Lecturers’ Utilization of Electronic Instructional Media on Students’ Academic Performance in National Open University of Nigeria, Port Harcourt Study Center

Pritta Menyechi Elenwo
Department of Educational Management, Faculty of Education, Rivers State University, Nigeria

Joyce Vadukweenem Oteyi
Institute of Education, Rivers State University, Nigeria

Abstract

The study investigated lecturers’ utilization of electronic instructional media on students’ academic performance in the National Open University of Nigeria, Port Harcourt Study Center. Three specific objectives, three research questions and three hypotheses guided the study. This study adopted descriptive survey research. The population of the study was 27 lecturers of the National Open University of Nigeria, Port Harcourt Study Center. No sampling technique was used to achieve a sample size of 27 lecturers. The data collecting instrument for this study was a self-structured questionnaire titled “Lecturers’ Utilization of Electronic Instructional Media on Students’ Academic Performance Questionnaire.” The instrument was structured using 4-point rating scale and was face and content validated by three experts in Departments of Educational Management and Measurement and Evaluation in Rivers State University. The instrument was tested for reliability using Cronbach Alpha statistics which yielded an average reliability index of 0.79. All the 27 copies of the questionnaire administered were retrieved, and used for the study. Mean and standard deviation were used in answering the research questions while the null hypotheses were tested using t-test at 0.05 level of significance with a critical value of ±1.96. Findings revealed that lecturers’ utilization of audio tape, internet, and electronic books in instructional delivery influences students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center to a high extent. Based on the findings, it was recommended that more funds be provided by the government to make available audio tapes for free to students to enable them follow up on their taped lessons; government should provide free Wi-Fi services to enable both teachers and students get unlimited access to internet usage in National Open University of Nigeria for hitch-free instructional delivery and learning process and government should as a matter of urgency provide more electronic books in schools and ensure that they are accessible to students to enhance positive reading achievement for quality education.

Keywords: Lecturers’ Utilization, Electronic Instructional Media, Students’ Academic Performance, National Open University of Nigeria.


Introduction

The National Open University of Nigeria (NOUN) is a federal open university and distance learning, the first of its kind in the West African sub-region. NOUN (2023) described the National Open University of Nigeria as an Open and Distance Learning (ODL) institution renowned for providing functional, flexible, accessible, cost-effective education adequate for flourishing in the 21st century and beyond. The
institution desires to be regarded as the foremost university providing highly accessible and enhanced quality education anchored by social justice, equality and national cohesion through a comprehensive reach that transcends all barriers. The open university is committed to provide quality education through the open and distance learning system which is responsive to the needs and challenges of a technologically advanced and globally linked society. It further states that NOUN leverages on Information Communication Technology (ICT) to deliver an education tailored towards the globalized economy as it offers exceptional academic programmes that meet the specific needs of all sectors of the global economy, in the Arts, Education, Health, Law, Physical, Social, Agriculture and Management Sciences.

As an ODL institution poised to ensuring equal educational opportunity, the university is determined to meet the following objectives that necessitated its establishment in Nigeria, to: make provision for education for All and promotion of lifelong learning; fill the gap created by the closure of outreaches/satellite campuses; provide cost-effective education; ensure improved economies of scale; ensure flexibility of instructional delivery system; ensure maximum utilization of academic personnel; provide on-the-job teacher training opportunity; eradicate poverty and provide vocational and life education; provide functional non-formal education and change national orientation towards better patriotism among the citizenry (NOUN, 2023). To achieve the above objectives, the institution has maintained and retained high quality teaching and learning through its present instructional delivery model which is composed of three main components: print/electronic course materials, instruction videos and online facilitation which are integrated to provide necessary academic resources to the learners. Judge (2013) opined that when technology is infused within the curriculum, young learners are provided a set of learning tools to assist them in achieving developmental academic goals across the curriculum. Isola (2020) posited that academic performance is the performance of a student per time, which indicates individual’s intellectual abilities. Elenwo and Ebom-Jebose (2023) opined that Academic performance is the extent to which a student has attained his short or long-term educational goals. It is the learning outcomes of the student which includes the knowledge, skills and ideas acquired and obtained through their course of study within and outside the classroom situation. Presently, utilization of the electronic instructional media can facilitate not only the delivery of instruction, but also the quality of learning attained by students.

