

Awareness and Utilisation of Information Resources Among Polytechnic Lecturers In Nigeria

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Abstract

This study examined the relationship between awareness of existence of information resources and its utilisation among Polytechnic lecturers in Nigeria. The descriptive survey research design involving the use of questionnaire as the research instrument was adopted. Data were analysed using frequencies, percentages, means, standard deviations, and simple correlation. The study found that majority of Polytechnic lecturers had awareness of most of the information resources identified in the study. Among the mostly utilised resources were textbooks (93.5%), journals (80.4%), conference proceedings (56.5%), and encyclopedias (52.2%). A weak positive correlation ($r=0.37$, $p=0.012<0.05$) existed between awareness and utilisation of resources. Deliberate efforts by Polytechnic librarians in creating awareness on various information resources available for teaching was suggested as the way forward.

Introduction

Information resources utilisation as a concept boasts of extensive literature but suffers a lot of diversifications in its definition. Researchers from different disciplines have presented more than four hundred definitions of this term, ranging from information science, informatics, informology and informatology to information management and management information systems. Economists, accounting researchers as well as management scientists have also made the concept of information resources a subject of study, while journals, conferences and symposia have been devoted to the topic of information resources (Mckinbutt, 2001). The numerous definitions notwithstanding, there remains considerable controversy over the significance of the concept of information resources.

Within the context of library and information studies, information resources can be described as including any information in electronic, audio-visual or physical form, or any hardware or software that makes possible the storage and use of information (University of Utah, 2010). It is often said that information is knowledge. Given the variety of purposes to which knowledge can be applied, it is conspicuous that information stems from facts, and knowledge is a set of facts and rules that are known within a certain research domain, which can form a basis for organising disparate resources (Reed, 2000). These arrays of resources that harness information in a compact form and present it to the user for the purpose of knowledge generation and/or impartation has been conceptualized to be information resources in this study.

Armed with this background, what then does information resources utilisation connote? Elaturoti and Oniyide (2003) give a clearer picture by referring to it as those print and non-print materials that are

selected specifically and organized for implementing the educational programme at the primary, secondary and tertiary levels of education. In the context of this study, information resources utilisation is concerned with the variety of information bearing materials (print and electronic) that the teacher uses to teach, present, illustrate and elucidate teaching activities. These include textbooks, journals, theses and dissertations, conference proceedings, technical reports and trade manuals, newspapers and magazines, abstract/indexes, government documents, statistical publications, internet, online databases, CD-Rom databases, workshop reports, encyclopedias, directories/handbooks, and dictionaries. Other instructional and learning resources such as charts, pictures, exhibits, slides and transparencies are not included in the working definition of information resources as conceptualized in this study.

When talking about use or utilisation of information resources, one question that readily comes to mind is can anyone utilise what he/she does not have knowledge of its existence? Research is replete on awareness and use of information resources. Awareness precedes use. Though, a fundamental factor in information resources utilisation is the 'perceived' information need, awareness of the existence of an information resource is a major determinant of use. An individual's knowledge of possible resources and preferences may help determine his information horizon (Sonnenwald, 1999). Awareness of the availability of resources is therefore an important variable that has been found to have a positive association with use of information resources (John-Okeke, 2006; Kiyengyere, 2007; Manda & Mukangera, 2007). Specifically, Saijad ur Rehman and Ramzy (2004) assert that lack of awareness is among the primary reasons for under-utilising information resources by health professionals in Kuwait University. This implies that

though a user may identify his/her area of information need, without proper awareness of how and where to get resources that will provide the information needed, such needs may not be met.

