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Daniel Samuel Ayele (CLN)

Isa Mustapha Agwai Polytechnic Lafia, ayeledaniel9@gmail.com

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**Students' Perspective on Effectiveness of Electronic Resources and
Conventional Textbook Materials in Promoting Learning in Isa Mustapha
Agwai I Polytechnic (IMAP), Lafia**

By

**Ayele, Daniel Samuel
Department of Library Science
Isa Mustapha Agwai I Polytechnic Lafia
ayeledaniel9@gmail.com**

Abstract

A survey was conducted to investigate the viewpoint of IMAP students on effectiveness of electronic learning resources and conventional textbook materials in promoting learning. The population of the study was 750 registered users of IMAP library in 2021 from which a sample of 450 representing 60 percent of the total population was randomly selected. The sample was determined using the Krejcie and Morgan table of sample size determination. The setting for the study was face to face. The instruments for data collection were questionnaire and interviews. The instruments were pilot tested with five participants. These five participants consist of three students, an expert in research methods and an instructional designer familiar with survey research method. Cronbach Alpha formula was used to determine the reliability since the items are not dichotomously scored. The reliability coefficient of 0.82 was attained which is high enough to be suitable for use. Four research questions were asked to guide the study. The research questions were answered using simple percentage count. The study revealed that, electronic learning resource is more effective in promoting learning than conventional textbook materials. There is wide range use of conventional textbook materials because of high level of digital illiteracy among the students of IMAP and that; there is no free internet service in the school. The study recommended that, Students should be encouraged to use or patronize electronic learning resources. They should also endeavor to attain some level of computer literacy. The institution should provide free internet services for the students in the school premises.

Keywords: electronic, resources, conventional, patronizing

Introduction

The use of electronic learning resources is rampant in today's digital world of education. No wonder Renandya (2002) predicted that, electronic resources will occupy a more central role in the classroom in the nearest future. Before the booming of technology integration in the classroom, most teachers usually rely only on conventional textbook resources to structure their teaching learning process however, such trend has changed since the advent of electronic technologies (Friedman, 2009).

The vision for the electronic learning resources represents a significant paradigm shift in how students read and learn. Beyond simply digitizing text, the electronic learning resources allow students to perform searches within the material, includes interactive tables and figures, hyperlinks to related topics, case examples, and links to videos (Bukky, 2006). Electronic resources also allow the students to cut and paste information from the material into other documents such as presentation slides. Some recent research indicates that a modern, more capable electronic learning resource can better help students learn complex material (Appleton, 2005). Electronic learning resources can easily be updated therefore; students are more likely to get a material with the most current theory and application. Electronic resources could offer increased portability hence; several resources can be carried on one laptop (McFall, 2005).

Electronic resources promote active learning and improve students' achievements and performance. It transforms the lecturer's role from information provider to facilitator and makes students more independent learners (Okike, 2011). Many teachers are interested in using electronic learning resources since they have some advantages over the conventional textbook resources. Some of the advantages are: it offers access to learning materials on-the-go, and provides authentic and updated information (Jarvis & Szymczyk, 2009).

Textbook materials in other are traditional part of the educational experience for many students. Textbook is simply a collection of knowledge, concepts, and principles of a selected topic or course (teachervision.com). Most textbooks are accompanied by teacher guides, which provide you with supplemental teaching resources, ideas, and activities to use throughout the academic year. An underlying assumption of the use of textbook material is that students who utilize them will have enriched academic experiences and demonstrate improved class performance. One of the benefits that stem from reading textbook a material is that, it increases the baseline understanding of the students (Skinner & Howes, 2013).

It is therefore, pertinent to note that both the electronic learning resources and conventional textbook materials are perceived to be effective in promoting learning however, this study seeks to investigate which is more effective between the two based on students perspective.

Statements of the Problem

Most students in the Polytechnic are currently addicted to using the conventional textbook materials other than the electronic learning resources which are perceived to be effective in promoting learning. Existing researches in this area in higher education settings does not reflect students' views (Simsim, 2011) therefore, this study seeks to glean students' view point on effectiveness of electronic learning resources versus conventional textbook materials in promoting learning in Isa Mustapha Agwai I Polytechnic (IMAP), Lafia

Purpose of the Study

The purpose of the study is to investigate students' perspective on effectiveness of electronic resources and conventional textbook materials in promoting learning. Specifically, the study seeks to:

- i. Know which is more effective in promoting learning between electronic resources and conventional textbook materials based on student's viewpoints.

- ii. Know why students patronize conventional textbook material more in IMAP over electronic learning resources.

Research Questions

The following research questions were asked:

- i. Which is more effective in promoting learning between electronic resources and conventional textbook materials?
- ii. Why are students patronizing conventional textbook materials over electronic learning resources?

Methodology

The descriptive Survey design was used and the setting for the study was face to face survey. The population of the study comprised of 750 registered users of the school library as at 2021. The sample for the study was 450 representing 60% of the total population. The sample size was determined using the Krejcie and Morgan table of sample size determination. The instruments for data collection were questionnaire and interviews. The instruments were pilot tested with five participants. These five participants consist of three students, an expert in research methods and an instructional designer familiar with survey research method. Cronbach Alpha formula was used to determine the reliability since the items are not dichotomously scored. The reliability coefficient of 0.82 was attained which is high enough to be suitable for use. This also indicated that, the instrument can be applied to a wide spectrum of people who have varying experiences and involvement in a learning community of professionals

The questionnaire was distributed on face to face basis to the respondents. It has two sections: Section 1 gleaned respondents' demographic information while section 2 sought to know the perspectives of the students on effectiveness of electronic learning resources versus the conventional textbook materials. The data obtained was analyze using frequencies, percentage

count and mean. The analyzed data were summarized in a tabular form to facilitate the interpretation of the findings.