Electronic instructional media are media that use electronics means to help the teacher to communicate effectively needed knowledge or ideas to the students; such that at the end of such instruction, the student can be that which the teacher predetermined in his objective statement. For lecturers to be more competent in the delivery of instruction, their knowledge of various applications of electronic instructional media is very pertinent (Heggart & Yoo, 2018). Some of the electronic instructional media that are discussed as identified in this study include audio tape, internet, and electronic books.

Audio tapes are a traditional medium of imparting instructions in distance education. These are still used by many universities as an effective method to deliver distance education content to the students. The teachers can simply record their lectures about a topic in audio tapes. Olakulehin (2017) stated that students using audio tapes had higher grades and were more likely to complete their courses than students who did not use it. Audio tapes are very effective in helping students grasp the concept and further give a feeling to students as if they were being instructed by the teacher in a classroom (Devasis, 2022).

The internet has these days become the most popular media for conducting distance education courses. Fajola (2012) asserted that internet platforms perform multi-functional roles in teaching processes at all levels which in turn influences teaching effectiveness and academic performance of students. The internet offers tools like emails, chats, audio and video conferencing and several other tools that can be used by teachers to enable students to access distance education courses and learn the same. According to Devasis (2022) email is the most effective teaching tool in distance education to address issues like, answering directed questions of students, counselling, giving class assignments, making general class announcements, giving occasional quizzes, establishing direct communication with a particular student, posting grades, giving helpful hints about homework or upcoming quizzes, introducing texts, and out
ruling excuses for missing class. Chat rooms act as virtual classes, where the teacher and the student can interact and discuss about the course content.

Electronic books are open textbooks, which means that these are books which are available in digitized formats in several electric libraries of universities and colleges that offer distance education courses. These textbooks can be accessed by many distance learners and prove to be quite effective in helping students learn. These materials are created by educators, universities, and other educational institutions, and can be used for a variety of purposes, such as to supplement teaching materials, provide supplemental information, or serve as a standalone resource (Caslin, 2015). Higgins (2017) opined that with the availability of these materials, students have greater access to learning materials, allowing them to save time and money, while still obtaining quality educational materials. In a study conducted by Bersin (2014) it was found that students exposed to the utilization of electronic books developed better scientific reasoning skills by engaging in small group discussions and reflections during the classroom work.

Statement of the Problem

The establishment of National Open University has provided functional, flexible, accessible, and cost-effective education for all who seek knowledge using electronic media in instructional delivery. The utilization of electronic media in teaching has met with some challenges and advantages. For instance, Okoli, Ohaegbulam and Oladunjoye (2015) listed some of the challenges as erratic power supply, absence of internet, limited computer facilities for teachers, high cost of data and printing of electronic materials. The advantages include improved technical skills, time management, enhanced communication skills, broader networking opportunities and so on. Despite the glaring advantages of utilization of electronic media to teach over these years, the extent to which it influences academic performance stands to be questioned. Therefore, the study investigated lecturers’ utilization of electronic instructional media on students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center.

Purpose of the Study

The purpose of the study was to investigate lecturers’ utilization of electronic instructional media on students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center. Specifically, the objectives are to:

1.Ascertain the extent to which lecturers’ utilization of audio tapes in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center.

2. Examine the extent to which lecturers’ utilization of internet in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center.


Research Questions

The following research questions was answered in this study:

1. To what extent does lecturers’ utilization of audio tapes in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center?

