This paper focused on blended education and student’s academic performance in universities in Rivers State. A total of 850 respondents (50 lecturers and 800 students) were randomly drawn from 3 universities in Rivers State. A questionnaire tagged ‘Assessment of Blended Education on Student’s Performance (ABESP)’ was used for the collection of data. It consisted of 29 items and contained 4 sections. The reliability of the instrument was determined using the test retest method, with Pearson Product Moment Correlation Coefficient reliability of 0.75. The data gathered were used to answer three research question using frequency, percentages, mean and standard deviation. The study discovered that majority of students and lecturers indicated that the most popular blended education strategy used is face-to-face instruction. The study also revealed that the majority of participants are of the opinion that computers remain the most common blended education facility available in their institution for teaching and learning. The performance of students as a result of the use of blended education has improved significantly and was highlighted by both students and lecturers, however they are not oblivious of the fact that blended education in some cases is a form of distraction. Based on the findings the researcher recommended the establishment of flexible educational policies that can create a link between traditional method of education and blended education. Also suggested is the provision of stable electricity, funding from the government and the inclusion of blended education in the curriculum of university education in Rivers State should be considered.

Key words: Blended Education, University, Performance.

Introduction

Over the last decade, the internet globally has invaded the education sector in such a way that both educationist and students have innovatively restructured their methods of teaching and learning to meet up with the sudden surge in communication technology. The use of computers, smart phones, social media, Information Communication Technology (ICT) facilities are gradually becoming an inevitable aspects of education systems around the world. In Nigeria, owners of public and private educational institutions are challenged more than ever to update and upgrade their school amenities to meet up with these advancements in technology. The demand for prospective students in these schools and the need to ensure higher standards of learning experience has necessitated the renovation being witnessed in school infrastructure in the country.

Universities are at the forefront in this advancement, and use of technology based education. Nigerian universities utilize ICT facilities at various aspects on a daily basis for teaching, learning and administrative work. The technological transformation of tertiary institutions in Nigeria has become rampant, because in the present electronic world improved educational performance has become a necessity. As such Nigerian universities are compelled to provide technology based learning for a larger and more diverse cross-section of the population in their schools. This has been done in order to cater for the hi-tech needs of the society, facilitate lifelong learning and to include technology-based practices in the curriculum. Blended education is considered a vehicle through which tertiary institutions in Nigeria can accomplish this task over the vast geographical expanse of the country.

Currently, it has become a common trend to see people (teachers and students) conduct research, learn, communicate/exchange ideas and conduct experiments together across geographical boundaries using the internet without meeting each other face-to-face.
Education has reached a point where online learners in the same or different locations can be connected to a community of learners anytime and anywhere, without being restricted by time, place or geographical boundaries. These innovative methods of learning are having a volatile impact on traditional campus-based learning in higher institutions around the world (Young, 2002).

Blended education has progressively changed the manner in which universities in Nigeria communicate, teach and learn the traditional paradigms of classroom learning. Management and utilization of information have all changed tremendously over the last decade. It is therefore vital to determine the effect of blended education on student’s performance in universities in Nigeria as it relates to its structure, opportunities and effect on student’s outcome. This empirical paper discussed this emerging trend in university education in Nigeria, (blended education) and analysed its impact on student’s academic performance in universities in Rivers State.

Theoretical Framework

The theoretical framework for this study is the Active Learning Theory, propounded by Bonwell and Eison in 1991. Active learning is a learning theory model of instruction that focuses the responsibility of learning on learners (Bonwell and Eison, 1991). It states that in order to learn, students must do more than just listen to teachers or lecturers, they must also read, write, use learning materials, discuss, or be involved in problem solving. This model of learning theory identifies three learning domains namely; Knowledge, Skills and Attitudes (KSA), and that this taxonomy of learning behaviours. It stresses that students should participate in higher-order thinking tasks such as analysis, synthesis, and evaluation. Active learning by students involves two key aspects, doing things and thinking about the things they are doing (Bonwell and Eison, 1991).

Blended learning basically ensures that there is a connection between teaching and the use of ICTs for free and open dialogue between students and lecturers. Similarly, it ensures that there is debate on relevant educational topics in lecture rooms across various universities, also inter and intra campus negotiations which are all key aspects of contemporary university education which are all geared towards enhancing learning (Meyer, 2003). The connection between blended education and Active Learning Theory is that, the theory stresses on learners working together, with the use of materials like (computers, videos, ICTs), role-playing, debate, case study, cooperative learning, to improve on their learning and thus academic performance. The argument is that when active learning exercises are carried out or used in blended education manner students seem to learn more.