Various reasons can be attributed to why individuals utilise information resources, ranging from academic to health, business, wealth creation, competition, public support necessary for sustainable development, and even survival. Whichever it is, what is pertinent is that information resources are invaluable and so cannot be handled carelessly especially in this age of information explosion. Specifically, in the educational system, information resources utilisation is not only a means of self-expression but also a medium for displaying authority and subject mastery by a teacher. What this implies therefore is that information requirements and utilisation vary with the level and goals of the user; and because information resources utilisation varies based on the purpose and need of the user, resources are also divergent. For instance, it has been established that social scientists in general rely on textbooks, journals, abstracts and indexes, theses and dissertation, conference proceedings, technical reports, government documents, statistical publications, newspapers and magazines, monographs, mass media, official records, personal documents, interview, and experimental data for their job performance (Watson, 2004; Popoola & Haliso, 2009). Science and technology teachers on the other hand rely on resources such as data sets, disciplinary repositories, conference papers, journal articles, textbooks, monographs, handbooks and trade manuals depending on the discipline; and engineers consider standards, technical reports, handbooks and trade manuals, textbooks, product catalogs and specification sheets as extremely important information resources (Schnurppusch, 2008). Another variable that has been found to have positive association with the use of information resources include information literacy skills in the use of resources especially electronic resources (Manda & Mukangera, 2007). It is imperative that users acquire necessary information literacy skills to enable them sieve through the ocean of information overload available both local and international.

Polytechnic lecturers as a group of educators who are in the business of imparting knowledge and promoting students' learning outcomes and hands on skills need to and must be aware of varieties of information resources available for teaching in their various disciplines in order to enhance the use of such resources. This is because effective utilisation of information resources will not only enhance their job

performance but also help in self development that will eventually bring about self actualization and even job satisfaction in their areas of specialisation.

Objectives of the study

In order to achieve the aims of this study, the researcher intends to:

1. Find out if polytechnic lecturers are aware of the existence of the various information resources available for teaching;
2. Determine which of the information resources are mostly used by Polytechnic lecturers in Nigeria;
3. Investigate the frequency of use of the various information resources by Polytechnic lecturers in Nigeria.

Research Questions

To achieve the set objectives of the study, the following research questions are proposed:

1. Are polytechnic lecturers aware of the typology of information resources available for use?
2. Which of these resources are mostly used by polytechnic lecturers?
3. What is the frequency of use of the various information resources by polytechnic lecturers?

Research Hypothesis

One hypothesis was formulated for the study at $\alpha < 0.05$

- H₁ Awareness of the existence of information resources will not lead to utilisation by Polytechnic lecturers.

Review of Related Literature

Awareness of the existence of information has been found to be one of the underlining factors in its utilisation. Research is replete on the role of awareness in utilising information resources by individuals be it printed or electronic. Authors like Saijad urRehman and Ramzy (2004), Baro, Endouware and Ubogu (2011), Togia and Tsigilis (2011) all reiterated that lack or low awareness of the existence of information resources constitutes major impedance to its utilisation.

Ibrahim (2004) in his study on "Use and User Perception of Electronic Resources in the United Arab Emirates University (UAEU)" made an attempt to measure the use and perception of the United Arab Emirates University (UAEU) faculty members of electronic resources. He also found out that lack of awareness of electronic resources provided by library was one of the obstacles to resource utilisation among this people. Interestingly, Tyagi (2011) established in his study that even when users are aware of the

availability of electronic resources in their area of interest, they are only used as supplementary sources of information. This implies that it is possible that print resources are having precedence over electronic resources in some quarters.

Back here in Nigeria, the situation may not be different owing to the same reason in addition to inadequate power supply and poor internet connectivity especially where electronic information resources are concerned (Salaam & Aderibigbe, 2010). So also, lack of necessary technological skills to search and evaluate what a particular information resource can offer could serve as a limitation to resource utilisation (Kinengyere, 2007, Lwehabura, 2008, Togia & Tsigilis, 2011). These call for immediate attention in order to encourage optimal utilisation of information resources among all groups of library patrons.

