

INFORMATION LITERACY SKILLS FOR RESEARCH OUTPUT OF ACADEMIC STAFF IN POLYTECHNICS IN DELTA AND EDO STATE

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Abstract

The study investigated information literacy skills as correlates of research output of academic staff in Polytechnics in Delta and Edo States. Correlational and descriptive survey research design was used for the study. The population of the study is 3,101 lecturers in the 7 Polytechnics in Delta and Edo states. The study adopted quota-sampling techniques. Questionnaire was used for data collection. Data were analyzed using descriptive statistical tools. Hypotheses was tested using Pearson Product-Moment Correlation Coefficient (PPMCC) at 0.05 level of significance. The study found that level of research output of the lecturers was high; the level of information literacy skills of the academic staff was high; the extent to which Polytechnic academic staff information literacy skills affect their research output was high; the extent of scholarly publishing of lecturers was high; and there is significant relationship between information literacy skills and research output of lecturers. The study recommended that young and newly employed academics should be trained to fully acquire the information literacy skills for research output. The Polytechnics administration should endeavor to give research grants and incentives to the lecturers as these will serve as an encouragement towards higher research commitment and improved delivery of academic services. The study established that there is a high correlation between information literacy skills and research output of academic staff in Polytechnics in Delta and Edo states.

Keywords: Information Literacy, Skills and Research Output.

Introduction

The Polytechnic is a citadel of learning where students acquire knowledge in different discipline to increase their knowledge. It is an institution of higher learning which provides facilities for teaching and research; and it is authorized to hold examination and grant National Diploma (ND) and Higher National Diploma (HND) (Sanyal, 2012).

Research output refers to the work that has been researched upon and published in journals, book chapters, monographs, articles, technical reports, bulletin, conference papers, working papers, short communication papers, patents and standards (Rashid, 2011).

Research outputs are used as yardstick for measuring success in an academic circle which in turn may lead to promotion and probably increase in salary.

Research is one of the most important objectives of the universities and the most veritable tools for the accomplishment of quality research in any university are members of academic staff. Academics perform multiples and overlapping roles which include teaching, knowledge, production, administration and enlightenment of the public and extramural activities (Kyvik, 2008).

Yusuf (2015) notes that “publish and perish” is a popular cliché among academics in the Nigerian Tertiary Institution settings. According to him, this phrase underscore the importance attached to research and publication in any Polytechnic.

According to American Library Association (2008) information literacy is becoming increasingly more important in our world that is rapidly evolving through the growth and proliferation of technological and information resources. As a result, information users are faced with countless information choices and must decide which resources to use in the acquisition of information.

Furthermore, American Library Association (2008) also determine the authenticity, validity and usability of the information they discover. The ability to access, evaluate and use information is a prerequisite for lifelong learning and a basic requirement for the information society.

Objectives of the Study

The general objectives of this study is to examine information literacy skills as correlates of research output of academic staff in Delta and Edo states. Specifically, this study seeks to:

1. Determine the extent of research output of academic staff in Polytechnics in Delta and Edo States.
2. Examine the extent of information literacy skills of academic staff in Polytechnics in Delta and Edo States
3. Ascertain the extent which Polytechnic academic staff information literacy skills affect their research output.
4. Find the relationship between information literacy skills and research output of academic staffs in Polytechnics in Delta and Edo States.

Research Questions

The following research question guided the study:

1. What is the extent of research output of lecturers in Polytechnics in Delta and Edo States?
2. What is the extent of information literacy skills acquired by academic staff in Polytechnics in Delta and Edo States?
3. To what extent do polytechnic academic staff information literacy skills affect their research output.
4. What is the relationship between information literacy skills and research output of academic staffs in polytechnics in Delta and Edo State.

Hypotheses

The following null hypothesis was tested at 0.05 level of significance.

1. There is no significant relationship between information literacy skills and research output of lecturers in polytechnics in Delta and Edo states.

Review of Related Literature

Research output is a means by which academics contribute knowledge to the existing body of knowledge. this can be in form of journal articles, technical reports, books or chapters of book. The quality of research could be measured, according to Popoola (2002) by counting the numbers of books published, or journal articles produced over a period. Oduwale and Ihizama (2007) used survey method to ascertain research output of lecturers in Nigeria Agricultural Research Institutes. They found out that the lecturers' research output, although generally low, was related to their work experience.

