

A COMPARATIVE STUDY OF PRINT AND DIGITAL RESOURCES USAGE IN FEDERAL POLYTECHNIC LIBRARIES IN THE NORTH CENTRAL STATES OF NIGERIA: IMPLICATION FOR COLLECTION DEVELOPMENT

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Article Info

Keywords: Print Resources, Digital Resources, Usage, Collection Development, Polytechnic Libraries.

DOI

10.5281/zenodo.15389578

Abstract

This study was carried out to compare print and digital resources usage in Federal Polytechnic Libraries in the North Central States of Nigeria. Four objectives and four research questions were formulated to guide the study. The study employed a descriptive survey method. Questionnaire was the instrument used for data collection. The population of the study consisted of a total number of sixty-five thousand three hundred (65,300) students and staff of federal polytechnics in the North Central states of Nigeria. The sample size was three hundred and fifty-three (353) students and staff of Federal Polytechnic Wannune, Benue State. It was revealed from the study that majority of the respondents consult more print resources such as textbooks, government publications, past projects, reference materials, journals than digital resources. The study also revealed that the convenient to use, very easy to retrieve and use and familiarity with print resources were among the top reasons given for the use of print resources. The study recommended that more funds should be allocated to the library to provide both print and digital libraries.

Introduction

Collection development makes of mars a library collection and its services. The extent to which a library collection is utilized depends on the quality relevance of the collection itself. Collection development plays a central role in the library and information resource delivery. Collection development is to the library management what neuron is to an organism. Printing technology since its invention has significantly changed information packaging and storage over the centuries before the digital method of information storage emerged (Olubiyo, 2023). Owing to this significant seismic shift, the way libraries provide access to information resources has been impacted.

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Polytechnic libraries acquire a variety of materials for preservation and use. These resources include print-on-papers media like books, journals, newspapers and maps and also audio visual materials like records, audio-cassettes, etc. Libraries maintain collections that include not only printed materials but also reproductions, map photographs, microfilms, CD-ROMS, computer software, online databases, internet, electronic books and e-journals, and also other media.

A significant number of polytechnic institutions (public/private) have sprouted in the North Central region of the country in the last 50 years, presenting a unique context for examining the usage pattern of print and digital resources. The revolutionized information environment poses a daunting task of navigating the intricacies of collection development in the region. Though technology has continued to expand significantly, print resources remain essentially necessary in the information environment.

There is a widely held belief that the development of new information technology will lead to an all-round improvement in the public availability of information (Barman, 2012). The thriving growth of electronic publications is reshaping the nature of collectors and the mode of delivering and accessing information. The traditional print resources nowadays take challenges from their counterparts in faster and timely delivery of information as well as unimproved access. The question that comes to mind is, which of these information formats do users of federal polytechnic libraries in the North Central states of Nigeria consult most. The study examined some factors that correlate with users' usage of print and digital resources in federal polytechnic libraries in the North Central states of Nigeria.

Objectives of the Study

The study was guided by the under listed objectives:

- i. To investigate the print and digital information resources available to users in federal polytechnic libraries in the North Central states of Nigeria.
- ii. To identify the preferred information resources available to users in federal polytechnic libraries in the North Central states of Nigeria.
- iii. To identify the factors that determine the resources choice of the users in federal polytechnic libraries in the North Central states of Nigeria.
- iv. To find out the obstacles encountered in the use of print and digital information resources in federal polytechnic libraries in the North Central states of Nigeria.

Research Questions

To achieve the research objectives stated above, answers to the following research questions were sought:

- i. What are the print and digital resources available to users of federal polytechnic libraries in the North Central states of Nigeria?
- ii. What are the preferred information resources available to users in federal polytechnic libraries in the North Central states of Nigeria?
- iii. What factors determine the information resources choice of the users in federal polytechnic libraries in the North Central states of Nigeria?
- iv. What are the obstacles encountered in the use of print and digital information resources in federal polytechnic libraries in the North Central states of Nigeria?