2. To what extent does lecturers’ utilization of internet in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center?

3. To what extent does lecturers’ utilization of electronic books in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center?

Hypotheses

The following hypotheses were tested in this study at 0.05 level of significance:
1. There is no significant difference in the mean responses of male and female lecturers on the extent to which lecturers’ utilization of audio tapes in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center.

2. There is no significant difference in the mean responses of male and female on the extent to which lecturers’ utilization of internet in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center.

3. There is no significant difference in the mean responses of male and female lecturers on the extent to which lecturers’ utilization of electronic books in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center.

Methodology

The research adopted a descriptive survey design. The study was conducted in Rivers State. The population of the study was twenty-seven (27) respondents comprising of 15 and 12 male and female lecturers respectively. No sampling technique was used for the study, since the population is small. The research instrument for this study was a 15-item researchers’ designed questionnaire using a 4-point rating scale weighted as Very High Extent (VHE) – 4 Points, High Extent (HE) - 3 Points, Low Extent (LE) – 2 Points and Very Low Extent (VLE) – 1 point. The questionnaire was titled “Lecturers’ Utilization of Electronic Instructional Media on Students’ Academic Performance Questionnaire (LUEIMSAPQ). The questionnaire was given to three experts; two from Department of Measurement and Evaluation and one from the Department of Educational Management to ascertain the face and content validity of the instrument. The reliability of the instrument was established by a trial test which was carried out by the researchers. The Cronbach Alpha Method was used to ascertain the overall reliability coefficient index of 0.78. The researcher administered twenty-seven (27) copies of the questionnaire to the respondents (27 lecturers) with the help of one research assistant. Mean and standard deviation were used to answer the research questions while t-test was used to test the null hypotheses at 0.05 level of significance. The mean was obtained by the total summation of all responses as assigned to a rating scale in an item divided the total number of responses: 4+3+2+1= 2.50. The mean score of 2.50 and above indicate high extent, while those below indicates low extent. A null hypothesis was accepted when the calculated t-value is less than the critical t-value of ±1.96 and rejected when the calculated t-value is greater than the critical t-value of ±1.96 respectively.

Results

Research Question 1

To what extent does lecturers’ utilization of audio tapes in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center?

Table 1. Mean Responses of Male and Female Lecturers on the Extent Lecturers’ Utilization of Audio Tapes in Instructional Delivery Influence Student’ Academic Performance in National Open University of Nigeria, Port Harcourt Study Center

<table>
<thead>
<tr>
<th>S/No</th>
<th>ITEMS</th>
<th>Males</th>
<th>Decisions</th>
<th>Females</th>
<th>Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>SD</td>
<td>X</td>
<td>SD</td>
</tr>
<tr>
<td>1</td>
<td>Recording of lectures help students to learn in a convenient environment which influence academic performance</td>
<td>3.23</td>
<td>0.82</td>
<td>HE</td>
<td>3.25</td>
</tr>
<tr>
<td>2</td>
<td>Listening to recorded lessons helps a student to have a mastery of it for better performance</td>
<td>3.25</td>
<td>0.81</td>
<td>HE</td>
<td>3.19</td>
</tr>
</tbody>
</table>
Audio tapes makes students feel being instructed by the teacher in a classroom

Audio tapes helps students grasp the concept

Auditory learning style increases students' knowledge and creativity.

Table 1 above showed that both male and female lecturers agreed that students’ academic performance was influenced to a high extent by lecturers’ utilization of audio tapes in instructional delivery to a high extent with the following mean values for items (1-5) for males: 3.23, 3.25, 3.21, 2.91 and 2.98 and for females: 3.25, 3.19, 2.85, 2.85 and 2.94 respectively.

Research Question 2

To what extent does lecturers’ utilization of internet in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center?