In their contribution, Ashoor and Chaudhry (2013) found out that the 1,082 papers covered in their study of Saudi scientists were published in 29 different countries. Ashoor and Chaudhry's study also posited that although the scientists published in 442 different journals, only 37 of the journals carried the bulk of the papers, constituting the core scientific journals for Saudi libraries. The result further indicated that Saudi researchers preferred to publish their papers in the USA, which had 546 of the papers (52%) while UK had 252 (23.3%).

Okenedo's (2015) findings on the research and publication productivity of lecturers in public universities in South-West Nigeria, revealed that publication productivity of lecturers was high with the period of 2009-2014, furthermore when ranking the

publication by types Okenedo further discovered that articles in learned journals ranked highest followed by conference proceedings and chapters in books.

The reasons for this may be as a result of the fact that journal articles are easy, less time consuming and cheaper to publish compared to textbooks, monographs, etc. these findings were also in agreement with the findings of Ogbomo (2010) who reported that lecturers most often publish in referred and non-referred journals in the LIS Field.

Atemna (2016) emphasized that it is not always easy for scholars in developing countries to get articles published in foreign journals because many of their papers address local issue and problems, which are unlikely to interest overseas audiences. This accounts partly for the high rejection rate of manuscripts sent abroad for publication.

Ibeun (2015) found out that academic lecturers publish to meet the promotion and tenure demands of their respective institutions so as to gain faculty status. Furthermore, on the importance of research productivity, Ray (2015) stated that it enables lecturers to share insights, demonstrate academic scholarship, gain recognition for creative thinking and finally to develop a reputation for expertise in a specialty area.

Information literacy is a vital ability in the modern information world which enables, personal, economics, social and cultural development. In the midst of the information explosion, ability to access, retrieve and evaluate information has

constituted a significant part of today's definition of literacy. Otobrise (2015) views information literacy as a term that enables people to recognize the value of information and use it to make informed choices in their personal professional and academic lives.

Anunobi and Udem (2015) studied undergraduates in Singapore found that students were unable to formulate a search effectively as they tended to make a very literal interpretation of the question and started looking for methods that mention those words listed in the question. Apart from the need to access information, academic staff also have the need to evaluate the accessible information. Evaluation of information and its sources is an important skill needed all the time for research. According to Islam and Tsuji (2010), learning how to determine the relevance and authority of a given resource is one of the core skills of the research process.

Scholarly publishing and information literacy are topics of interest within the academic library community. Researchers, majorly librarians are now beginning to explore synergies between these topics. Association of College and Research Librarians (ACRL) (2015) noted that the nature of scholarly communication is changing in ways that have effects on many aspects of academic librarianship including information literacy. Also Hall (2015) noted that much of the work around scholarly publishing and information literacy targets new learning outcomes for developing skills for librarians working with these communities. Researchers are

these days experiencing a high degree of pressure to publish and increase their research outputs. McClellan, Determining, Martinez and Johnson (2017) asserted that the ability to publish research outputs through the most appropriate outlet is vital for researchers in order to maximize the impact of their research. Scholarly publishing is an extension of information literacy. It emphasizes academic research and scholarship and at the same time advocates education on scholarly publishing.

According to McClellan, Detmering, Martinez and Johnson (2017), most scientific and scholarly journals and many academic and scholarly books, though not all are based on some form of peer review or editorial refereeing to qualify texts for publication.

Polytechnic lecturers are expected by all standards, to have scholarly publishing literacy skills. Meanwhile, at the inception, publishing was very relatively low in Nigeria. According to Association of College and Research Libraries (2015) the reason for the relatively low publishing was because education was in its infancy.

The early missionaries and foreign publishers who pioneered the publishing industry in Nigeria, a great proportion of the books used in the country are still published abroad, although efforts have been intensified in publishing for the primary, secondary and tertiary schools.

Research Methodology

The study employed the descriptive survey research design. The population of this study is 3,101 polytechnic academic staff.

This comprises all the polytechnic academic staff in Delta and Edo states. The total respondents were drawn from seven polytechnics; Federal Polytechnic, Auchi; Delta State Polytechnic, Ogwashi-Uku; Delta State Polytechnic, Ozoro; Delta State Polytechnic, Oghara; Shaka-Momodu Polytechnic, Benin-City, Light House Polytechnic, Benin-City and Kings Polytechnic, Ubiaja. The sample size of this study is 620 respondents. Firstly, four faculties/ colleges/ schools were purposely selected from each polytechnic. These faculties are common to the Polytechnic used for the study. Secondly, the quota sampling techniques was employed to select a sample size of 620 respondents.

