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Contents

A Survey of Undergraduates' Use of Library Resources in University of Ibadan: Does Disciplince Affect Library Use?

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Abstract

Use of library resources and factors that hindered use by undergraduates in Social Science and Science disciplines in University of Ibadan was investigated. Random sampling was used to select two and three departments from social science and science respectively and a sample size of 218. Questionnaire was used for data collection. Results showed that print resources were more available for use than electronic resources in both disciplines. Majority of the social science students used the resources for examination and assignment (52.6%), while those in science used them more for examination purposes (57.8%). Books were accessible to students in both disciplines but journals, research projects and dictionaries were more accessible to social science students than science students. Social science students used books, journals, research projects and dictionaries more frequently than science students. The undergraduates in both disciplines expressed that unavailability of library resources, erratic electricity power supply, and improper preservation of library resources, obsolete materials and inadequate ICT facilities hindered their use of library resources. The use of library resources was determined by their accessibility and discipline of the undergraduates.

Keywords: Library resources, Nigeria, Undergraduates, Use, Disciplines

Word count 179

Introduction

Academic libraries comprise of all libraries established in higher institutions of learning: university, polytechnic, colleges of education, colleges of health institutions. The basic functions of academic libraries can be summarised as provision of materials for students, faculty, non teaching staff and researchers for academic and research work. It is important for academic libraries to form consortium with one another to develop a network of library resources that would be rich which would be accessible to all scholars. Teoh and Tan (2011) affirmed that the academic library serves an important role in sustaining the primary functions of research and scholarship of higher education. Besides the traditional key purpose of providing access to knowledge, the library also offers a congenial ambience as a meeting place that allows users to complete their assignments or revise their studies. As such, the value of the academic library in institutions of higher learning is well-established (Tenopir, 2009).

The main purpose of a university library is to support the objectives of a university in the areas of learning, teaching, research and service. It is also expected to provide information sources for recreation, entertainment and general knowledge. The users of a university library are students, lecturers, support staff (non-teaching staff) and members of the local community in which the university is located (Aina, 2004) and their information needs vary and have to be taken care of. As a result, there exists a need for the continuous assessment of the myriad of services provided by university libraries so as to effectively sustain its services and programs (Metoyer 2000).

The collection of a library should be rich and diverse to satisfy the information needs of its users. Building a strong library collection is the major task of any library as the quality of services provided and the satisfaction of users is dependent on the availability and relevancy of the collection. The collection of a university library must be diverse such that it would cater for the information needs of all users in the various disciplines. The collection should therefore, consist of print and non print materials. Examples include books, periodicals, reference materials, thesis and dissertations, audiovisual materials and microforms. Others are Compact Disk-Read Only Memory (CD-ROM), electronic resources and necessary equipment such as ICT facilities e.g. microfiche and microfilm readers, computer with Internet access. The library resources should cater primarily for the needs of students such as undergraduates and postgraduates.

The undergraduates visit the library to consult books, journals and other information resources in the library for assignments, research, preparation for examination, recreation in order to achieve their educational pursuit. It therefore, becomes imperative for university libraries to provide relevant materials in different format to meet the information needs of their users and such materials should be easily accessible to allow for maximum use. Ossai (2010) opined that information resources are developing and increasing at very astronomical speed, due to the multiplying number of information resources being used and explored almost on a daily basis. Therefore, the information resources should be properly organized and made accessible to the undergraduates to promote their academic

performance. These information resources are in print and electronic format. Dilevko and Gottlieb (2002) claimed that print remains important for at least some information for all subject disciplines and as part of the research process for undergraduates. Consequently, most libraries offer a combination of these large full-text databases that facilitate searching, and journal systems from publishers, which facilitate browsing.

There is this long-standing perception that academic disciplines use library materials differently and also on the results previously reported at the University of Washington showing the research differences between academic fields (Hiller 2002), the author expected University of Illinois at Urbana-Champaign (UIUC) survey results to mirror these findings and show that differences in research material use and library use continue to be different between disciplines. Williams (1995) and Whitmire (2001) found students' library use dictated by academic programmes. Specifically, students whose coursework required significant writing of academic papers and reports were found to have a higher frequency of library use.

