%)</td>
<td>166 (41%)</td>
<td>58 (14%)</td>
</tr>
<tr>
<td>6.</td>
<td>Employment of adequate number of qualified and experienced lecturers.</td>
<td>SA</td>
<td>148 (36%)</td>
<td>170 (42%)</td>
<td>60 (15%)</td>
</tr>
<tr>
<td>7.</td>
<td>Internationalization of public tertiary institutions in Nigeria.</td>
<td>SA</td>
<td>150 (37%)</td>
<td>160 (39%)</td>
<td>62 (15%)</td>
</tr>
<tr>
<td>8.</td>
<td>Massive deployment of ICT in teaching / learning as well as in administration.</td>
<td>SA</td>
<td>146 (36%)</td>
<td>164 (40%)</td>
<td>64 (16%)</td>
</tr>
<tr>
<td>9.</td>
<td>Dissolution of various workers unions in public tertiary institutions in Nigeria.</td>
<td>SA</td>
<td>52 (13%)</td>
<td>76 (19%)</td>
<td>108 (26%)</td>
</tr>
<tr>
<td>10.</td>
<td>Aggregate mean and standard deviation</td>
<td>SA</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>