2019

Sources, Format Preference and Challenges of Accessing TVET Information among the Engineering Students of the Federal Polytechnic Ede, Osun State, Nigeria

Blessing Amusan
blessingamusan@gmail.com

Adepero Olajumoke Odumade-Salako Mrs.
Federal Polytechnic, Ilaro, Ogun State, Nigeria, odumadeadepero@gmail.com

Sources, Format Preference and Challenges of Accessing TVET Information among the Engineering Students of the Federal Polytechnic Ede, Osun State, Nigeria

By

Adepero Olajumoke ODUMADE-SALAKO

Federal Polytechnic Ilaro Library, Ogun State, Nigeria

and

Blessing Babawale AMUSAN

Department of Library and Information Science, Federal Polytechnic, Ede, Osun State, Nigeria

odumadeadepero@gmail.com, blessingamusan@gmail.com

ABSTRACT

The study focused on sources, format preference and challenges faced by the engineering students of the Federal Polytechnic Ede, Osun State in accessing Technical and Vocational Education and Training (TVET) information resources. The study adopted a survey method. Questionnaire was administered on a sample size of 379 students selected from the School of Engineering of the Federal Polytechnic, Ede, from a population of 7400 students through a stratified sampling technique. 306 sets of questionnaire were returned and valid for analysis, representing 80.74% return rate. The study discovered that personal collections, Internet and colleagues were the three most used sources of accessing TVET information among the students. Also majority of the respondents preferred TVET information sources in electronic format to print resources and reasons attributed to this include ability to interact with the source and search within texts; and round-the-clock, easy, cheap and remote accessibility. Also, the respondents experienced several challenges in accessing TVET information which include high cost of accessing information, poor attitudes of library staff and lack of awareness of TVET information sources. The study recommends among others that the Institution Library should reposition itself to be the first point of call for information among the students, and also acquire more e-resources and improve accessibility to the resources. There is also the need to re-orientate the library staff, especially the front desk staff on staff-customer relations as well as teaching information literacy skills to the students to solve the problems associated with information retrieval.

Keywords: TVET, Information accessibility, Information format, Federal Polytechnic Ede Engineering

Introduction

Information is key to planning, decision making and completing a given task. It is this major significance that that inform countries of the world to spend huge resources on creating and safe-guarding information. The technologically advanced countries invest robustly, especially on

Technical and Vocational Education and Training (TVET) as it is a major propeller of economic growth and sustainable development. Similarly, it is expected that people seek for information that can best gratify their information needs and the choice of the information sources and formats are as varying as their information needs and personal characteristics.

Information resources available in print (such as textbooks, journals) and electronic formats (such as e-books, e-journals, webpages and software) and can be accessible through different sources such as the library, colleagues, personal collections among others. Irrespective of the source or format, they all serve the same purpose of informing the users. Students need information on daily basis for their academic or personal development; and search for such information from any available means, and different format. Also, sources and format of information may pose challenges in accessing such information. Therefore, it is necessary to investigate sources and preferred format of information as it affects engineering students that use TVET information to be able to serve them better and contribute to the economic growth and sustainable development of the country.

Statement of The Problem

Engineering students, just like every other student, need information on daily basis. Such information includes those that will be necessary for academic and personal development. Information relating to technical and vocational development are part of such information that maybe needed by the students, and it is expected that such information should be timely provided, especially by the institution library.

However, it has been observed that many students experience various challenges in accessing TVET information. Such challenges include non-availability of information sources, difficulty in accessing the information, lack of skills to access and filter information to select the appropriate one. Also, many students prefer using electronic resources to print resources. Similarly, many students are not aware of the availability of information sources in the library. These challenges affect accessibility and use of the resources which may negatively affect their academics. This may also affect the library not to meet up with its targeted users. It is on this basis that this study was developed to identify challenges facing accessibility of TVET information among the Engineering students of the Federal Polytechnic, Ede, Osun State.

Research Questions

The study is expected to provide answers to the following research questions:

1. What sources are available and used for accessing TVET information among the Engineering students of the Federal Polytechnic Ede, Osun State?
2. What TVET information format is preferred by the Engineering students of the Federal Polytechnic Ede, Osun State?
3. What are the challenges of accessing TVET information among the Engineering students of the Federal Polytechnic Ede, Osun State?
4. What could be done to address the challenges encountered by the students on accessing TVET information?

Research Objectives

The objectives of the study are to:

1. Identify the sources available and used for accessing TVET information among the Engineering students of the Federal Polytechnic Ede, Osun State.
2. Determine the preferred format of TVET information among the Engineering students of the Federal Polytechnic Ede, Osun State.
3. Identify the challenges of accessing TVET information among the Engineering students of the Federal Polytechnic Ede, Osun State.
4. Suggest solutions to the challenges encountered by the students on accessing TVET information.