Table 2. Mean Responses of Male and Female Lecturers on the Extent Lecturers’ Utilization of Internet in Instructional Delivery Influence Students’ Academic Performance in National Open University of Nigeria, Port Harcourt Study Center

<table>
<thead>
<tr>
<th>S/No</th>
<th>ITEMS</th>
<th>Males</th>
<th>Decisions</th>
<th>Females</th>
<th>Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>SD</td>
<td>X</td>
<td>SD</td>
</tr>
<tr>
<td>6</td>
<td>Using internet gives students more room to express themselves</td>
<td>3.28</td>
<td>0.81</td>
<td>HE</td>
<td>3.20</td>
</tr>
<tr>
<td>7</td>
<td>Internet learning contributes to students’ development</td>
<td>3.17</td>
<td>0.89</td>
<td>HE</td>
<td>3.24</td>
</tr>
<tr>
<td>8</td>
<td>Internet raises the willingness to communicate to other students</td>
<td>2.74</td>
<td>1.03</td>
<td>HE</td>
<td>2.85</td>
</tr>
<tr>
<td>9</td>
<td>Internet materials motivates students to study harder</td>
<td>3.26</td>
<td>1.02</td>
<td>HE</td>
<td>2.85</td>
</tr>
<tr>
<td>10</td>
<td>Internet makes students curious to seek for more knowledge</td>
<td>2.91</td>
<td>0.91</td>
<td>HE</td>
<td>2.94</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Mean/SD</strong></td>
<td><strong>3.07</strong></td>
<td><strong>0.93</strong></td>
<td><strong>HE</strong></td>
<td><strong>3.02</strong></td>
</tr>
</tbody>
</table>

Table 2 above showed that both male and female lecturers agreed that students’ academic performance was influenced to a high extent by lecturers’ utilization of internet in instructional delivery with the following mean values for items (6-10) for males: 3.28, 3.17, 2.74, 3.26 and 2.91 and for females: 3.20, 3.24, 2.85, 2.85 and 2.94 respectively.

Research Question 3

To what extent does lecturers’ utilization of electronics books in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center?
Table 3. Mean Responses of Male and Female Lecturers on the Extent Lecturers’ Utilization of Electronic Books in Instructional Delivery Influence Student’ Academic Performance in National Open University of Nigeria, Port Harcourt Study Center

<table>
<thead>
<tr>
<th>S/No</th>
<th>ITEMS</th>
<th>Males Decisions</th>
<th>Females Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>SD</td>
</tr>
<tr>
<td>11</td>
<td>Electronic books help students read far and wide</td>
<td>3.22</td>
<td>0.84</td>
</tr>
<tr>
<td>12</td>
<td>Electronic books avail students’ diverse knowledge of a particular concept</td>
<td>2.89</td>
<td>0.98</td>
</tr>
<tr>
<td>13</td>
<td>Electronic books help students learn effectively</td>
<td>2.96</td>
<td>0.99</td>
</tr>
<tr>
<td>14</td>
<td>Electronic books help students with their assignments</td>
<td>3.18</td>
<td>0.67</td>
</tr>
<tr>
<td>15</td>
<td>Electronic books make it easier for students to read</td>
<td>3.24</td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Mean/SD</strong></td>
<td><strong>3.10</strong></td>
<td><strong>0.86</strong></td>
</tr>
</tbody>
</table>

**Source:** Researchers’ Field Result, 2024

Table 3 above showed that both male and female lecturers agreed that students’ academic performance was influenced to a high extent by lecturers’ utilization of electronic books in instructional delivery with the following mean values for items (10-15) for males: 3.22, 2.89, 2.96, 3.18 and 3.24 and for females: 2.90, 3.22, 3.15, 2.75 and 2.84 respectively.

**Hypothesis 1**

There is no significant difference in the mean responses of male and female lecturers on the extent to which lecturers’ utilization of audio tapes in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center.