The instrument used for the collection of data was the questionnaire.

The data was analyzed using descriptive statistical tools. Statistical mean was used to answer research question 1, 2 and 3. Pearson Product Moment Correlation Coefficient (PPMCC) was used to test the formulated hypothesis.

Data Analysis and Discussion

Out of 620 copies of questionnaire that were administered 494 (80%) copies were retrieved.

Research Question 1: What is the research output of academic staff in Delta and Edo States?

Level of Research Output	11 and Above	6-10	1 – 5	None	Mean
Total number of textbooks published	283	52	53	106	3.04
Chapter in books	259	62	95	77	3.03
Authored books and journal articles	215	115	59	105	2.87
Number of articles in learned journals	157	136	162	39	2.83
Paper published in conference proceedings	146	198	49	101	2.78
Book reviewed	204	75	113	102	2.76
Bibliographies compiled	182	96	106	110	2.69
Monographs	163	119	52	160	2.57
Occasional paper	84	202	78	130	2.48
Technical paper	74	201	59	160	2.37
Working paper	40	213	69	170	2.23
Average Mean					2.70
Criterion Mean					2.50

Table 1 shows the research output of the academic staff. The result shows that the level of research output of lecturers in polytechnics in Delta and Edo states is

high. This is as a result of the fact that the average mean (2.70) is higher than the criterion mean (2.50).

Research Question 2: What is the extent of information literacy skills of academic staff in polytechnics in Delta and Edo States?

Level of Information Literacy Skills	VHL	HL	LL	VLL	Mean
I can use a number of search engines when sourcing information	423	69	2	0	3.86
I am able to define my specific information needs prior to the search	407	83	4	0	3.82
I can conveniently access needed information from variety of sources for problem solving independently.	379	115	0	0	3.77
I can evaluate and integrate new information into an existing body of knowledge.	345	148	1	0	3.70
I have good internet navigation skill	345	146	4	0	3.70
I can use information retrieved from different sources effectively	331	160	3	0	3.66
I can synthesize and select online/offline materials for my use.	253	240	1	0	3.51
I can effectively use Boolean search techniques	241	252	1	0	3.49
I can select materials on topic accurately	234	258	2	0	3.47
I can store information from electronic sources by printing or saving to disk/flash drive	236	246	12	0	3.45
I can effectively use the library OPAC to search for specific library material.	231	124	119	0	3.27
Average Mean					3.61
Criterion Mean					2.50

Note: VHL - Very High Level, HL – High Level, LL – Low Level, VLL – Very Low Level.

Table 2: Shows the extent and level of information literacy skills of librarians in polytechnic libraries in Delta and Edo States, Nigeria. I can use a number of search engines when sourcing information has the highest mean (3.86) with an

aggregate mean of 3.61, which is greater than the criterion mean of 2.50, it can be concluded that the level of information literacy skills of lecturers in Polytechnics is Delta and Edo States is high.

Research Question 3: To what extent do polytechnic academic staff information literacy skills affect their research output?

Table 3: Extent to which Information Literacy Skills affects Academic Staff Research Output

Literacy Skills/Academic Staff Research Output	VHE	HE	LE	VLE	Mean
Ability to use a number of search engines when sourcing information.	442	52	0	0	3.0
Ability to define specific information needs prior to the search.	432	60	2	0	3.89
Ability to conveniently access needed information from variety of sources for problem solving.	420	74	0	0	3.85
Ability to evaluate and integrate new information into an existing	411	80	3	0	3.83

body of knowledge.					
Having good internet navigation skill.	323	157	14	0	3.64
Ability to use information retrieved from different sources effectively.	311	183	0	0	3.63
Ability to synthesize and select online/offline materials for my use.	311	183	0	0	3.63
Ability to effectively use Boolean search techniques.	304	189	0	0	3.61
Ability to select materials on topics accurately	341	80	73	0	3.61
Ability to store information from electronic sources by pointing to saving to disk/Flash drive	243	185	65	1	3.36
Ability of effectively use the library OPAC to search for specific library materials	235	117	142	0	3.18
Average Mean	3.64				
Criterion Mean	2.50				

Table 3, Shows the extent to which polytechnics academic staff information library skills affect research output. Ability to use a number of search engines when sourcing information has the highest mean value (3.90). The average mean (3.64) is greater than the criterion mean of 2.50. This means that polytechnics academic

staff information literacy skills affect their research output to a high extent.

