

## Use of Open Educational Resources and Print Educational Materials by Federal College of Education Katsina, Nigeria: A Study

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### ABSTRACT

This research work investigates the usage of Open Educational Resources (OER) and Print Educational Materials by the students of Federal College of Education Katsina, Nigeria. Using descriptive survey, 358 students were sampled as respondents. The research find out that while print section still remain relevant, an alarming negative attitudes by the students toward print educational materials have been found. Factors including students' learning needs and interest, infrastructural decay, outdated books stocks, under equipped nature of the print sections and the unfriendly attitudes of the librarians toward clients are responsible this attitudes. However, OER enjoy an overwhelming patronage of students. The unrestricted nature of open educational resources coupled with its ease of access, freeness, proximity, relevance and IT infrastructural advancements are what make it an educational hotcake of the time. Better funding of education, inculcation of reading culture in younger generation, massive development of print materials into open educational resources and in-service training of library staff has been recommended.

**Keywords:** Open educational resources; Print educational materials

### 1. INTRODUCTION

One of the technological breakthrough of 21<sup>st</sup> century is internet. Originated from military, internet has become an indispensable tool in the global educational dispensation. The Internet is the greatest exponent of information revolution. It is now a main source of, and the main channel for vital information. It offers the largest reservoir of vital information in the world<sup>1</sup>. The ability to use information technology is becoming increasingly important in every facet of life. The information technology used creatively, can make a difference in the way teachers teach and the way students learn<sup>1</sup>. It is clear today, that internet has become an indispensable tool in the in global educational dispensation. And has eliminated distance as the barrier to access of information. The proliferation of mobile technology especially the smartphones, has helped to make the internet more popular among students<sup>2</sup>. Today, from the comfort of their armchairs, internet connects millions of users of hundreds nationalities through the interconnectivities of thousands networks. The ocean of information in the internet in variety of formats with relative ease of access are among the reasons that bought the technology academic patronage.

In a conference hosted by UNESCO in 2002; Open Educational Resources (OER) was defined as: 'The open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial

purposes'<sup>3</sup>. However, 'Open Educational Resources are defined recently as digitised materials offered freely and openly for educators, students and self-learners to use and re-use for teaching, learning and research'<sup>4</sup>. OER include: textbooks, course materials, modules, videos, tests, software, and any other tools, materials or techniques used to support access to knowledge, audio-video lectures, sounds and music lesson plans, quizzes, syllabi, instructional modules, simulations, content, software tools, licenses and best practices<sup>5</sup>. The 'open' conceptually implies the zero cost and non-restrictive nature of the materials.

The shortage of learning and instructional materials and the general underfunding of education, coupled with the recent advance in internet infrastructure and mobile technology make OER a hotcake in Nigeria educational enterprise. The two most important aspects of openness in OER have to do with free availability over the internet and as few restrictions as possible on the use of the resource. OER have no technical barriers (undisclosed source code), no price barriers (subscriptions, licensing fees, pay-per-view fees) and as few legal permission barriers as possible (copyright and licensing restrictions) for the end-user<sup>6</sup>. OER have gain a wider use and application in Nigeria educational community, notably by the students. But only National Open University of Nigeria (NOUN) and National Teachers Institute (NTI) are credited as proponents of this technology in Nigeria.

The current students' attitudinal change toward the internet and its educational packages in recent times is enough a stimuli for a research of this kind. One of these educational

hotcake provided by internet is OER. OER include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials or techniques used to support access to knowledge<sup>7</sup>. The free encyclopedia is a fine and convincing example. The course modules of National Open University in Nigeria are another in addition to widely used e-books, webinars, quizzes, computer based tests, among others.

While tremendous success have been achieved in library services with the advent of internet in the developed world, the developing world particularly Africa is recording the opposite. Instead of intensifying the marriage between the two, the academic library today in some African countries are becoming a 'grave yard' for their vast literature.

Print materials remain the bank of Nigeria's literature through which her historical heritage, norms and values and the entire culture can be transmitted to her younger generations. The curricular contents and its implementation rely heavily on the print materials, primarily books. Most of the scholarly works: books, journals, experts and reports from research institutes are in print forms. The openness and ease at which OER is accessed due to the viral nature at which internet coverage spread, buy it the patronage of students. This in turn, affect the attitude of students toward print materials. A critical observation of the users of libraries (in Nigeria) today, revealed that 75 per cent of users preferred using their mobile phone for research to using their library resources<sup>2</sup>. They felt why bother the librarian when I can easily have access to what I am looking for online.