Conceptual Framework

The term blended education has been in use for more than two decades, words such as "hybrid instruction," "blended learning", "technology-mediated instruction," "web-enhanced instruction," and "mixed-mode instruction" have all been used interchangeably to mean blended education. However, an education business organisation called the Interactive Learning Center based in Atlanta, United States of America first used the words blended education to refer to the utilization and combination of the Internet, digital media (ICT facilities) and the physical co-presence of teachers (face-to-face instruction) to educate students daily. Bonk and Graham (2006), referred to blended education or blended learning as a series of learning systems that combine face-to-face instruction with computer mediated instruction. That is the ability to pull together face-to-face or lecture method of instruction with the use of ICT facilities in the classroom for the purpose of teaching and learning. The use of multimedia and online facilities to aid instruction in lecture halls is the main objective of blended education in order to promote critical thinking and enhance the learning environment.

Blended education is significantly different from classrooms that have been fitted with computers for learning, for instance it is common to find computer labs in universities around the country. The use of these computer labs in teaching students the basic principles of a computer and how computers operate, does not reflect blended learning, this is because blended education is absolutely different from a total use of the computers for teaching. Rather it is the use of computers connected to the internet (online technology) along with face-to-face instruction from lecturers to transmit knowledge to student’s on various topics. Blended learning essentially ensures that there a link between teaching and the use of internet technology for free and open dialogue between students and lecturers. It also ensures that there is critical debate on pertinent topics in lecture rooms across various universities, also inter and intra campus negotiations which are all key aspects of contemporary university education (Meyer, 2003).

Blended education is an effective combination of two main components (face-to-face and internet technology) as illustrated in Figure 1. The first step in adopting this method of instruction is for lecturers to fully understand the properties of the internet technology and how to effectively integrate this technology with face-to-face learning experience in order to create an improved learning environment for students that is rich in nature and quality of educational experience. During this process of blended education, learners have an independent and collaborative learning experience. That
is they are able to learn at their own pace and time, which facilitates critical thinking in students and higher-order learning.

Blended Education Learning Facility Requirement


i Human Resource: Human resource are essential to the development and delivery of blended learning in universities and other educational institutions anywhere in the world. These individuals (personnel) provide the needed instructional design, curriculum development, training skills and technology skills necessary to support teaching using blended education techniques. In addition to these skills, lecturers and staff who can provide personal attention and motivational strategies for teaching students who are not convinced of the value of blended education techniques are important human resources. Also human personnel who have the capacity to train and retrain others on how to use blended education for the purpose of educating students are crucial.

ii Financial Resource: Financial resources are necessary to initiate and support blended education initiatives. Without financial resources it will be impossible for institutions to purchase the necessary equipment and facilities needed such as online computers and internet communication technology equipment. These materials are usually very expensive. Financial resources are also required for the maintenance and payment of the salaries of staff operating these facilities on a daily basis in these institutions.

iii Technical Resource: Technical resources that are of the highest quality and quantity are required to ensure that the technology being utilized meets up with international standards and can enhance the learning process effectively and efficiently rather than obstruct it. This requires access to the right blended education tools in place that have the capability of meeting the learning needs of students, and tools that are up-to-date, reliable and easy to use. It will be illogical to undermine the importance of technical resources in the administration of blended education in universities because without these facilities this method of knowledge transmission will fail.

iv Policy: Policy statements are essential aspects for the provision of effective and efficient blended learning to a vast majority of students in universities across Nigeria. Since most universities offer some form of technology education to a few students of a particular department or faculty. With little administrative policies these computer-based courses are initiated and typically managed by the individual faculties or departments, or teaching faculty for a selected number of students. Conversely, a vital aspect of blended education is the ability of the Internet and online technology to provide an interactive learning experience to a larger number of students in a cost effective and accessible manner. Therefore, there is a need for a broader policy framework to be established that will govern and support the operation of blended education programs across all universities in Nigeria for all students.

The availability of resources for the successful execution of blended education programmes in universities cannot be undermined, since without right mix of the listed human, financial and technical resources such a program is doomed in any university.