Literature Review

The literature review included critical themes on the topic of research, such as collection development, print resources and digital resources.

Collection Development

Collection development covers several activities related to the development of library collections (through which print and digital resources come into the library), including selection, determination and coordination of selection policy, assessment of the needs of users and potential users, budget management, identification of collection needs, community and user outreach and liaison, planning for resources sharing, and perhaps e-resources contract review and negotiation (Johnson, 2014).

Print Resources

Print information resources are information resources in physical and tangible formats. Examples of print information resources are books, journals, pamphlets, newsletters and reference sources. They also include projected aids (Mercer & Ponticell, 2012). Historically, libraries have been dependent on printed materials to build their collection. In a library, we find a variety of printed materials in various forms which are: books, periodicals, newspaper, reference books, dissertations and theses, standards, patents, map and reports, etc (Gakibayo & Ikoja-Odongo, 2013).

Digital Resources

Digital information resources or electronic information resources (EIRS) are another format of information provided by polytechnic libraries. This group of information resources is gaining popularity due to technological advancement and has numerous advantages too (Friday & Chinwe, 2023). Conceptually, EIRS are referred to any source of information encoded and made available for access directly or remotely through the use of computer and other electronic devices accessed via the internet and the CD ROM resources since they too can be accessed online (Auwal & Maidabino, 2021). The present day academic library services are focusing more on the area of digital, virtual or libraries without borders, all of which have transformed academic libraries and led to transition and transformation in the academic library environment. The transition and transformation are accompanied by sophistication in the changing pattern in the information needs of users, which is growing rapidly (Iyanda & Opele, 2015).

Electronic sources of information are information sources that the libraries provide access to in an electronic format. They include databases, e-book collections, digitalized primary resources, statistical sources and more. They are articles available through academic one file encyclopedias. Electronic resources or e-resource are materials in digital format accessible electronically; they are also referred to as online databases, which include articles from magazines, encyclopedias, or professional publications which can be accessed on internet-connected devices such as computers, tablets or smartphones as well as text information, audio and video clips (Torma & Valkker, 2004).

Research Methodology

The study employed a descriptive survey design. This kind of research design is good considering the area of coverage and large population involved in the study. The area of the study was North Central Nigeria. The population of the study comprised sixty-five thousand three hundred (65,300) students and staff of federal polytechnics in the North Central states of Nigeria. The sample size of three hundred and fifty-three (353) students and staff were used for the study. The choice of the sample size of three hundred and fifty-three (353) students and staff of Federal Polytechnic, Wannune, Benue State, Nigeria was considered using a simple random sampling technique. The simple random sampling technique helped the researcher to obtain the most handily and available and willing to serve participants in the study. Thus, there was no bias as respondents voluntarily participated. The instrument used was a self-developed structured questionnaire. Questionnaires were used to collect numeric data to achieve the objective of the topic under study. A total of three hundred and fifty-three (353) copies of questionnaires were given to three (3) experts to validate, before being distributed to

the respondents, and three hundred (300) questionnaires were returned and filled correctly. This gave a response rate of 84.9%. The method of data analysis was descriptive statistical analysis of data to answer the research questions; frequency counts and percentages were generated in tables. The essence was to make the presentation clear and easy for understanding.

Data Analysis and Discussion

Table 1: Questionnaire Response Rate

Number of Questionnaires Administered 353	Number of Questionnaires Returned 300	Percentage of Questionnaires Returned 84.9%
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As revealed in Table 1 above, a total number of 353 copies of questionnaires were distributed; 300 (84.9%) copies were retrieved and they were found useful.

Analysis of the Respondents Bio-Data

Table 2: Gender Distribution of the Respondents

Gender	Frequency	Percentage %
Male	201	67%
Female	99	33%
Total	300	100%

Table 2 shows that male respondents (201) (67%) in this study were more than their female (99) (33%) counterparts.

Research Question One

What are the print and digital resources available to library users of federal polytechnic libraries in the North Central states of Nigeria?