Results

The following tables contain the demographic information of the respondents.

Table 1: Gender

Gender	Respondents	%
Male	284	63.1
Female	166	36.9
Total	450	100

Table 2: Age Group

Age range	Respondents	%
18-21years	320	71.1
22-25 years	80	17.8
26 and above	50	11.1
Total	450	100

Table 3: Department

Departments	Respondents	%
Pub Admin	35	7.8
MASS COMM	40	8.9
Bus Admin	27	6
Comp Sc	84	18.7
SLT	92	20.4
Accounting	52	11.6
Social Development	22	4.9
LTM	5	1.1
Hospitality Mgt	6	1.3
Maths Stat	2	0
URP	7	1.6
E/E	69	15.3
Architecture	11	2.4
Total	450	100

Research Questions

1. Which is more effective in promoting learning between electronic resources and conventional textbook materials?

Table 4 shows the descriptive statistics of students' perspectives on effectiveness of electronic learning resources versus conventional textbook materials in promoting learning.

Table 4: Electronic learning resources versus conventional textbook materials

Statements	TM	%	ER	%
Which of them offers in depth of coverage of topics?	40	8.9%	410	91.1%
Which of them provides current and updated information?	30	6.7%	420	93.3%
Which of them supplement instruction with other learning resources?	162	36%	288	64%
Which of them offers flexible and convenient reading style?	20	4.4%	430	95.6%
Which of them takes background knowledge of the student into account?	57	12.7%	393	87.3%
Which of them provides many perspectives on a concept?	46	10.2%	404	89.8%
Which of them provides higher-level questions, creative thinking and problem-solving activities?	120	26.7%	330	73.3%

Key: **TM** stands for textbook materials
ER stands for Electronic learning materials
% stands for percentage

Table 4, contains students' perspectives on effectiveness of electronic learning resources versus conventional textbook material on promoting learning. In coverage of topics, 91.1% of the respondent opined that, electronic resource is more effective in promoting learning while only 8.9% were in favor of the conventional textbook materials. In terms of providing access to current and updated information on subject matter, 93.3% of the respondents perceived electronic learning resources to be more effective compared to the conventional textbook materials. On the issue of providing supplemented instruction, 68% of the respondents agreed that, the electronic resource is more effective. On the issue of flexibility and convenient reading styles, the respondents perceived electronic learning resources to be more effective with a percentage response of 95.6%. On the issue of taking cognizance of students' background

knowledge, 87.3% of the respondent perceived electronic resources to be more effective. Also 89.8% of the respondents perceive electronic learning resource to be more effective in providing many perspectives on a concept. Finally, 73 percent of the respondents agreed that, electronic learning resource is more effective in providing higher-level questions, creative thinking and problem-solving activities compared to conventional textbook materials.

2. Why are students patronizing conventional textbook materials over electronic learning resources?

Table 5 contains the descriptive statistics of students' viewpoints on why conventional textbook material is widely used in IMAP compared to electronic learning materials.

Table 5: Why students patronize textbook materials over electronic learning resources

s/n	Statements	% Yes	%No
1	I am computer literate	18 (4%)	432(96%)
2	I can browse the internet	22(4.9%)	428(95.1%)
3	I always make use of e-books in the library	5 (1.1%)	445(98.9%)
4	I have used free internet services in the school	0(0%)	450(100%)
5	I have a laptop or desktop computer	17(3.8%)	433(96.2%)

Table 5 shows that 96% of the respondents are computer illiterate; 95.1% cannot browse the internet; 98.9% have never used or accessed resources in the library; 100% of the respondent opined that they have never enjoyed free internet services in the school, and 96.2% of the respondents does not have a lap top nor desktop computer.

List of Findings

In the course of this study, the following findings were made:

- i. Electronic learning resource is more effective in promoting learning than conventional textbook materials

- ii. There is wide range use of conventional textbook materials because of high level of digital illiteracy among the students of IMAP.
- iii. There is no free internet service in the school.

Discussion of Findings

Electronic learning resource is more effective than textbook materials in promoting learning

This is in agreement with Uzo (2006) who found that students who used digital learning resources had significantly higher perceived psychomotor and affective learning than those who used conventional textbook materials. The finding also agrees with Westhuizen (2004) who found that, students who used e-books had better acquisition of skills involved in the subject matter than those who used traditional textbook materials. The finding is also in line with Allen (2011) who found that, students who used electronic resources had an increasing internalization of positive attitudes toward the contents treated than those who did not. This finding is further in conformity with Dorup (2004) who asserted that, university students who used electronic learning resources for their group activities had better learning outcomes than those who used conventional textbook materials for the same activities.

Students patronize conventional textbook materials more because of digital illiteracy and lack free internet services in the school.

The finding is in accordance with Adedeji (2010), who found that, many tertiary institutions in Ekiti State are deficient in the availability of ICT facilities including lack of free internet services and as such many students are not aware of various emerging educational resources. The finding also agrees with Jagdoro (2004) who found that, ICT facilities are deficient in Nigerian tertiary institutions and that, even staff and students lack the technical know-how of ICT tools in education.

Conclusion

This study concluded that, Electronic learning resource is more effective in promoting learning than conventional textbook materials. There is wide range use of conventional textbook materials in IMAP because of high level of digital illiteracy among the students. There is no free internet service in the school.

Recommendations

Based on finding of this study, the following recommendations are made:

- i. Students should be encouraged to use or patronize electronic learning resources.
- ii. Students should endeavor to attain some levels of computer literacy
- iii. The institution should provide free internet services for the students in the school premises.

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