Blended Education Models

Despite the importance of available resources for efficient and effective execution of blended education in universities in Nigeria, it is also vital that the right type of blended education models or strategies are adopted given the cultural, socio-economic and educational factors in Nigerian universities. According to Garrison and Kanuka (2004) educationist commonly agree that there are six distinct strategies blended educationist can adopt and these include;

- Face to face Strategy: In this strategy lecturers drive the instruction and debates with students in the classroom using digital tools. It involves a situation where both lecturers and students are within the same geographical location and are able to interact via both verbal and media communication.
Blended education programmes which are able to conduct research work (Stacey and Gerbic, 2008).

- Flex Strategy: In this strategy, knowledge is transmitted via a digital platform and teachers are available for face-to-face consultation and to support students when necessary. Online technology is used to educate students during this strategy however, lecturers are readily available to answer questions and make suggestions (Martyn, 2003).
- Lab Strategy: This strategy supports the delivery of knowledge through digital platform but in a consistent physical location such as a classroom. Students also take traditional classes in this model. This classroom environment is usually prepared for blended education instruction with the provision of all the necessary facilities and equipment for this form of knowledge transmission.
- Self-Blended Strategy: Lecturers encourage students to expand their traditional learning with online course work. This form of augmented learning ensures that students are not restricted to traditional learning methods alone. The online course work usually follows a prescribed provision of both the syllabus and curriculum, so that students receive a holistic instruction.
- Online Driver Strategy: Lectures and knowledge transfer is delivered through a digital platform (strictly online), although face-to-face meetings with lecturers are scheduled or made available to help students assimilate what has been taught (Oliver and Trigwell, 2005).

These are some strategies adopted in the process of blended education that provide some form of educational consistency in the transmission of knowledge to students on a regular basis.

Performance of Blended Education

The performance of blended education can be considered in terms of the extent to which they promote or fail to promote the actualisation of the highest quality of learning outcome possible. Also performance can be measured in terms of the positive learning experiences students acquire in addition to high lecturer satisfaction and reasonable workload that allows lecturers time to conduct research work (Stacey and Gerbic, 2008). Blended education programmes which are able to provide a student with positive learning experiences and sufficient workload for lecturers that is not burdensome reflects high performance and vice versa.

Blended education is besieged with benefits and challenges, some of these benefits include improved autonomy research and reflection, to improve student’s learning outcome, to ensure greater flexibility for students and lecturers, reduction in student dropout rate, promote professional learning environment, efficiency in the utilisation of educational resources among others. While challenges include: time constraint, technological difficulties for lecturers and institutions, lack of support for course design, limitation in the acquisition of new lecturing skills, invasion into unnecessary areas of life, technological adaptation difficulties for students, perceived isolation of students and unrealistic student expectation. Whenever the benefits listed above outweighs the challenges the performance of blended education is high, however whenever the challenges are more than the benefits, the performance can generally be regarded as low (Wang, Shen, Novak & Pan, 2009).

Blended education ensures the optimum utilisation of educational resources that is with very little investment lecturers are able to have a huge impact on student’s teaching and learning. This is because it combines the strengths of many different methods in a low cost manner that can accomplish set educational goals and objectives in an efficient manner. This gives lecturers the opportunity to experiment with blended education strategies freely in their classrooms (Manganas, 2006).

Purpose of the Study

The purpose of this study was to assess the impact of blended education on student’s academic performance in universities in Rivers State. Specifically, the study was designed to achieve the following objectives:

1. Determine the blended education strategies adopted in universities in Rivers State.
2. Investigate the availability of blended education facilities in universities in Rivers State.
3. Identify the impact of blended education strategies on student’s performance in universities in Rivers State.

Research Questions

The following research questions were addressed in the study:

1. What is the blended education strategies adopted in universities in Rivers State?
2. What are the blended education facilities available in universities in Rivers State, Nigeria?
3. What is the effect of blended education on student’s performance in universities in Rivers State, Nigeria?

Methodology

A descriptive survey study method was used in this
research which allowed the researcher to have an explicit picture of the impact of blended education on the performance of students studying education in universities in Rivers State. Hence, the population for this study was limited to lecturers and students of university institutions offering education in Rivers State, Nigeria. This gave a total study population of approximately 8,000, which comprised of 820 lecturers and 7,180 students from universities in Rivers State. To ensure that there is an equal representation of both lecturers and students of the three tertiary institutions (University of Port Harcourt, Rivers State University of Science and Technology and Ignatius Ajuru University of Education) in Rivers State where education is taught at various levels and departments. The researcher through a process of simple random sampling and stratified sampling, selected 50 lecturers and 800 students from these institutions, this gave a sample of 850 respondents. Then two separate questionnaires designed for lecturers and students were distributed, the questionnaires focused on the research questions (Rivers State Ministry of Education, 2014).