Methodology

The research design adopted for this study was survey. The targeted population for this study consisted of 48 lecturers in twelve Federal

Polytechnics in Nigeria (see appendix for list of Polytechnics). The multistage sampling technique was used to select sample as follows:

Simple random sampling was used to select twelve (60%) of the nineteen Federal Polytechnics in Nigeria. The selected 12 Polytechnics were clustered along schools and two schools, namely: Schools of Engineering and Science and Technology were purposively selected because these were the schools in all the selected Polytechnics with the same nomenclature and similar curriculum. Furthermore, two departments each were randomly selected from each of the two schools in each Polytechnic. These were electrical electronics engineering department, civil engineering department, computer science department and science laboratory technology department. The courses were: electric circuit theory, engineering management, computer graphics and animation and inorganic chemistry, all at HND level. A total number of 46 questionnaires were returned and found analyzable out of the 48 administered. Descriptive statistics consisting of frequencies, counts, percentages and simple correlation were used to analyse data.

Findings and Discussion

Table 1 Awareness of information resources in the institutions

*Information resources that lecturers are aware of their existence

S/N	RESOURCES	YES (%)	NO (%)
1	Textbooks	42 (91.3) *	4 (8.7)
2	Journals	40 (87) *	6 (13)
3	Thesis and Dissertations	25 (54.3) *	21 (45.7)
4	Conference Proceedings	24 (52.2) *	22 (47.8)
5	Technical reports and manuals	26 (56.5) *	20 (43.5)
6	Abstracts and Indexes	26 (56.5) *	20 (43.5)
7	Newspapers and Magazines	37 (80.4) *	9 (19.6)
8	Government Publications	23 (50) *	23 (50)
9	Monographs/Standards	17 (37)	29 (63)
10	Workshop reports	27 (58.7) *	19 (41.3)
11	Directories and Handbooks	25 (54.3) *	21 (45.7)
12	Encyclopedia	32 (69.6) *	14 (30.4)
13	Computer	34 (73.9) *	12 (26.1)
14	Internet / WorldWideWeb	38 (82.6) *	8 (17.4)
15	Online Database	23 (50) *	23 (50)
16	CD-ROM Database	21 (45.7)	25 (54.3)
17	Audio-Visuals	15 (32.6)	31 (67.4)

The findings reveal that about one third (35.3%) of the listed information resources were well known to the lecturers. These include textbooks, journals, newspapers and magazines, encyclopedias, internet/www and computers. Others like theses and dissertations, abstracts and index, technical reports and manuals, conference proceedings, directories and handbooks, workshop reports, government publications, online database and CD-Rom were averagely known while monographs/ standards and audio visuals had low level awareness rating.. This report buttresses Manda and Mukaranga (2007) who discovered in their study that awareness of availability of information resources actually contributed to its level of utilisation among female postgraduate students at the University of Dar Es Salaam, Tanzania. They further discovered that specifically, use of internet was high among this group of users which corroborated the discovery in the present study. Inferences drawn from this is that most of the listed information resources were found to be popular with lecturers, except audio visuals and monographs/standards.

This study sought to ascertain which of the information resources were mostly utilised by polytechnic lecturers in the course of their jobs. Table 2 reveals that though all the resources were utilised by respondents, 8 of them were mostly utilised. In their order of ratings, these include: textbooks, internet/www , journals, computer, conference proceedings, online databases, newspapers and magazines, and encyclopedia. This is not surprising especially for textbooks and journals. A careful observation of all the frequency tables reveal that these 2 resources topped almost all the ratings. This agrees with Iwhiwhu (2011) and Malekani (2007) that most users rely mainly on printed books and journals as opposed to electronic information resources.

Inferences drawn from table 2 is that despite all the accolades enjoyed by electronic information resources such as currency, timeliness, handiness, and so on, the role of print materials especially books and journals could not be underestimated. Most users still prefer these to electronic information resources.