Studies have shown that discipline affects the use of libraries and its print and electronic resources (Abels *et al.,* 1996; Eason *et al.,* 2000; Tenopir, 2003; Torma & Vakkari, 2004). Literature has revealed that representatives of science and medicine use electronic resources more frequently than humanists and social scientists (Borgman, 2000; Tenopir, 2003, Torma & Vakkari, 2004) and the availability of relevant electronic resources affects how frequently scholars use them (Eason *et al.,* 2000; Abels *et al.,* 1996). The provision of electronic resources varies among disciplines. They are most available in science and medicine and least in social sciences and humanities (Kling & McKim, 1999; Borgman, 2000). It is evident that it is not only the characteristics of a discipline, but also the availability of electronic resources in the discipline that explains the use of e-resources and libraries. Consequently, if the availability of e-resources in libraries was more even, there would not be such great differences in their use among the disciplines.

According to some studies (Kling & McKim, 1998; Covi, 1999; Eason *et al.,* 2000; Tenopir, 2003), user's discipline and institutional context strongly affect the use of electronic resources. Tenopir (2003) in a study on use and users of electronic resources reported that there were variations in the use of e-resources due to discipline. Both scientists and social scientists value the library as the institution that provides them with journals, but those in the arts and humanities did not feel as comfortable with electronic information as respondents in social sciences, engineering and business.

Due to the economic situation in Nigeria, many parents who send their children to the universities cannot provide adequate funds that would afford these undergraduates purchase most of the needed information materials for their academic pursuits. The alternative is for the undergraduates to depend more on the library resources available. Due to dwindling library funds, more university libraries have embraced e-resources to provide current and relevant information to undergraduates.

Undergraduates can only utilize the library resources when such are easily accessible to them. However, the use of library resources by undergraduates in Nigerian university

libraries could be affected by some factors, such as: discipline, availability, accessibility, obsolete materials, information illiteracy, lack of ICT skills and erratic power supply. Others include: inadequate seating space, furniture or poor ventilation, poor library services, mutilation, theft of library materials, attitude of library staff, location of the library, etc. Therefore, this study sought out to investigate how accessibility and utilization of library resources are affected by undergraduates' discipline.

Objectives of the Study

This study aims at achieving the following specific objectives, to:

(1)   investigate the purpose for the use of library resources by social science and science undergraduates.

(2)   find out the resources available to social science and science undergraduates.

(3)   determine the level of access to library resources by social science and science undergraduates.

(4)   investigate the frequency of use of library resources by social science and science undergraduates.

(5)   identify factors inhibiting access to use of library resources by these undergraduates.

Methodology

The descriptive survey research was adopted to collect data from undergraduates in the Faculties of Social Science and Science. The population of undergraduates in Social Sciences and Science were 1,482 and 1,998 respectively. The stratified and simple random sampling techniques were used to select two departments from social science which had five departments and three departments from science which had nine departments. A sample fraction of 15% was used to get a sample size of 218, while a questionnaire was used to collect the data (Table 1).

Table 1: Distribution of Undergraduates according to Department and Faculty

Faculty	Department	Study Population					Sample Size				
		Level					Level				
		100	200	300	400	Total	100	200	300	400	Total
Science	Chemistry	71	78	92	87	328	10	10	12	17	49
	Computer Science	49	58	79	104	290	9	12	10	13	44
	Statistics	18	35	49	80	182	9	5	5	8	28
Social Sciences	Geography	82	76	89	106	353	10	13	10	20	53
	Sociology	74	62	77	84	297	8	12	10	15	45
Total						1450					218