The paradigm shift in teaching toward student-centered approach with much emphasis on his needs and interests, and the growing patronage OER and its appealing packages enjoy in the hands of students make it an important tool in the entire academic community. The addictive and appealing nature of OER in addition to its freeness and proximity has turned it into an academic hotcake in the eye of teachers and students. But does this attitudinal shift have effect on the educational system? This research try to do that in relative to the attitudes of Nigeria students toward print materials.

Library provides physical or digital access to material, and may be a physical building or room or a visual space, or both. Library's collection can include books, periodicals, newspapers, manuscripts, films, map, prints, documents, microforms, CDs, cassettes, videotapes, DVDs, e-books, audio- books, databases and other formats<sup>8</sup>. Print educational materials dominate Nigeria academic libraries. Library had an impressively direct and significant impact on societies all over the world for thousands of years. Creating and providing an outlet for technological advancements, introducing and nurturing cultural artifacts, supporting the rise of various religions and helping to maintain a sense of historical structure<sup>9</sup>.

## 2. LITERATURE REVIEW

The proliferative and dominant role of OER in education attract many authorships and scholar works in the area with relations to the use of print counterparts.

Olunbanjo & Halisco<sup>10</sup> in their study concluded that internet is in competition with librarians. This reveals how far

internet has gone as an alternative source of information to clients as oppose to the traditional librarianship. Study by Anyanwu<sup>2</sup>, *et al.* found a positive attitude in the respondents' use of internet and with frequent usage by majority of the respondents (daily and weekly basis). Similar finding were also reported somewhere by Oriogu<sup>11</sup>, *et al.*

## 3. OBJECTIVES

The specific objectives of the study are as follows:

- (i) To find out the frequencies of visits/usage of print sections of the academic library and OER by the students
- (ii) To determine their purpose(s) of using print sections of the library
- (iii) To investigate students' attitudes toward both print educational materials and OER
- (iv) To identify the factors affecting students' use of both print educational materials and OER

## 4. METHODOLOGY

Descriptive survey were used as the research design and 5,479 Nigeria Certificate of Education (NCE) students of Federal College of Education Katsina, Nigeria, were used as research population from which 358 students were sampled. Simple stratified sampling technique were employed, all the five schools in the college were represented. Namely: School of art and social sciences, School of education, School of sciences, School of languages and School of vocational education. Close ended questionnaire was used as instrument for data collection. The questionnaire was validated by experts. The administration and retrieval of the structured questionnaires was done through collaboration with the heads of departments in the various schools and Students' Union Government (SUG). The questionnaires were retrieved two weeks after administration. Data collected was analysed using tabulated frequency count and simple percentages.

## 5. ANALYSIS

### 5.1 Demographic Variables

Table 1 shows the demographic variables of the students. Majority of the respondents fall between the age bracket of 17 to 25 year, with male student constituting (60.3 per cent) and the rest 39.7 per cent females. School of Art and Social Sciences contributed the highest number of respondents (31 per cent) followed by School of Sciences which contributed 29.6 per cent and most of them (43.5 per cent) are NCE III students.

### 5.2 Frequency of Usage

Table 2 reveals that 32.9 per cent of the students make daily and 24.9 per cent weekly usage of the print sections of academic library and about 20.7 per cent making an occasional usage of the section. In the other hand, an overwhelming majority (53 per cent) of the students access OER at least once daily and 30.5 per cent occasionally.

### 5.3 Purpose(s) of Using Print

Figure 1 reveals that majority of the students use print section only during examinations and to read newspapers.

**Table 1. Demographic variables**

Respondents		Frequency	Percentage
Gender	Male	216	60.3
	Female	142	39.7
Schools	School of art & social sciences	111	31.00
	School of education	36	10.10
	School of languages	31	8.60
	School of sciences	106	29.60
	School of vocational education	74	20.70
Level of Study	100 Level	98	27.40
	200 Level	104	29.10
	300 Level	156	43.50
Age	17-25	223	62.30
	25-Above	135	37.70

**Table 2. Frequency of usage of print Sections of the academic library and OER Packages**

Frequency of visit	Print Sections		OER	
	Frequency	Percentage	Frequency	Percentage
1-6 Hours	-	-	74	20.7
Daily	118	32.9	67	18.7
Twice daily	-	-	49	13.6
Weekly	89	24.9	57	15.9
Monthly	73	20.4	0.0	0.0
Occasionally	74	20.7	109	30.5
Not at all	04	1.10	02	0.6
Total	358	100	358	100

Only about 47.5 per cent visit the section to read books and about 66 per cent for lecture follow-up.