Literature review

Information resources come in various formats and are accessible through various sources. Engineering students use different types of information depending on the task at hand, and they seek for such information from available sources. TVET information, just like other type of information can be categorized into three areas namely: Primary sources, secondary sources and tertiary sources (Reitz, 2014). While primary sources are documents or records that report first-hand information or original articles that report findings of research undertakings, secondary sources on the other hand synthesize information from primary sources and present them in a more usable format. Equally, tertiary sources serve as guides to locating primary and secondary sources. Macleod and Corlett (2012) argues that TVET information are usually targeted at engineers and technicians and similar specialists who needs information about technical issues relating to their undertakings. According to Queen's University Library (2019), engineering information resources include: scholarly journals, professional journals, technical reports, engineering standards and codes.

Information formats are usually categorized into print and electronic. However, there are different factors that determine preference for a particular type of information format among the information users. Kirsty (2018) discovered that there was an increase in the numbers of electronic information resources use between 2014-2017 in Regent's University London. Reasons attributed to this include ability to search for exact phrases in a text and provision of instantaneous access, without having to take a trip to the library to borrow a print version. However, on the contrary Yamson, Appiah and Tsegah (2018) discovered that students prefer print resources to e-resources because they believed that any print resource is considered to be complete in itself and that they find it easier to use. Also, a similar study by Idigbeyan-Ose, Ifijeh, Aregbesola and Owolabi (2019) revealed that the preference of the respondents is the same, as the number of respondents that prefer print resources is uniform with those that prefer e-resources.

In accessing TVET information resources, there are several challenges which the information users can face. Mahwasane and Mudzielwana (2016) discovered that these challenges include lack of proper knowledge on how to use information retrieval skills, insufficient users' education by the library, lack of computer knowledge among the students and ICT facilities in accessing information in the library. Similaly, Igbo and Imo (2010) studied challenges associated with information accessibility among the students of University of Nigeria, Nsukka. It was discovered that they experience certain challenges while accessing information resources. These include: difficulty in accessing information sources, ineffective library services, out-datedness of sources, among others.

Research design

The study adopted a social survey method to study the challenges of accessing TVET information among the Engineering students in Federal Polytechnic Ede, Osun State. The population of the study consisted of 7400 students across the 5 Departments that made up of the School of Engineering namely: Departments of Civil Engineering; Horticulture and Landscaping technology; Computer Engineering; Electrical and Electronics Technology; and Mechanical Engineering.

The study adopted the Yemane formula $n = N/1+N(e)^2$ for deriving the sample size for the study: where n = the sample size, N = total number of the population and e = degree of freedom which is 0.05. According to Agrastuta (2013), the Yemane formula was developed in 1967 by and has been used across various fields to derived sample for the study. Therefore, a sample size of 379 students arrived at using the formula was adopted for the study. Stratified and simple random sampling techniques were adopted to draw sample from all the departments and academic levels in the School of Engineering. The students were first grouped according to their departments and academic levels, from NDI to HND II, and from each stratum, simple random technique was used to pick the respondents (95 students each from HND II, HNDI and ND II, while ND I has 94). The breakdown is presented in Table 1.

The study adopted questionnaire as the only instrument for collecting data. The questionnaire was administered on the students at their various lecture rooms to ensure wide coverage across each stratum. Data collected for the study were analysed using frequency counts and simple percentage. Frequency tables and graphs were used to present the data for further clarification.

Findings/discussion

From the 379 sets of questionnaire that were administered, 306, representing 80.74% were returned and valid for analysis. Also from the 306 respondents, 224 (73.20%) were male while the remaining 82 (26.80%) were female.

Table 1: Distribution of respondents according to rate of questionnaire return

Levels	No. of Questionnaire Administered	No. and Percentage of Questionnaire Returned
HNDII	95	71 (18.74%)
HNDI	95	79 (20.84%)
NDII	95	83 (21.90%)
NDI	94	73 (19.26%)
TOTAL	**379**	**306 (80.74%)**

Table 1 shows the distribution of the respondents according to their academic level and the rate of the returned questionnaire. From the 379 sets of questionnaire that were administered, 306 were returned representing 80.74%.
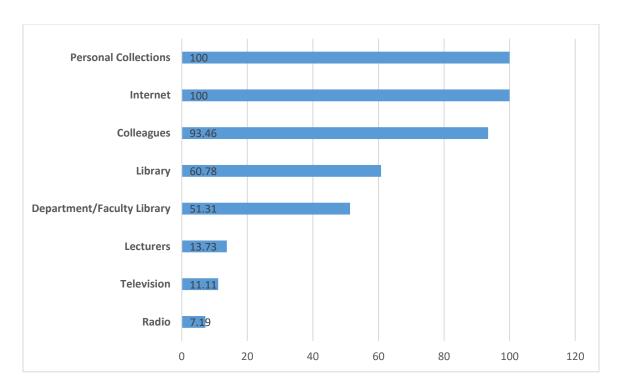
Figure 1: **Available and used sources for accessing TVET information among the Engineering students of the Federal Polytechnic Ede, Osun State**