Results

Library was used by the undergraduates mostly for examination, research and assignment (Fig. 1), but those in Science were found to make use of the library resources for a combination of examination and assignment more than those in the Social Sciences (52.6%). Findings revealed that equal number of students from both faculties used library resources for research. The different library resources investigated were books, journals, dictionaries, encyclopedias, electronic databases. Others included thesauri, maps and atlases, charts, government and others. The findings revealed that 57.4% and 42.6% of respondents from Science and Social Sciences respectively agreed that print (e.g. books, journals) resources were available for use, while the reverse was the case when availability of electronic resources were investigated, as a higher percentage of those in Social Sciences (52.6%) affirmed that electronic materials were available to them than those in Science (Fig. 2).
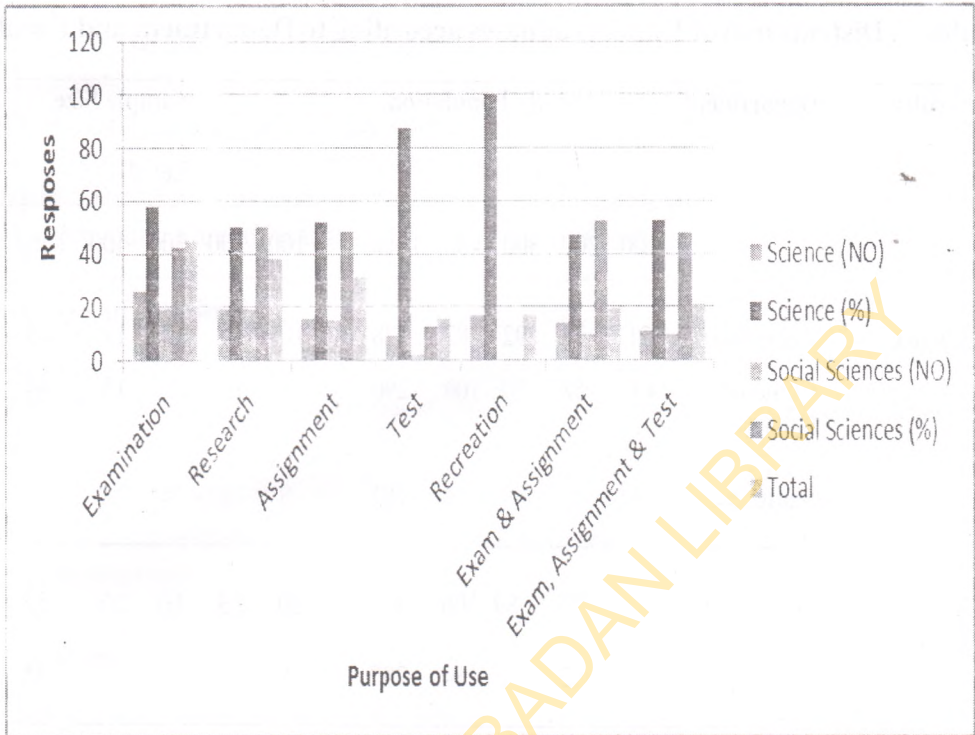
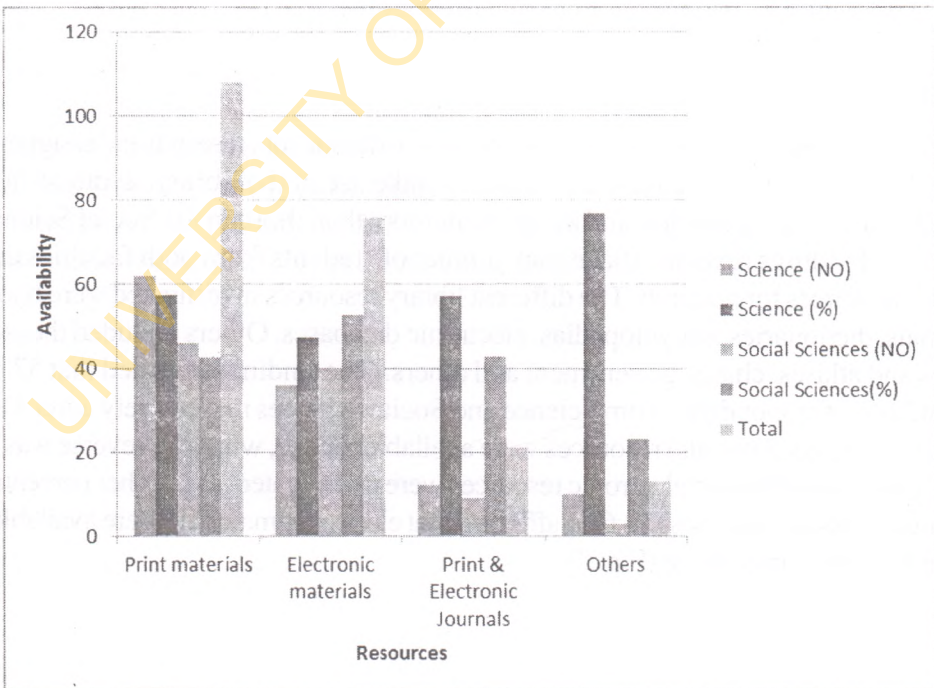**Fig. 1 Purpose of Use of the Library Resourcces**