Table 2 Information resources mostly used by lecturers

*Mostly utilised information resources

S/N	RESOURCES	YES (%)	NO (%)
1	Textbooks	43 (93.5) *	3 (6.5)
2	Journals	37 (80.4) *	9 (19.6)
3	Thesis and Dissertations	17 (37)	29 (63)
4	Conference Proceedings	26 (56.5) *	20 (43.5)
5	Technical reports and manuals	19 (41.3)	27 (58.7)
6	Abstracts and Indexes	8 (17.4)	38 (82.6)
7	Newspapers and Magazines	25 (54.3) *	21 (45.7)
8	Government Publications	8 (17.4)	38 (82.6)
9	Monographs/Standards	11 (23.9)	35 (76.1)
10	Workshop reports	15 (32.6)	31 (67.4)
11	Directories and Handbooks	16 (34.8)	30 (65.2)
12	Encyclopedia	24 (52.2) *	22 (47.8)
13	Computer	32 (69.6) *	14 (30.4)
14	Internet / WorldWideWeb	39 (84.8) *	7 (15.2)
15	Online Database	26 (56.5) *	20 (43.5)
16	CD-ROM Database	13 (28.3)	33 (71.7)
17	Audio-Visuals	15 (32.6)	31 (67.4)

Table 3 Frequency of resources utilisation by Polytechnic lecturers in Nigeria

S/N	RESOURCES	Never Used	Occasionally Used	Frequently Used	Most Frequently Used	Means	Std. Dev.
1	Textbooks	0	2 (4.3)	8 (17.4)	36 (78.3)*	3.74	.535
2	Journals	1 (2.2)	5 (10.9)	10 (21.7)	30 (65.2)*	3.50	.888
3	Thesis and Dissertations	9 (19.6)	16 (34.8)	20 (43.5)	1 (2.2)	2.28	.619
4	Conference Proceedings	4 (8.7)	30 (65.2)	11 (23.9)	1 (2.2)	2.20	.807
5	Technical reports/ manuals	5 (10.9)	20 (43.5)	14 (30.4)	7 (15.2)	2.50	.1.072
6	Abstracts and Indexes	6 (13)	18 (39.1)	12 (26.1)	10 (28.3)	2.57	.980
7	Newspapers & Magazines	5 (10.9)	12 (26.1)	16 (34.8)	13 (28.3)	2.80	.981
8	Government Publications	4 (8.7)	9 (19.6)	15 (32.6)	18(39.1)	2.61	.705
9	Monographs/Standards	18 (39.1)	21 (45.7)	7(15.2)	0	1.76	.614
10	Workshop reports	13 (28.3)	8 (17.4)	21 (45.7)	4 (8.7)	2.35	.782
11	Directories & Handbooks	14 (30.4)	7 (15.2)	18 (39.1)	7 (15.2)	2.39	.1.151
12	Encyclopedia	8 (17.4)	10 (21.7)	26 (56.5)*	2 (4.3)	2.48	.1.120
13	Computer	0	3 (6.5)	12 (26.1)	31 (67.4)*	3.61	.994
14	Internet / WorldWideWeb	1 (2.2)	5 (10.9)	10 (21.7)	30 (65.2)*	3.50	.836
15	Online Database	8 (17.4)	8 (17.4)	10 (21.7)	20 (43.5)	2.91	1.085
16	CD-ROM Database	12 (26.1)	17 (37)	6 (13)	11 (23.9)	2.35	.977
17	Audio-Visuals	16 (34.8)	15 (32.2)	8 (17.4)	7 (15.2)	2.13	1.067

*Most frequently used information resources

Respondents were requested to rate their frequency of utilisation of each of the information resources in table 7 on a 4-point scale: Most Frequently Used = 4, Frequently Used= 3, Occasionally Used = 2, and Never Used = 1. The result shows that textbooks, journals, computer, internet/www and encyclopedias were frequently used by lecturers than other resources. Inferences drawn from this table is that of all the 17 resources, textbooks and journals were found to be the most frequently used resources by lecturers while monographs and standards were the least used (under the category of printed materials). Also, technical reports were not rated high. This is

contrary to expectation because by virtue of Polytechnic education, especially in the field of engineering, technical report is meant to be one of the major forms of communication. It is the conventional format for reporting the results of research, investigations, and design projects (CALT Learning Support, 2007; Schnurpusch, 2008) and so is supposed to be an invaluable resource for teaching and learning. However, computer and internet/World Wide Web were found to be the most frequently used among electronic resources.