Table 4. t-Test Analysis of the Responses on the Influence of Lecturers’ Utilization of Audio Tapes in Instructional Delivery on Students’ Academic Performance in National Open University of Nigeria, Port Harcourt Study Center

<table>
<thead>
<tr>
<th>Respondents</th>
<th>N</th>
<th>( \bar{X} )</th>
<th>SD</th>
<th>DF</th>
<th>LS</th>
<th>t-cal</th>
<th>t-crit</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Lecturers</td>
<td>15</td>
<td>3.12</td>
<td>0.85</td>
<td>25</td>
<td>0.05</td>
<td>0.31</td>
<td>±1.96</td>
<td>Failed to Reject No Significant Difference</td>
</tr>
<tr>
<td>Female Lecturers</td>
<td>12</td>
<td>3.01</td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Researchers’ Field Result, 2024

Table 4 above shows no significant difference in the mean responses of male and female lecturers on the extent to which lecturers’ utilization of audio tapes in instructional delivery influence students’ academic performance. The t-calculated value of 0.31 was less than the t-critical value of ±1.96 (0.31 ≤ ±1.96) for degree of freedom of 25 at 0.05 level of significance. Therefore, the null hypothesis was accepted which states that there is no significant difference in the mean responses of male and female lecturers on the extent to which lecturers’ utilization of audio tapes in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center.

**Hypothesis 2**

There is no significant difference in the mean responses of male and female lecturers on the extent to which lecturers’ utilization of internet in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center.
Table 5. t-Test Analysis of the Responses on the Influence of Lecturers’ Utilization of Internet in Instructional Delivery on Students’ Academic Performance in National Open University of Nigeria, Port Harcourt Study Center

<table>
<thead>
<tr>
<th>Respondents</th>
<th>N</th>
<th>( \bar{X} )</th>
<th>SD</th>
<th>DF</th>
<th>LS</th>
<th>t-cal</th>
<th>t-crit</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Lecturers</td>
<td>15</td>
<td>3.07</td>
<td>0.93</td>
<td>25</td>
<td>0.05</td>
<td>0.14</td>
<td>±1.96</td>
<td>Failed to Reject No</td>
</tr>
<tr>
<td>Female Lecturers</td>
<td>12</td>
<td>3.02</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Significant Difference</td>
</tr>
</tbody>
</table>

Source: Researchers’ Field Result, 2024

Table 5 above shows no significant difference in the mean responses of male and female lecturers on the extent to which lecturers’ utilization of internet in instructional delivery influence students’ academic performance. The t-calculated value of 0.14 was less than the t-critical value of ±1.96 (0.14 ≤ ±1.96) for degree of freedom of 25 at 0.05 level of significance. Therefore, the null hypothesis was accepted which states that there is no significant difference in the mean responses of male and female lecturers on the extent to which lecturers’ utilization of internet in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center.

Hypothesis 3

There is no significant difference in the mean responses of male and female lecturers on the extent to which lecturers’ utilization of electronic books in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center.

Table 6. t-Test Analysis of the Responses on the Influence of Lecturers’ Utilization of Electronic Books in Instructional Delivery on Students’ Academic Performance in National Open University of Nigeria, Port Harcourt Study Center

<table>
<thead>
<tr>
<th>Respondents</th>
<th>N</th>
<th>( \bar{X} )</th>
<th>SD</th>
<th>DF</th>
<th>LS</th>
<th>t-cal</th>
<th>t-crit</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Lecturers</td>
<td>15</td>
<td>3.10</td>
<td>0.86</td>
<td>25</td>
<td>0.05</td>
<td>0.37</td>
<td>±1.96</td>
<td>Failed to Reject No</td>
</tr>
<tr>
<td>Female Lecturers</td>
<td>12</td>
<td>2.97</td>
<td>0.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Significant Difference</td>
</tr>
</tbody>
</table>

Source: Researchers’ Field Result, 2024

Table 6 above shows no significant difference in the mean responses of male and female lecturers on the extent to which lecturers’ utilization of electronic books in instructional delivery influence students’ academic performance. The t-calculated value of 0.37 was less than the t-critical value of ±1.96 (0.37 ≤ ±1.96) for degree of freedom of 25 at 0.05 level of significance. Therefore, the null hypothesis was accepted which states that there is no significant difference in the mean responses of male and female lecturers on the extent to which lecturers’ utilization of electronic books in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center.