**5.4 Attitudes Toward Educational Materials**

Figure 2 shows a gross negative attitudes of the students toward print educational material in the print section of the library. They find information in the section outdated, less relevant, difficult to search and ineffective in sourcing educational materials.

However as shown in Figure 3, the students demonstrated a positive attitude toward OER. They find information associated with OER up-to-date and effective in making specific information available. They on the other hand find data retrieval system in OER less reliable.

**5.5 Factors Affecting Usage**

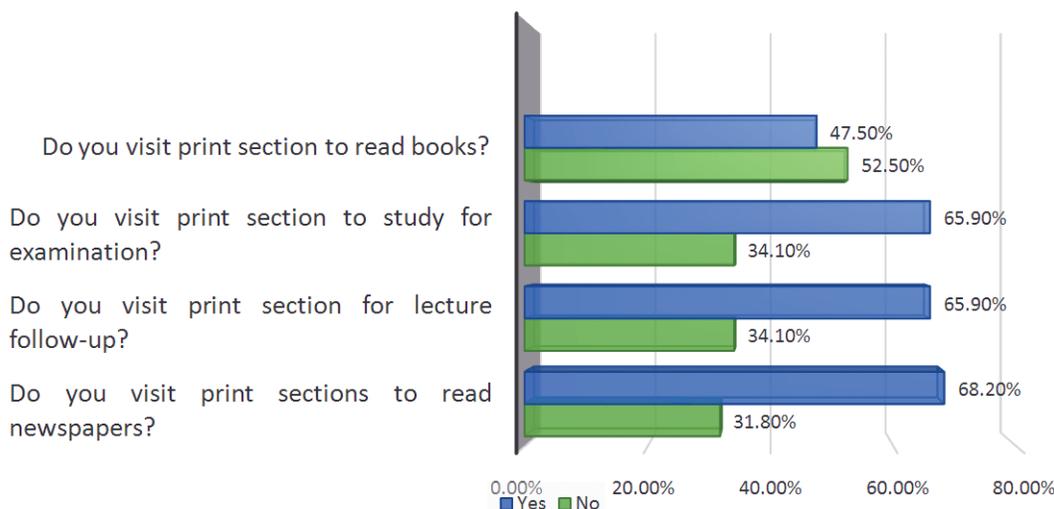
Figure 4 reveals the level of infrastructural decay and the under equipped condition of the print section of the library coupled with the under trained librarians as factors affecting students’ use print educational materials.

Figure 5 reveals delay in internet connectivity, power outage and difficulties in locating relevant information in browsing OER as challenges affecting the use of OER by the students. The students do not find referencing and citation of information sources in OER challenging.