Figure 1 presents available sources where the respondents access TVET information. It is evident that personal collections and the Internet were the sources mostly used as claimed by all the respondents. These are closely followed by colleagues (93.46%) and institution library (60.78%). Also, some 13.73% claimed to source for TVET information from their lecturers.
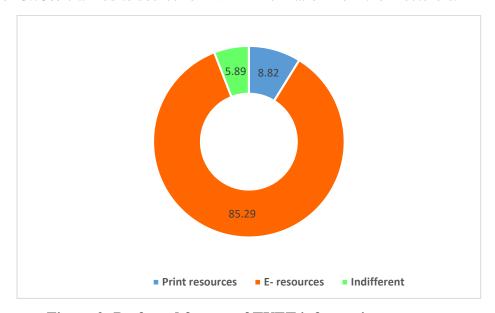

Figure 2: Preferred format of TVET information resources

Figure 2 shows the preferred format of TVET information sources among the respondents. The Figure shows that majority of 85.29% claimed to prefer information in electronic format, while minority of 8.82% claimed that they preferred print format. However, some 5.58% other were indifferent.

Reasons for format preference

Respondents were asked, through an open ended question, to state reasons for preferring a format of information sources to another. Some important reasons given for preferring TVET information resources in electronic format include: ability to interact with the source and search within texts, especially software and pdf formats; easy and remote access; round-the-clock and cheap accessibility; easy to share with friends and no fear of charges by the library (such as over-due fines or for loss of materials). Also, reasons for preferring print resources include: credibility of source is easy to ascertain; no need for power supply to access print resources; and do not like reading on screen.

Table 2: **Challenges of accessing TVET information among the Engineering students of the Federal Polytechnic Ede, Osun State**

SN	Challenges	Frequency	Percentage
1	High cost of accessing TVET information	301	98.37%
2	Poor attitudes of library staff	297	97.06%
3	Preferred format not always available	288	94.12%
4	Lack of awareness of TVET information sources	287	93.80%
5	Difficulty in accessing sources	276	90.20%
6	Inability to pay for TVET information resources	265	86.60%
7	Non availability of resources in the library	258	84.31%
8	Preferred source not always available	254	83%
9	Poor campus Wi-Fi	253	82.68%
10	Insufficient users education by the library	199	65.03%
11	Poor knowledge of book arrangement in the library	189	61.76%
12	Difficult procedure in borrowing materials in the library	174	56.86%
13	Distance to library is far	159	51.96%
14	Power supply	151	49.35%
15	Outdated TVET information sources	115	37.58%
16	Lack of computer skills	88	28.76%
17	Lack of time to search for TVET information	83	27.12%
18	Poor internet connections	79	25.82%
19	Poor information retrieval skills	72	23.53%
20	No smart phone	32	10.46%

n = 306

Table 2 shows various challenges experienced by the respondents while accessing TVET information. The most commonly experienced challenge is high cost of accessing TVET information sources (98.37%), closely followed by poor attitudes of library staff (97.06%) and non-availability of preferred format of information source (94.12%). Similarly, some 93.80% of the respondents claimed that non-awareness of TVET information sources constitute as a barrier, some 82.68% claimed that poor campus Wi-Fi constituted as barrier. Also, some 37.58% claimed that outdated TVET information sources constituted as barrier. The least challenges they experience were poor information retrieval skills (23.53%) and no smart phone (10.46%).

Suggestions on what could be done to address the challenges encountered by the students on accessing TVET information

Respondents were asked, through an open ended question, to suggest what could be done to address the challenges they face in accessing TVET information. Some of the suggestions include: provision of more useful resources by the institution library, especially electronic information resources; institution WI-Fi should be improved upon to make Internet connectivity faster and round-the-clock; lecturers should recommend useful TVET information materials and the institution library should improve on strategy for creating awareness for library use.

Discussions of findings

The study revealed that personal collections and Internet were the two major sources where the respondents access TVET information. While one would expect the institution library to be the most used, however, this was not the case. As opined by Nwaobasi, Uwa and Ossai-onah (2013), the institution library holds a central position in the information seeking process of undergraduate students in Nigerian tertiary institutions. However, the high use of personal collections and the Internet among the respondents may be attributed to some of the library-related challenges indicated by the respondents in Table 2.