Additionally, a 29-item questionnaire tagged Assessment of Blended Education on Student Performance (ABESP) was designed to assess the impact of blended education on the performance of students studying education in universities in Rivers State. The content validity was determined by two specialists in education while a reliability coefficient of $r = 0.75$ was obtained using the test-retest method. It was administered on 40 randomly selected students and lectures outside the study sample. The results were collected then after a period of two weeks the questionnaires were administered to the same set of respondents. Scores on the two sets of questionnaire were correlated using Pearson Product Moment Correlation Statistics. The result yielded a correlation of 0.75 indicating high reliability. Based on this, the instrument was considered highly reliable and therefore used for the study.

**Results and Findings**

This subheading dealt with presentation and analysis of the data, which included answers to the research questions.

**Research Question 1**

What is the blended education strategies adopted in universities in Rivers State?

The researcher first determined the blended education strategies adopted in universities where education is taught in Rivers State. The various strategies featured include Face-to-Face Strategy, Rotational Strategy, Flex Strategy, Lab Strategy, Self-blended Strategy and Online Strategy as presented in Table 1. As evidently shown, a total of 5 strategies were examined. Judging by their frequency and percentages, it is obvious that the face-to-face strategy of blended education is the most common strategy adopted in universities with the highest frequency and percentage from both lecturers 28 (56%) and students 301 (37.6%). The flex strategy is the least blended education strategy adopted in schools with a frequency and percentage of zero for lecturers and 10 (1.3%) for students. The implication is that lecturers and students agreed on the most popular strategy and least common strategy of blended education in universities in Rivers State.

**Research Question 2**

What are the blended education facilities available in universities in Rivers State, Nigeria?

The researcher went on to determine the blended education facilities available in universities where education courses is taught in Rivers State. The various facilities featured include computers, internet connectivity, digital technology, television/DVD, projectors, satellite technology and educational applications as presented in Table 2.

As plainly shown, a total of 7 blended education facilities were examined in terms of their availability. Judging by the mean and remarks of lecturers and students it is obvious that computers are the most available facility in these institutions as indicated by lecturers (2.74) and students (2.59) respectively. The least available blended education facility in these universities as attested to by both lecturers and students in education. Based on the aggregate mean obtained it is apparent that lecturers in universities where education courses is taught in Rivers State indicated the availability of blended education facilities (2.50), while student’s stated that these facilities are not available (2.25) in universities in Rivers State.

**Research Question 3**

What is the effect of blended education on student’s performance in universities where education courses is taught in Rivers State, Nigeria?

The researcher determined the performance of students taught with blended education methods in universities where education is taught in Rivers State. The various factors used to determine student’s performance are presented in Tables 3 and 4.

From the responses of lecturers and students on the effect of blended education, 68% of lecturers indicated
Table 1. Frequency and percentages of the types of Blended Education Strategies Adopted.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Blended Education Strategies</th>
<th>Lecturers</th>
<th>Percent (%)</th>
<th>Students</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Face-to-face Strategy</td>
<td>28</td>
<td>56</td>
<td>301</td>
<td>37.6</td>
</tr>
<tr>
<td>2.</td>
<td>Rotational Strategy</td>
<td>3</td>
<td>6</td>
<td>50</td>
<td>6.3</td>
</tr>
<tr>
<td>3.</td>
<td>Flex Strategy</td>
<td>-</td>
<td>-</td>
<td>10</td>
<td>1.3</td>
</tr>
<tr>
<td>4.</td>
<td>Lab Strategy</td>
<td>4</td>
<td>8</td>
<td>251</td>
<td>31.4</td>
</tr>
<tr>
<td>5.</td>
<td>Self-Blended Strategy</td>
<td>6</td>
<td>12</td>
<td>54</td>
<td>6.8</td>
</tr>
<tr>
<td>6.</td>
<td>Online Strategy</td>
<td>9</td>
<td>18</td>
<td>134</td>
<td>16.8</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>50</td>
<td>100</td>
<td>795</td>
<td>99.4</td>
</tr>
<tr>
<td>Missing system</td>
<td></td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>0.63</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>50</td>
<td>100</td>
<td>800</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Research Fieldwork 2014.