Fig. 2 Availability of Library Resources

The level of accessibility to library resources was investigated and a scale of 'most often', 'often', 'rarely' and 'never' was used. 'Most often' and 'often' were collapsed to interpret the results. Respondents in Social Sciences often had access to journals, research projects, dictionaries, encyclopedias and electronic databases more than those in Sciences (Figs. 3 & 4). Thesaurus was often used more by respondents in Science than those in Social Sciences. A larger number of respondents from Science never used e-databases and thesauri than those in Social Sciences (Figs. 3 & 4.).
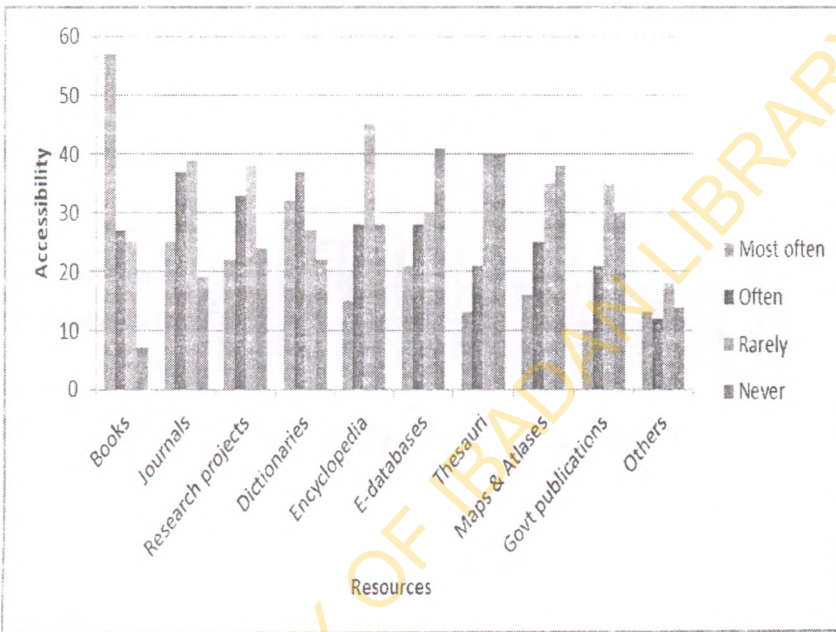

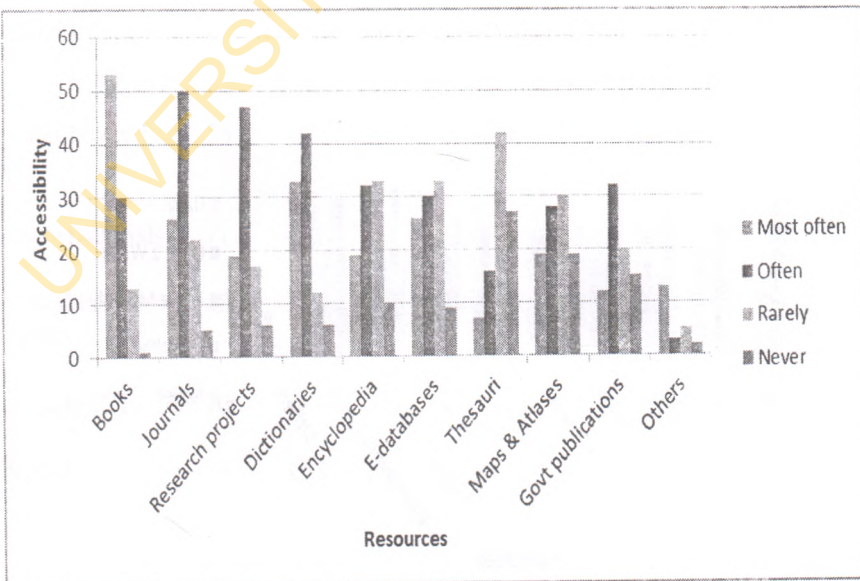**Fig. 3. Accessibility of Library Resources to Undergraduates in Science**