Also, majority of the respondents preferred TVET information sources in electronic format to print resources and reasons attributed to this include ability to interact with the source and search within texts; and round-the-clock, easy, cheap and remote accessibility. This is in line with Kirsty (2018) discovery that users in Regent's University London prefer e-resources to print resources, but in contrast with Yamson, Appiah and Tsegah (2018) findings that users in Ghana prefer print resources to e-resources. Similarly, the respondents experienced several challenges in accessing TVET information. Prominent among these challenges were high cost of accessing TVET information, poor attitudes of library staff and difficulty in accessing sources. This finding is also in line with Mahwasane and Mudzielwana (2016) and Igbo and Imo (2010) discoveries.

Conclusion

The study has revealed that Engineering students of the Federal Polyetchnic Ede, Osun State access TVET information mostly from their personal collections, Internet and colleagues, in that order, whereas, the Institution Library came 4th in rank. This may be connected with some library-related challenges experienced. Also, they prefer information resources in electronic format to print resources because of the perceived advantages they claimed e-resources have over print format. Similarly, the students face certain challenges in accessing TVET information sources. These include: high cost of accessing TVET information; poor attitudes of library staff and preferred format not always available, among others.

Recommendations

Based on the findings of the study, the followings are hereby recommended:

Repositioning: The institution library should re-position itself to be the first point of call for the academic community in need of any kind of information in different formats. The academic library is usually regarded as holding a central position in any academic environment, therefore, there is

need for re-positioning through awareness, collection and service improvement to enable the users make it the first point of call for information.

Acquisition of e-resources and improved accessibility: The Federal Polytechnic Ede Library should endeavour to expand their e-resources by subscribing to useful database that will enable the students to have access to more useful information resources. This will not only solve the igh cost of accessing information as experienced by the students, but also enable them to have unrestricted access to the e-resources which they preferred more. In addition, accessibility should be improved upon so as not to waste the huge financial resources expanded on subscribing to electronic databases. Internet connectivity on campus (such as the Institution Wi-Fi) should be strengthened to enable the users have round-the-clock access to the resources.

Re-skilling of library staff: The library staff need to be reskilled, most importantly, in the area of staff-customer relations. Poor attitudes of library staff were the second most experienced challenge by the students of the Federal Polytechnic Ede, therefore, there is the need by the library management to re-orientate the staff on how to deal with the users. In doing this, the front desk staff (such as the Library security, porters and the circulation staff) should be considered as they are the first set of library staff that usually have personal contact with the users.

Teaching of Information Literacy Skills: In addition to the traditional functions of organization and provision of access to information resources, the library should also endeavour to teach the students basic information literacy skills. Being equipped with information literacy skills will solve the problems associated with information retrieval such as lack of ICT or information retrieval skills. Such instruction can be integrated into the *Use of Library* or General Studies Course which is usually offered by all the newly admitted students.

References

Agrastuta, V. (2013). The adoption of green dentistry among dentists in Thailand. An Unpublished PhD Thesis.

Idigbeyan-Ose, J., Ifijeh, G., Aregbesola, A. & Owolabi, S. (2019). E-resources vs print: Usages and Preferences by undergraduates in a private university, Nigeria. *Journal of Library and Information Technology, 39*(2), 125-130.

Igbo, U. H. & Imo, N. T. (2010). Challenges of accessibility of information resources by the psot-graduate library users of a Nigerian university. *The Information Technologist, 2*(10).

Kirsty, F. (2018). Print or e preference? An assessment of changing patterns in content usage at Regent's University London

Macleod, R. and Corlett, J. (2012). Information sources in engineering. Retrieved from https://www.degruyter.com/view/product/162249

Mahwasane, N. P. & Mudzielwana, N. P. (2016). Challenges of students in accessing information in the library: A brief review. *Journal of Communication, 7,* 216-221

Nwaobasi, R. N., Uwa, E. O. and Ossai-onah, O. V. (2013). Information needs and seeking behaviour of students in two universities in Imo state, Nigeria. *Library Philosophy and Practice.* Retrieved from https://digitalcommons.unl.edu/libpilprac/966/

Queen's University Library. (2019). Engineering design and practice sequence (EDPS). Retrieved from https://guides.library.queensu.ca/apsc/enginfo

Retiz, J. M. (2014). ODLIS: Online Dictionary of Library and Information Science. Retrieved from www.odlis.com

Yamson, G. C., Appiah, A. B. and Tsegah, M. (2018). Electronic vs. print resources: A survey of perceptions, usage and preferences among central University undergraduate students. *European Scientific Journal, 4*(7), 291- 304.