Table 2. Mean Assessment of Blended Education Facilities Available.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Available Blended Education Facilities</th>
<th>Lecturers</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>Remark</td>
</tr>
<tr>
<td>1.</td>
<td>Computers</td>
<td>2.74</td>
<td>Available</td>
</tr>
<tr>
<td>2.</td>
<td>Internet Connection</td>
<td>2.67</td>
<td>Available</td>
</tr>
<tr>
<td>3.</td>
<td>Digital Technology</td>
<td>2.50</td>
<td>Available</td>
</tr>
<tr>
<td>4.</td>
<td>Television/DVDs</td>
<td>2.64</td>
<td>Available</td>
</tr>
<tr>
<td>5.</td>
<td>Projectors</td>
<td>2.58</td>
<td>Available</td>
</tr>
<tr>
<td>6.</td>
<td>Satellite Technology</td>
<td>2.50</td>
<td>Available</td>
</tr>
<tr>
<td>7.</td>
<td>Educational Applications</td>
<td>1.80</td>
<td>Not Available</td>
</tr>
<tr>
<td>Aggregate Mean</td>
<td></td>
<td>2.50</td>
<td>Available</td>
</tr>
</tbody>
</table>

Source: Research Fieldwork 2014.

Table 3. Percentage Remark of Lecturers on Student’s Performance Using Blended Education.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Improved Student’s ability to;</th>
<th>Performance Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Excellent</td>
</tr>
<tr>
<td>1.</td>
<td>Boot a Computer</td>
<td>68%</td>
</tr>
<tr>
<td>2.</td>
<td>Operate a Computer</td>
<td>37%</td>
</tr>
<tr>
<td>3.</td>
<td>Obtain Information online</td>
<td>45%</td>
</tr>
<tr>
<td>4.</td>
<td>Present information (using power point or equivalent)</td>
<td>6%</td>
</tr>
<tr>
<td>5.</td>
<td>Create web pages</td>
<td>1%</td>
</tr>
<tr>
<td>6.</td>
<td>Write a Programme</td>
<td>3%</td>
</tr>
<tr>
<td>7.</td>
<td>Use a programme</td>
<td>24%</td>
</tr>
</tbody>
</table>

Source: Research Fieldwork 2014.

that students are able to boot computers excellently, and 48% of lecturers indicated that students' performance in obtaining information online is excellent. While lecturers indicated that students' performance in being able to write programs and create web pages is poor with 86 and 63% respectively. On the other hand 56 and 46% of students strongly agreed that their performance as a result of the use of blended education strategies in teaching has improved their ability to use computers and their communication skills respectively. While 51 and 43% of students strongly disagreed that blended education has improved their performance in terms of having better ethical/moral standards and improving their grades in school.

Discussion of Findings

As a result of the study, some findings were reached and revealed in terms of the blended education strategies.
Table 4. Percentage Remark of Student on their Performance Using Blended Education.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Blended education improves your reading skills.</td>
<td>23%</td>
<td>41%</td>
<td>19%</td>
<td>17%</td>
</tr>
<tr>
<td>2.</td>
<td>Blended education improves your ability to use computers efficiently.</td>
<td>56%</td>
<td>34%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>4.</td>
<td>Blended education improves your grades in school.</td>
<td>12%</td>
<td>29%</td>
<td>16%</td>
<td>43%</td>
</tr>
<tr>
<td>5.</td>
<td>Blended education creates a more interactive education.</td>
<td>28%</td>
<td>26%</td>
<td>33%</td>
<td>13%</td>
</tr>
<tr>
<td>6.</td>
<td>Blended education improves communication skills</td>
<td>46%</td>
<td>32%</td>
<td>19%</td>
<td>3%</td>
</tr>
<tr>
<td>7.</td>
<td>Blended education improves ethical and moral standards in students.</td>
<td>21%</td>
<td>18%</td>
<td>10%</td>
<td>51%</td>
</tr>
<tr>
<td>8.</td>
<td>Blended education promotes problem solving in students through the application of scientific method.</td>
<td>38%</td>
<td>28%</td>
<td>20%</td>
<td>14%</td>
</tr>
</tbody>
</table>

used on education students in universities in Rivers State. It was discovered that a vast majority of respondents indicated that face-to-face strategy and lab strategy are the most common methods of blended education adopted in schools in Rivers State. Clark, I and James, P. (2005) agreed with this finding by stating that most prominent instruction method in blended education, especially in higher institutions remains face-to-face instruction. This is based on the assumption that there are inherent benefits associated with applying face-to-face method of blended education, also there are benefits associated with blended education using the laboratory strategy. The overwhelming numbers of students prefer to show up for classes in a (lab) classroom adequately fitted with all the blended education facilities when lab strategy is used, meaning attrition rate is essentially low.