Fig. 4 Accessibility of Library Resources to Undergraduates in Social Sciences

Respondents in Social Sciences were found to use most library resources more frequently than those in science. Such library resources included books, journals, research projects and electronic databases which were used on a daily and weekly basis more than those in science (Figs. 5 & 6). This could be attributed to the fact that Social Science library was more equipped with current library materials than Science. The findings also revealed that a greater number of respondents from Science were found never to have used most of the resources under study than those from Social Sciences.
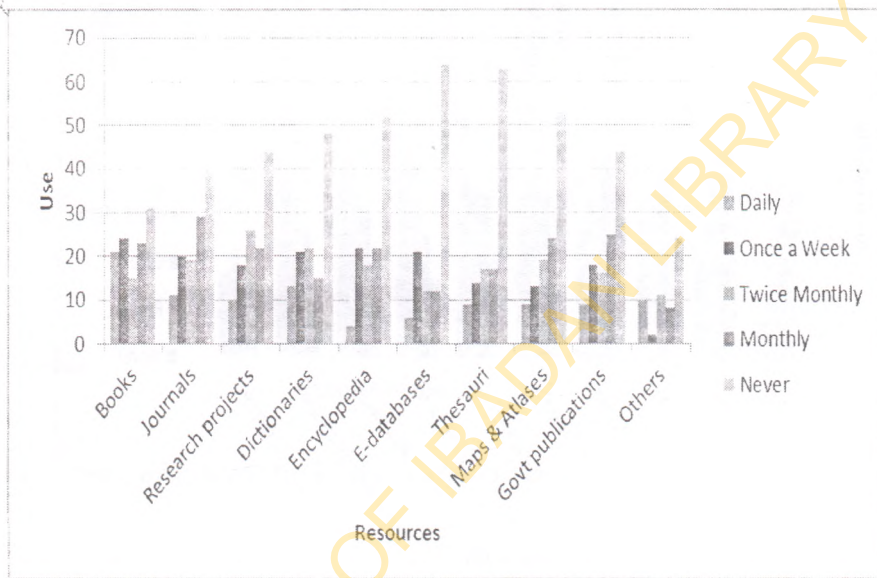

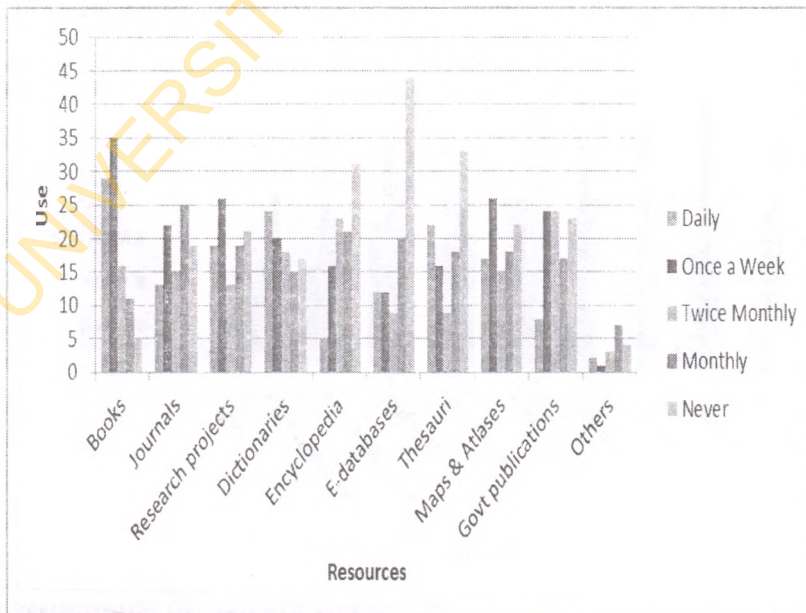**Fig. 5 Frequency of Use of Library Resources by Science Undergraduates**

Fig. 6. Frequency of Use of Library Resources by Social Sciences Undergraduates

The major factors that hindered access to and use of library resources were those that had response rate of over 50%. They included: unavailability of library resources from Social Sciences 60 (61.2%) and Science 79 (65.9%). erratic electricity power supply had 65 (66.4%) from the Social Sciences and 74 (61.6%) from Science. Improper preservation of library resources was 49 (50.0%) from Social Sciences and 61 (50.8%) from Science (Table 2). Materials being obsolete was agreed by 55 (56.1%) from Social Sciences and 71 (61.2%) from Science. Inadequate ICT facilities had 72 (73.5%) from Social Sciences and 70 (58.3%) from Science.