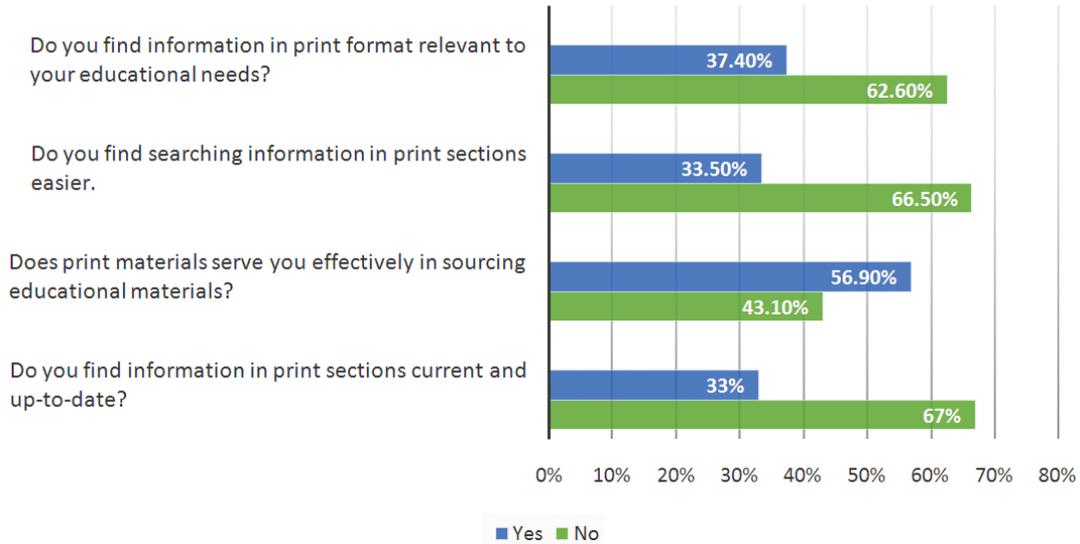
**6. FINDINGS**

The following form the major findings of the research:

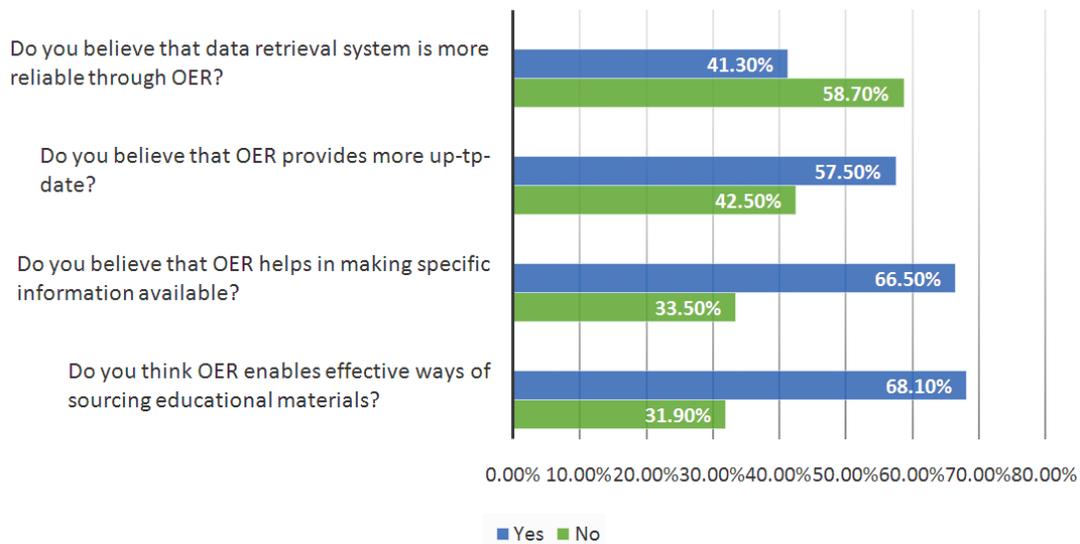
- (i) Print sections of academic library still remain relevant in Nigeria educational enterprise. About 57.8 per cent of the students visit the section at least once a week, despite students’ interest and learning habit shifting toward educational IT packages, pronouncedly OER, which enjoy students’ frequent visit (access).
- (ii) The research find out an alarming growth of negative attitudes by the students toward Print Educational Materials in academic library. Factors including infrastructural decay, outdated books stocks, under



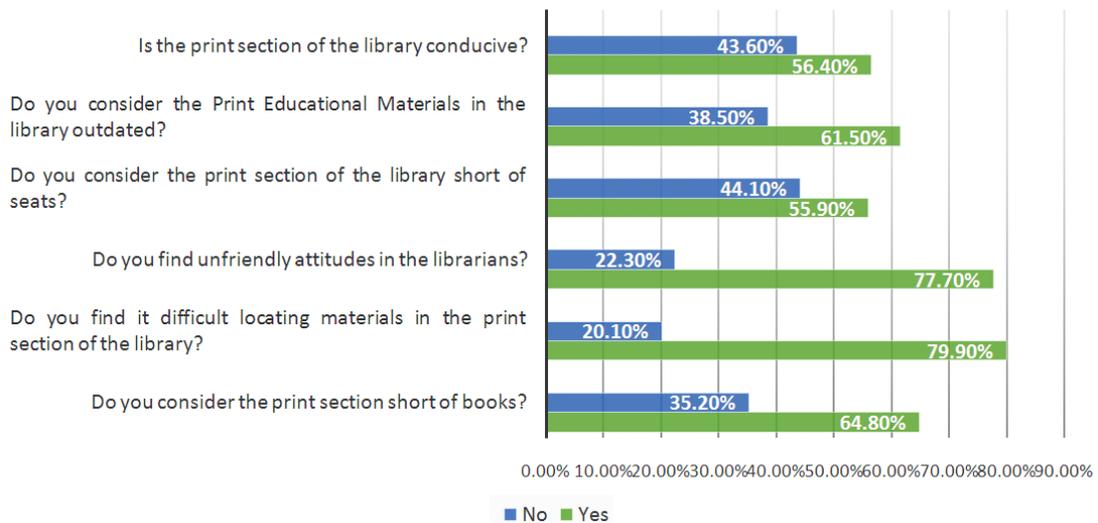
**Figure 1. Purpose(s) of using print materials of the library.**