Table 3: Print and Digital Resources Available and Used by the Library Users

Resources	Yes		No	
	f	%	f	%
Textbooks (Print)	300	100	-	-
Newspaper (Print)	55	18.4	245	81.6
Journals (Print)	223	74.4	77	25.6
Magazines (Print)	67	22.4	233	77.6
Reference Materials	250	83.4	50	16.6
Handbook	15	5	285	95
Government Publications	279	93	21	7
Past Projects	255	85	45	15
Wikipedia	-	-	300	100
OPAC	-	-	300	100
CD – ROM	189	63	111	37
E – Projects	-	-	300	100
Internet Sources	155	51.6	145	48.4

Table 3 shows the various print and digital resources usage of information consulted by the respondents. The data shows that all the respondents use textbook (300) (100%). None of the respondents disagreed to using textbooks. Fifty-five (55) respondents, representing 18.4%, agreed that they read newspaper while 245 respondents, representing 81.6%, disagreed. Two hundred and twenty-three (223) respondents, representing 74.4%, agreed that they use journals while 77 respondents, representing 25.6%, disagreed. 67 respondents, representing 22.4%, agreed that they use magazines while 233 respondents, representing 77.6%, disagreed. 250 respondents, representing 83.4%, agreed that they use reference materials while 50 respondents, representing 16.6%, disagreed. 15 respondents, representing 5%, agreed that they use handbook while 285 respondents, representing 95%, disagreed. 279 respondents, representing 93%, agreed that they use government publications while 21 respondents, representing 7%, disagreed. 255 respondents, representing 85%, agreed that they use past projects while 45 respondents, representing 15%, disagreed. None of the respondents disagreed to using Wikipedia. None of the respondents disagreed to using OPAC. 189 respondents, representing 63%, agreed that they use CD – ROM while 111 respondents, representing 37%, disagreed. None of the respondents disagreed to using E – Projects. 155 respondents, representing 51.6%, agreed that they use internet sources while 145 respondents, representing 48.4%, disagreed.

74.4%, consulted journals while 77 respondents, representing 25.6%, disagreed. Sixty-seven (67) respondents, representing 22.4%, read magazines while 233 respondents, representing 77.6%, disagreed. Two hundred and fifty 250 respondents, representing 83.3%, agreed that they consult reference materials. Fifteen (15) respondents, representing 5%, agreed that they read handbooks while 285 respondents, representing 95%, disagreed. Two hundred and seventy-nine (279) respondents, representing 93%, agreed that they used Government publications while 21 respondents, representing 7%, disagreed. Two hundred and fifty-five (255) respondents, representing 85%, agreed that they consulted past projects while 45 respondents, representing 15%, disagreed. None of the respondents agreed that they use Wikipedia. No respondent agreed on using OPAC. One hundred and eighty-nine (189) respondents, representing 63%, affirmed that they use CD-ROM while 111 respondents, representing 37%, disagreed. No respondent indicated that they use E-Projects. One hundred and fifty-five (155) respondents, representing 51.6%, agreed that they use internet sources while 145 respondents, representing 48.4% disagreed on using internet sources.

Research Question Two

What are the preferred information resources available to users in federal polytechnic libraries in the North Central states of Nigeria?

Table 4: Preferred Information Resources Used by the Users

Sources	Yes f	%
Print	256	85.4
Electronic	44	14.6
Total	300	100

Table 4 has to do with the preferred mode of information source the respondents are interested in using. Two hundred and fifty-six (256) respondents, representing 84.4%, agreed to the use of print sources of information while 44 respondents, representing 14.7%, disagreed with the preference of electronic sources of information.

Research Question Three

What factors determine the information resources choice of the users in federal polytechnic libraries in the North Central states of Nigeria?