Discussion of Findings

The result on influence of lecturers’ utilization of audio tapes in instructional delivery on students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center showed that the respondents to a high extent agreed to all the questionnaire items (1-5) with a grand mean score of 3.12 for males and 3.01 for females. This result indicates that the respondents to a high extent agreed that lecturers’ utilization of audio tapes in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center. The result on hypothesis 1 showed no significant difference in the mean responses of male and female students on the extent to which lecturers’ utilization of audio tapes in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center. A t-calculated value of 0.31 which is
less than t-critical value of ±1.96 at 0.05 level of significance implied that both male and female lecturers agreed that their utilization of audio tapes in instructional delivery influence students’ academic performance. Hence, the null hypothesis which states that there is no significant difference in the mean responses of male and female students on the extent to which lecturers’ utilization of audio tapes in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center failed to reject no significant difference. The finding agreed with Olakulehin (2017) that students using audio tapes had higher grades and were more likely to complete their courses than students who did not use it.

The result on influence of lecturers’ utilization of internet in instructional delivery on students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center showed that the respondents to a high extent agreed to all the questionnaire items (6-10) with a grand mean score of 3.07 for males and 3.02 for females. This result indicates that the respondents to a high extent agreed that lecturers’ utilization of internet in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center. The result on hypothesis 1 showed no significant difference in the mean responses of male and female students on the extent to which lecturers’ utilization of internet in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center. A t-calculated value of 0.14 which is less than t-critical value of ±1.96 at 0.05 level of significance infers that both male and female lecturers agreed that their utilization of internet in instructional delivery influence students’ academic performance. Therefore, the null hypothesis which states that there is no significant difference in the mean responses of male and female students on the extent to which lecturers’ utilization of internet in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center failed to reject no significant difference. The finding is in consonance with Fajola (2012) who asserted that internet platforms perform multi-functional roles in teaching processes at all levels which in turn influences teaching effectiveness and academic performance of students.

The result on influence of lecturers’ utilization of electronic books in instructional delivery on students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center showed that the respondents to a high extent agreed to all the questionnaire items (11-15) with a grand mean score of 3.10 for males and 2.97 for females. This result indicates that the respondents to a high extent agreed that lecturers’ utilization of electronic books in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center. The result on hypothesis 1 showed no significant difference in the mean responses of male and female students on the extent to which lecturers’ utilization of electronic books in instructional delivery influence students’ academic performance. So, the null hypothesis which states that there is no significant difference in the mean responses of male and female students on the extent to which lecturers’ utilization of electronic books in instructional delivery influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center failed to reject no significant difference. The finding is in tandem with the finding of Bersin (2014) which showed that students exposed to the utilization of electronic books developed better scientific reasoning skills by engaging in small group discussions and reflections during the classroom work.

Conclusion

Findings from this study revealed that lecturers’ utilization of audio tapes, internet, and electronic books in instructional delivery to a high extent influence students’ academic performance in National Open University of Nigeria, Port Harcourt Study Center. Also concluded was that there is no significant difference in the mean responses of male and female students on the extent to which lecturers’ utilization

**Recommendations**

Based on the result of the study, the following recommendations were made.

1. More funds be provided by the government to make available audio tapes for free to students to enable them follow up on their taped lessons.

2. Government should provide free Wi-Fi services to enable both teachers and students get unlimited access to internet usage in NOUN for hitch-free instructional delivery and learning process.

3. Government should as a matter of urgency provide more electronic books in schools and ensure that they are accessible to students to enhance positive reading achievement for quality education.

**References**