Hypothesis

H₀: Awareness of the existence of information resources will not lead to utilisation by polytechnic lecturers.

Table 4: Correlation result of lecturers' awareness and use of information resources

		Are you aware of the existence of information resources	Use of information resources enhanced your teaching effectiveness
Are you aware of the existence of information resources	Pearson Correlation	1	.369*
	Sig. (2-tailed)		.012
	N	46	46
Use of information resources enhanced your teaching effectiveness	Pearson Correlation	.369*	1
	Sig. (2-tailed)	.012	
	N	46	46

*. Correlation is significant at the 0.05 level (2-tailed).

The findings reveals that a significantly weak positive correlation (0.37, p = 0.012) did exist between awareness of information resources and utilisation. Though by implication, awareness of the existence of information resources is not a strong predictor in explaining utilisation, there is still a relationship between the two variables. As a result, this hypothesis was accepted. This report confirmed the view of Manda and Mukangara (2005) that awareness of availability of resources is one of the variables that were found to have positive association with the use of information resources. In the same vein, Sonnenwald (1999) concurred that an individual's knowledge of possible resources and preferences may help determine his information horizon. It is therefore concluded in this study that awareness of the existence of information resources will lead to its utilisation by Polytechnic lecturers.

Conclusion and Recommendation

As stated repeatedly in this study, awareness of the existence of information resources is fundamental to utilisation. As a result, there should be a deliberate effort to create awareness on the availability of various information resources available for teaching and learning in Nigerian Polytechnics, though this is not enough to enhance utilisation. Acquisition of necessary information literacy skills to search and

evaluate useful materials be it print or electronic is also necessary for resources utilisation among Polytechnic lecturers in Nigeria. This study established that most of the information resources identified were known to Polytechnic lecturers. However, only a few precisely 8 out of 17 (textbooks, internet/world wide web, journals, computer, conference proceedings, online databases, newspapers and magazines, and encyclopedia) of the resources were mostly consulted by the lecturers. Out of these 8, the frequently used ones were books and journals. This could mean that most of them still prefer prints to electronic information resources. Finally, the study concludes that awareness of the existence of information resources will lead to its utilisation by Polytechnic lecturers. Based on the findings, it is recommended that there should be deliberate efforts by Polytechnic librarians to create awareness on various information resources available for teaching and learning in Polytechnic libraries so that there would be increased utilisation. Also, ongoing trainings on information literacy and information technology should be encouraged so that lecturers can update their knowledge in this area regularly. Knowledge is not static and as new inventions are springing up every day, especially, in the world of information technology, Polytechnic lecturers must be kept abreast of them so that they could keep up with their counterparts in other parts of the world.

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Appendix

List of Sampled Polytechnics and Number of Respondents in Schools of Engineering and Science and Technology

Names of Polytechnics	School of Engineering	School of Science & Tech	Total no of Respondents
Akanu Ibiam Federal Polytechnic, Unwana – Afikpo	2	2	4
Auchi Polytechnic, Auchi	2	2	4
Federal Polytechnic, Ado Ekiti	2	2	4
Federal Polytechnic, Ede	2	2	3
Federal Polytechnic Ilaro	2	2	4
Federal Polytechnic, Nasarawa	2	1	3
Federal Polytechnic, Nekede – Owerri	2	2	4
Federal Polytechnic Offa	2	1	4
Federal Polytechnic, Oko	2	2	4
Kaduna Polytechnic, Kaduna	-	-	-
Waziri Umaru Federal Polytechnic, Birnin Kebbi	4	4	8
Yaba College of Technology, Yaba	2	2	4
Total = 12	26	20	46