Table 5: Factors that Determine Information Resources Choice of the Users

Factors	Print				Digital			
	Yes f	%	No f	%	Yes f	%	No f	%
Easily accessible	210	70	90	30	154	51.4	146	48.6
Do not require special skill or training to use	255	85	45	15	115	38.4	185	61.6
Very easy to retrieve and use	270	90	30	10	220	73.4	80	26.4
It is more specific/direct to use	250	83.4	50	16.6	180	60	120	40
Familiarity	289	96.4	11	3.6	174	58	126	42
Saves time	257	85.6	43	14.4	200	66.6	100	33.4
Very cheap	254	84.6	46	15.4	67	22.4	233	77.6
Current timely and up to date	207	69	93	31	189	63	111	37
Convient to use	275	91.6	25	8.4	215	71.6	85	28.4

Table 5 provides data that shows the factors that determine the information resources users choose to use. Two hundred and ten (210) respondents, representing 70%, agreed that they use print resources because they are easily accessible while 90 respondents, representing 30%, disagreed. One hundred and fifty-four (154) respondents, representing 48.6%, disagreed. Two hundred and fifty-five (255) respondents, representing 85%, agreed that they use print resources because they do not require special skill or training to use, while 45 respondents, representing 15%, disagreed. One hundred and fifteen (115) respondents, representing 38.4%, agreed that they use digital resources because they do not require special skill or training to use, while 185 respondents, representing 61.6%, disagreed. Two hundred and seventy (270) respondents, representing 90%, agreed that print resources are very easy to retrieve and use while 30 respondents, representing 10%, disagreed. Two hundred and twenty (220) respondents, representing 73.4%, agreed that they make use of digital resources because it is very easy to retrieve and use, while 80 respondents, representing 26.4%, disagreed. Two hundred and fifty (250) respondents, representing 83.4%, agreed that print resources are more specific/direct to use, while 50 respondents, representing 16.6%, disagreed. One hundred and eighty (180) respondents, representing 60%, agreed that they use digital resources because it is more specific/direct to use, while 120 respondents, representing 40%, disagreed. Two hundred and eighty-nine (289) respondents, representing 96.4%, agreed that they use print resources because of its familiarity, while 111 respondents, representing 3.6%, disagreed. One hundred and seventy-four (174) respondents, representing 58%, agreed that they use digital resources because of its familiarity, while 126 respondents, representing 42%, disagreed. Two hundred and fifty-seven (257) respondents, representing 58.6%, agreed that they make use of print resources because it saves time, while 43 respondents, representing 14.4%, disagreed. Two hundred (200) respondents, representing 66.6%, agreed that they make use of digital resources because it saves time, while 100 respondents, representing 33.4%, disagreed. Two hundred and fifty-four (254) respondents, representing 84.6%, agreed that they make use of print resources because they are very cheap, while 46 respondents, representing 15.4%, disagreed. Sixty-seven (67) respondents, representing 22.4%, agreed that they make use of digital resources because they are very cheap while 233 respondents, representing 77.6%, disagreed. Two hundred and seven (207) respondents, representing 69%, agreed that they make use of print resources because they are current/timely and up-to-date, while 93 respondents, representing 31%, disagreed. One hundred and eighty-nine (189) respondents, representing 63% agreed of using digital resources because they are current/timely and up-to-date, while 111 respondents representing (37%) disagreed. Two hundred and seventy-five (275) respondents, representing 91.6%, agreed that they make use of print resources because they are convenient to use, while 25 respondents, representing 8.4% disagreed. Two hundred and fifteen (215) respondents, representing 71.6%, agreed that they make use of digital resources because they are convenient to use, while 85 respondents, representing 28.4, disagreed. It is crystal clear with the result in the table that users of the federal polytechnic libraries prefer to use print information resources.

Research Question Four

What are the obstacles encountered in the use of print and digital information resources in federal polytechnic libraries in the North Central states of Nigeria?