Table 2 Factors affecting Use of Library Resources by Undergraduates

	Faculty								
	Science				Social Sciences				
Factors	Agree		Disagree		Agree		Disagree		
	No	%	No	%	No	%	No	%	Total
Poor Attitude of staff	53	31.5	33	19.6	46	27.4	36	21.4	168
Unavailability of materials	79	41.1	28	14.6	60	31.2	25	13.0	192
Difficulty in locating materials	35	20.5	57	33.3	23	13.5	56	32.7	171
Inadequate library skills	58	32.8	36	20.3	45	25.4	38	21.5	177
Irregular power supply	74	40.4	22	12.0	65	35.5	22	12.0	183
Obsolete materials	71	45.8	16	10.3	55	35.5	13	8.4	155
Mutilated library materials	48	34.5	24	17.3	45	32.4	22	15.8	139
Inadequate ICT	70	38.9	20	11.1	72	40.0	18	10.0	180
Inadequate ICT Skills	59	33.5	32	18.2	59	33.5	26	14.8	176

Discussion

The undergraduates used the library primarily for examination, research and assignment, but those in science were found to make use of the library resources for examination and assignment more than those in the social science. Use of the resources for research were however, found to be used equally in both disciplines. This may be attributed to the fact that about one third of the undergraduates in both disciplines was in their final year and expected to write a project report as part of the requirement for the completion of their bachelor degree programme. This finding agrees with that of Tenopir (2003) who reported that majority of the respondents in her study visited the library for individual study/work and that the library is the place for meeting, study and discussion. She stated further that scientists visited the library more than the social scientists especially when new journals were available.

The findings revealed that about half of the respondents in both disciplines agreed that print resources were available for use, while the reverse was the case when compared with e- resources, as a higher percentage of those in Social Sciences revealed that e-resources materials were more available to them than those in Science. The availability of more e-resources for Social Sciences students may be because information could be retrieved from e-resources in other disciplines such as humanities and education due to multidisciplinary research across these disciplines.

Dilevko and Gottlieb (2002) reiterated that print remains important for at least some information for all subject disciplines and as part of the research process for undergraduates. Therefore, most libraries offer a combination of these large full-text databases which facilitate searching and journal systems from publishers which facilitate browsing. Schottlaender et al. (2004) conducted a study on the University of California Libraries and found that print resources remain important. This is contrary to the report of Hiller (2002) which revealed that science and engineering students in University of Illinois at Urbana-Champaign (UIUC) were the lowest group of students who considered print journals to be very important and this may be due to the fact that sciences had more access to more e-journals that non-science fields. Blowers and Williams (2004) concluded that online journals showed increasing citation rates, which print journals did not show, while Tenopir (2003) revealed that most students used e-resources rather than print resources.

Respondents in Social Sciences were found to use most library resources more frequently than those in Science. This could be attributed to the Social Sciences library having more rich and current resources than Science. Tenopir (2003) averred that arts and humanities students reported searching for books in the library at least weekly, while only a quarter of those in physical science and engineering students performed this activity at this rate. The result agreed with the classic depiction of the disciplines that says humanists read books in prints and scientists read articles online. This contradicts the findings of Torma & Vakkari (2004) on use of an electronic database in a Finnish university who found that about half of the researchers used it at least several times a week, ranging from about two-thirds in natural sciences to one-third in the humanities

and social sciences. Academics in economics were almost as active as natural scientists with their share of 57%.

The challenges to the use of library resources were unavailability of resources, erratic power supply, obsolete materials and inadequate ICT facilities by respondents in both disciplines. Tenopir (2003) agreed that the problems with electronic journals were: unavailability of some older issues, and also some recent issues, omission of some types of content, usability and printing barriers, and access problems. Adetimirin (2011) also reported that erratic power supply, inadequate ICT facilities and skills were the major challenges that affected ICT literacy skills of Nigerian undergraduates.

Conclusion and Recommendations

Undergraduates use the library to enhance their academic performance and this can only be achieved when the library is found to be relevant in meeting their information needs. Their utilization of library resources is determined by their availability, accessibility to these resources, purpose and their discipline. Therefore, libraries should not only build, a balanced and relevant collection, but also provide access to the materials irrespective of their format. This will subsequently improve the quality of graduates being produced by Nigerian universities.