The study ascertained that the most prevalent blended education facilities available for teaching and learning in universities in Rivers State are computers, digital technology, and internet connection amongst others. This supports the findings of Riffell, S and Sibley, D. (2005), who opined that the availability of computers and online technology in classrooms for students is becoming more popular in universities around the world because they reinforce learning, promote student-centered learning by helping students to take more responsibility for their learning and to increase the involvement and participation necessary for that learning to take place efficiently and effectively. These facilities give students greater control of their learning and they are able to learn at their own pace and speed, this leads to a more interactive learning environment which is better for students.

The study also revealed that most lecturers are of the opinion that blended education indeed affects the performance of students positively especially in the areas of being able to boot, operate computers, and retrieve information online. The use of online technology to deliver instruction to students is a crucial aspect of blended education. It is a component that ensures that student instruction is delivered using the asynchronous course organisation system (e-Class). The E-Class system involves the use of course description, course schedule, documents (course content), announcements, forums, links and student's papers. These are all structured in a manner that enhances student learning, performance and evaluation of the progress students are making on a daily basis (Kerres and De Witt, 2003).

It was also discovered in the study that majority of students generally agree that their performance in terms of the use of ICT facilities have significantly improved as a result of the blended education strategies employed in their universities. However, a significant number of students also indicated that despite the positive attributes of blended education, it is not capable of improving the morals/ ethical standards of students or their grades. This is based on the assumption that blended education with its ability to provide access to the internet has also led to the use of social media by students. This is most times abused by students in that they spend more quality time on social networking sites such as Facebook, Twitter, Whatsapp, Skype, BBM and so on rather than studying, thus negatively affecting their grades in school.

Conclusion/Implications

Considering the present status of available facilities for blended education strategies adopted, and the performance of students based on the use of blended education in universities in Rivers State, there is a lack of the necessary academic infrastructure for the execution of blended education in universities in Rivers State. Thus this form of education suffers because it is not receiving adequate attention and support from the government, the general public and the organized private.
sector. The implication of this conclusion is worrisome at this present level of operation because the purpose of blended education which is to provide students with the right blend of theoretical and practical knowledge will be defeated.

Furthermore, it was discovered that despite the availability of some facilities of blended education in universities in Rivers State, there is also a shortage or unavailability of most facilities required for blended education in the State. This can be attributed to several factors such as poor funding from the federal and state governments, preference for traditional methods of instruction and lack of serious commitment towards the success of blended education in universities amongst others. Additionally, it was discovered that most of the strategies of blended education are not practiced in universities in Rivers State. This explains the overall poor performance of students who learn using blended education method of instruction. This has led to awful training centers and students with little or no equipment for learning purposes which remains a huge hindrance to effective and efficient knowledge transmission.

Recommendations

Based on the study, the following suggestions are made to solve difficulties of blended education and to ensure that its potentials are harnessed:

- There is a need to create a link between blended education and traditional methods of education in universities in Rivers State, through a process of coordinating both modern and traditional methods of instruction within the classroom. This will guide and improve the administration and operation of blended education in these universities.

- Electricity or regular power supply is an essential requirement needed to operate blended education facilities, because this equipment operate with electricity and in the absence of stable electricity supply they will not function effectively. Most universities use generators, thus increasing their operating cost and the cost of trainings, therefore it is vital that the federal and state government solves the problem of frequent power outage in the country, since it will reduce cost and create an adequate learning environment for students.

- Government needs to ensure that grants and credits are made available to universities for the provision, maintenance and operation of blended education facilities in universities. This will enable them acquire all the necessary equipment needed for their daily routine in the classroom and it will prevent a shortage of learning facilities in these institutions. Additionally, these grants could be made available to students who are not able to personally buy laptops or other ICT materials which are essential to their learning.

- The use of blended education should be made part of the curriculum of universities in Nigeria for this will compel higher educational institutions around the country to use this method of knowledge transmission more often.

The recommendations stated above if adopted will significantly improve on the standard of blended education in the country and the performance of students in universities in Rivers State.

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