Table 5: Obstacles Encountered in the Use of Print Resources

Problems	Yes		Print	
	f	%	f	%
Lack of books in the Library	240	80	60	20
Time wasting	47	15.6	253	84.4

Not easily	70	23.4	230	76.6
Accessible obsolete materials	202	67.4	98	32.6
High cost of print acquisition	298	99.4	2	0.6

Table 5 presents the problems militating against users of print resources in Federal Polytechnic libraries in the North Central states of Nigeria. Two hundred and forty (240) respondents, representing 80%, affirmed that lack of books in the library is a problem faced by them when using the library while 60 respondents, representing 20%, disagreed. Forty-seven (47) respondents, representing 15.6%, agreed that using print resources in the library is time-wasting while 253 respondents, representing 84.4%, disagreed. Seventy (70) respondents, representing 23.4%, agreed that print resources are not easily accessible while 230 respondents, representing 76.6%, disagreed. Two hundred and two (202) respondents, representing 67.4%, agreed that the problem they face when seeking information is that the materials are obsolete while 98 respondents, representing 32.6%, disagreed. Two hundred and ninety-eight (298) respondents, representing 99.4%, agreed that lack of printed resources is a result of high cost of acquisition while 2 respondents, representing 0.6%, disagreed.

Table 6: Obstacles Encountered in the Use of Digital Resources

Problems	Yes f	%	Digital f	%
Lack of information technology knowledge/skills	256	85.4	44	14.6
Erratic Power Supply	230	76.6	70	23.4
Slow network	270	90	30	10
Too expensive	24	8	276	92
Difficulties in retrieving specific information	60	20	240	80

Table 6 presents the data on some obstacles militating against the use of digital resources in federal polytechnic libraries in the North Central states of Nigeria. Two hundred and fifty-six (256) respondents, representing 85.4%, lack information technology knowledge/skills in using digital resources while 44 respondents, representing 14.6%, disagreed. Two hundred and thirty (230) respondents, representing 76.6%, agreed that one of the problems they face is erratic power supply while 70 respondents, representing 23.4%, disagreed. Two hundred and seventy (270) respondents, representing 90%, agreed that the problem they face using digital resources is slow network while 30 respondents, representing 10%, disagreed. Twenty-four (24) respondents, representing 8%, agreed that the problem they face is that digital resources are too expensive while 276 respondents, representing 92%, disagreed. Sixty (60) respondents, representing 20%, agreed that they face difficulties in retrieving specific information through digital resources while 240 respondents, representing 80%, disagreed.

Summary of Findings

1. The study revealed that the majority of the users consult print resources rather than digital resources.
2. The study revealed that convenient to use, very easy to retrieve and use, and familiarity with print resources are among the reasons they preferred to use print resources.
3. It was revealed from the study that the majority of the respondents consult more print resources such as textbooks, Government publications, past projects and reference materials.

4. The study also showed that the obstacles that users face while consulting both print and digital information resources are lack of books in the library, obsolete nature of materials, high cost of print acquisition, and lack of information technology knowledge/skills, erratic power supply and slow network.

Conclusion

Comparing print and digital resources usage in federal polytechnic libraries in the North Central states of Nigeria was the aim of the study. The findings of the study shows that print resources are still the first choice of the users. Despite the digital age, most people in the developing countries still are not totally used to the internet and other ICT gadgets and, as such, they are more comfortable consulting print resources than digital resources, as indicated from the findings of the study. In a nutshell, it can be said that although print resources have not loosened their strong hold over the users' choice, side-by-side, digital resources have also made their strong presence in the information world.

Recommendations

1. The polytechnic management and library administrators should organize at regular intervals seminar and workshop to sensitize the users on the need to imbibe the habit of not just consulting print resources but also digital resources.
2. Polytechnic libraries should be well funded so as to meet users' information needs whether in print or digital form.
3. ICT facilities should be made available at the library.
4. Staff and students should undergo various ICT training and also be given ICT gadgets to enable them remain relevant in the digital age.
5. The management of the school should make provision for a standby generator and also install solar light in the library to put an end to the problem of erratic power supply.

Acknowledgement

I would like to acknowledge the management of Federal Polytechnic, Wannune for giving me an ample opportunity to be an IBR beneficiary. I am also very grateful to Tetfund Management, Abuja, Nigeria for sponsoring the research work.

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