**Figure 2. Attitudes of students toward print materials in the library.**



**Figure 3. Students' attitude to OER.**



**Figure 4. Factors affecting use of print sections of library.**

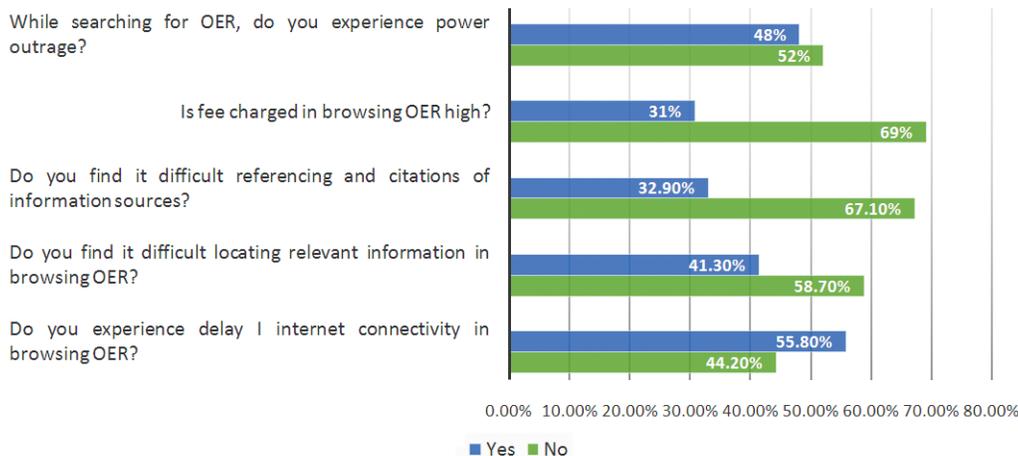


Figure 5. Factors affecting use of OER.

equipped nature of the print sections and the unfriendly attitudes of the librarians toward clients are responsible this attitudes. However, OER enjoy an overwhelming patronage of students.

- (iii) The openness, ease of access, wider internet coverages and the proliferation of mobile technologies play crucial role in the attitude change of the students toward print materials. Poor internet connectivity, cost, power outage and difficulties in locating relevant information are the challenges found associated with OER.

7. RECOMMENDATIONS

- (i) The government should undertake a novel project that would enable the development of our print materials, indigenous literatures and print artifacts in our academic libraries into OER to meet the students’ needs and interest and at the same time meet up the trend of this globalised world.
- (ii) Higher institutions of learning should support the development of OER packages for improved teaching and learning.
- (iii) All educational stake holders help in reviving the reading culture in youth and promote their patronage toward print materials.
- (iv) A better funding of the academic libraries in Nigeria institutions of learning to provide better and state-of-the-art libraries, supporting OER technologies that can meet the educational needs of our students. Like all universities, all Colleges of education and Polytechnics spend 10 per cent of the recurrent annual budget on library and library services.
- (v) Provide our librarians with in-service training to better their services toward their clients (students).

8. CONCLUSIONS

Print educational materials are tailored to address the educational needs of Nigerian students depending on the laid down objectives of the given institution and it is largely upon which the implementation of the national curriculum depend. The infrastructural decay of the print sections and the paradigm shift of the learning interest of the students is keeping them

off the print section’s register. The growing IT infrastructures, ease of access and current contents and proximity associated with OER have made it an educational hotcake. Though print stocks still remain relevant, their contribution to educational dispensation in Nigeria is still unsatisfactory.

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