To improve the use of library resources by undergraduates, the discipline of undergraduates should be considered in the type of resources acquired in the library and access to library resources should be increased through the provision of more ICT facilities and subsequently more access points. The library management should ensure that awareness of the library resources should be increased and training programmes organized for users on the use of the electronic resources.

References

Abels, E.G., Liebscher, P. and Denman, D.W. (1996). Factors that influence the use of electronic networks by science and engineering faculty at small institution. Part 1. queries. *Journal of the American Society for Information Science*, 47(2), 146-158.

Adetimirin, A. E. (2011). ICT Literacy among undergraduates in Nigerian Universities. *Education and Information Technologies*. Available: http://dx.doi.org/10.1007/s10639-011-9163-y. Retrieved November 23, 2011.

Aina, L.O. (2004). Library and information Text for Africa. Ibadan. Third World Information Services.

Blowers, P. and Williams, B. (2004). Have we changed the way we do research in response to the availability of online information? Presentation at the American Society for Engineering Education, Salt Lake City, June 21, 2004. [Online].

Available:http://depts.washington.edu/englib/eld/conf/04/Williams_ASEE_PowerPoint_for_ELD.ppt. Retrieved September 12, 2010.

Borgman, C.L. (2000). From Gutenberg to the global information infrastructure: access to information in the networked world. Cambridge, MA: MIT Press.

Covi, L.M. (1999). Material mastery: situating digital library use in university research practices. *Information Processing and Management*, 35(3), 293-316.

Dilevko, Juris, and Lisa Gottlieb. 2002. Print Sources in the Electronic Age: A Vital Part of the Research Process for Undergraduate Students. *The Journal of Academic Librarianship* 28 (6): 381-392.

Eason, K. Richardson, S. and Yu, L. (2000). Patterns of use of electronic journals.

Journal of Documentation, 56(5), 477-504.

Hiller, S. (2002). How different are they? A comparison by academic area of library use, priorities, and information needs at the University of Washington: *Issues in Science and Technology Librarianship* 33 [Online]. Available: http://www.istl.org/02-winter/article1.html. Retrieved September 8, 2011.

Kling, R. and McKim, G. (1999). Scholarly communication and the continuum of electronic publishing. *Journal of the American Society for Information Science*, 50(10): 890-906.

Metoyer, C. A. (2000). Missing links in reaching culturally diverse students in academic libraries. *The Journal of Academic Librarianship*, 26(3): 157–158.

Ossai, N. B. (2011). How law students utilize information resources: A case study of the University of Benin, Benin City. *International Journal of Library and Information Science*, 3(1):1-14,

Schottlaender, B.E.C., Lawrence, G.S., Johns, C., Le Donne, C., and Fosbender, L. (2004). Collection management strategies in a digital environment. A final report to the Andrew W. Mellon Foundation, January 2004. [Online]. Available: http://www.ucop.edu/cmi/finalreport/. Retrieved November 20, 2010.

Tenopir, C. (2003). Use and users of electronic library resources: an overview and analysis of recent research studies. Washington, DC: Council on Library and Information Resources. Available: http://www.clir.org/pubs/reports/pub120/contents.html. Retrieved February 23, 2011.

Tenopir, C. (2009). Measuring the value and return on investment of academic libraries. Paper presented at the International Conference on Academic Libraries (ICAL), Delhi, India, October 5–8, 2009.

Teoh, Z.M. and Tan, A. (2011). Determinants of library use amongst university students. *Malaysian Journal of Library and Information Science*, 16(2): 21-31

Torma, S and Vakkari, P. (2004). Discipline, availability of electronic resources and the use of Finish National Electronic Library – FinELib. *Information Research,* 10(1). Available: http://informationr.net/ir/10-1/paper204.html. Retrieved February 23, 2011.

Whitmire, E. (2001). The relationship between undergraduates' background characteristics and college experiences and their academic library use. *College and Research Libraries,* 62(6): 528–540.

Williams, A.P. 1995. Conceptualizing academic library use: results of a survey of continuing education undergraduates in a small Canadian undergraduate university. *Canadian Journal of Higher Education,* 25(3): 31–48.