Testing of Hypothesis

There is no significant relationship between information literacy skills and research output of academic staff in polytechnics in Delta and Edo States?

Table 4: Relationship between Information Literacy Skills and Research Output

		Extent of information literacy skills of Academic staff	Extant of Research output of Academic staff in polytechnic
Extent of information literacy skill of academic staff	Pearson correlation sig (2-tailed) N	1	.244**
			.000
		494	494
Extent of research output of academic staff in polytechnics	Pearson correlation sig (2-tailed) N	.244**	1
		.000	
		494	494

From Table 5, Pearson Product moment correlation $r = 0.244$. Since the significant value (Sig 2-tailed) is 0.000 (which is less than 0.05), it can be concluded that there is a significant relationship between information literacy skills and research output of lecturers in Polytechnics in Delta and Edo States.

Discussion of the finding

On level of research output of lecturers in Polytechnics Libraries in Delta and Edo States, Nigeria the respondents indicated that the total number of textbooks published, chapters in books, authorize book and journal articles, number of articles in learned journals, papers published in conferences proceedings and

books review was high. The findings are in agreement with the findings of Popoola (2002) who used questionnaire to find out the research output of social scientists in Nigerian Universities in preceding three years by types of publication Popoola's findings showed that the research output of social scientists in Nigerian Universities in preceding three years by typed of publication, Popoola's findings shows that the research output of the social scientist. Such as books, chapters in books, journalist does conference proceedings, and technical reports was tight.

On the extent of information literacy skill of Academic staff, the study shows that the level of information literacy skill of lecturers in polytechnics is high, the respondents revealed that they could use a number of search engines when sourcing information. A link exist between the findings of this study and that of Otoberise (2015) who submitted that in the midst of the information explosion, ability to access, retrieve and evaluate information has constituted a significant part of today's definition of Literacy and this has improve the level of information Literacy generally across the world. The result of the analysis on the extent to which information Literacy skills affects academic staff research output indicated that information Literacy skills affect academic staff research output to a high extent. These findings are in agreement with the finding of Islam and Tsuyi (2010) who found that learning how to determine the relevance and authority of a given resource is one of the core skills by the research process. On the relationship between information Literacy skills and Research output of

Academic staff the study revealed that there is significant relationship between information Literacy skills and research output of academic staff in Polytechnics in Delta and Edo state. This implies that an increase in information Literacy skills leads to a corresponding increase in the lecturers research output Otoberise (2015) has earlier found out that one of the numerous means through which academics can increase their research productivity is by improving their information literacy skills and by recognizing the value of information and use it make informed choice in their personal, professional and academic lives. The strong and positive relationship between information literacy skills and research output was also acknowledged by Anunobi and Udem (2015) and Ojedokun (2007) who posited that LIS postgraduate students need sufficient possession of information literacy skills in order for them to have excellent performance in their postgraduate education.

American Library Association (ALA) (1989) affirmed that Information Literacy Skill is fundamentally requested if the level of research is to be improved.

Conclusion

The study provided empirical data on variables that predicted the research output of academic staff in polytechnics in Delta and Edo States, Nigeria. In light of the findings obtained, the following conclusions were made; The level of research output of Lecturers is high. The level of information Literacy skills of Academic staff in Polytechnics in Delta and Edo state is high. The extent to which

Polytechnics lecturer's acquisition of information literacy skills affected their research output is high. There is significant relationship between information literacy skills and research output of academic staff in polytechnics in Delta and Edo State, Nigeria. Meaning that an increase in information literacy skill of academic staff may lead to corresponding increase in research output of academic staff in polytechnics in Delta and Edo State, Nigeria.

Recommendations

In line with the findings of this study, and in order to improve the research efforts of the lecturers in spite of the extent of their information literacy skills, the following recommendations are made.

1. Academic staff in the polytechnics should either maintain or ameliorate their level of research which could spur the quality and quality of their research.
2. The polytechnics management should ensure that there are enough lecturers in the polytechnics so that there would not be decline in the research output due to shortage of academic staff.
3. The lecturers must continue to work together for the purpose of accessing the current work schedule and polytechnic policies in order to identify and prioritize some ways to ameliorate the work environment to favour their active research commitment.
4. The lecturers should be trained on the modern ways of carrying out research. They should be motivated towards improved research output through sponsorship of prolific research projects, reduction of work pressure,

improvement of research infrastructure and proper funding of the Universities.

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