

Use of Electronic Databases by Law Students at the University of Botswana Library

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Abstract

This paper is based on a study of Masters dissertation carried out at the University of KwaZulu Natal which investigated the use of electronic databases by undergraduate law students at the University of Botswana Library. The study aimed to establish whether law students used the electronic databases, which databases they used and the frequency of such use, to identify problems students encountered when using the databases and how the students became aware of the databases. The study population consisted of 362 undergraduate law students. Data was collected by means of a questionnaire and an interview schedule was used to obtain background information from the two law librarians. The study results showed that the undergraduate law students did use most of the electronic databases that the library subscribed to. The databases that the students used most were: OPAC, Juta Publications and EBSCOHost. A number of problems that the students experienced when using the databases were identified.

Keywords

Botswana, electronic databases, law students, electronic databases usage, e-resources

Introduction

The rapid emergence of information and communication technologies (ICTs) has brought revolutionary changes in service and information provision in libraries. Through the use of these resources, it is possible for libraries to make information more accessible to users than before (Okeke, 2008:12). The University of Botswana (UB) has made great financial investments to offer online access to prestigious databases for most disciplines including that of law. The databases can be accessed via the University Library's website (only within the campus). Electronic databases are new ways of gaining access to a large volume of information through which users can satisfy their information needs. These databases consume an increasing percentage of library budgets, but are often underutilised when users are unaware of their existence. It is of great importance for the library to know how the students become aware of these databases, how often the students use the databases and the manner in which they use them.

The library can use evidence of effective use as justification for acquiring or providing access to these resources. On the other hand, underutilisation of electronic databases is a matter of concern for the library, and factors contributing to that should be investigated and suggestions for improving usage found. Since most universities receive funding from their governments, they have a duty to account for the money they spend. This requirement is well described by Nicholas, Huntington and Watkinson (2003:42) who stated that: "Libraries and their host organisations (mainly universities) have to justify their considerable investments in providing massive and unbridled digital access."

The University of Botswana Library has existed since 1971, when it was established as a constituent college library of the former University of Botswana, Lesotho and Swaziland. The Library was first housed in an unused church building in Gaborone Village. In

1982, the Library moved to the main campus in Gaborone, the capital of Botswana (Silas, 2007). After a few years, the library building could not accommodate the fast growing collection and the growing numbers of students. Plans were therefore made to construct a larger library. In 1986, the first phase of the planned new building was started. The state-of-the-art building was completed in June 2001. The building was designed to hold over 220 PCs for students, with a seating capacity of 4,000 readers and shelving space for 850,000 volumes. The library has integrated workstations and dedicated OPAC terminals on five of the six library floors (Mutula and Makondo, 2003).

The law collection is on the first floor and is housed separately from other business and social science materials. It comprises books, print journals, law reports of Botswana and other jurisdictions. According to Radijeng (2007), the law section subscribes to the following electronic databases:

- SAe-Publications;
- LexisNexis;
- EBSCOHost;
- Juta Publications; and
- Westlaw.

The library also has access to other databases which are freely available on the Web such as FindLaw; JSTOR and Southern African Legal Information Institute (SAFLII).

The UB Library has made great financial investments to purchase a significant number of online databases for various disciplines, including for the field of law (Radijeng, 2007). The mission of library services in the age of computer and electronic technologies is to provide accurate information at the moment of a user's need. However, despite the libraries' efforts to subscribe to reputable electronic databases, students continue to "Yahoo and Google their way into a vast sea of data" (Low, 2003:30). The majority of undergraduate students seem to choose Websites that include full-text, often without regard to how appropriate the sources are for their assignments (Tenopir, 2003:616).

However, there is a perception amongst librarians and academic staff at UB that the

databases are underutilised by students. The statistics on the use of some of the electronic databases for the year 2009 as provided by the periodicals librarian were as follows:

- LexisNexis: 306;
- SAe-Publication: 109; and
- JSTOR: 407.

These statistics show that the databases are not being effectively used, as would be expected to justify the high cost of subscriptions. The purpose of the study was to investigate the use of electronic databases by undergraduate law students at the UB. The results of the study should inform library management of the changes and improvements that need to be effected to promote and improve the use of the databases. The study was therefore guided by the following research questions:

- Do law students use electronic databases?
- Which electronic databases do law students use?
- What is the students' perceived importance of these databases?
- How often do law students use these electronic databases?
- How do law students learn about the availability of electronic databases?
- Do law students have sufficient skills to access the electronic databases?
- What barriers, if any, do law students encounter when consulting the electronic databases?

The study was limited to undergraduate law students at the UB in their second, third, fourth and fifth years of study. At the time data were collected, first-year students had just been admitted to the programme, therefore they were excluded from the study because of their limited knowledge and experience of the library. Due to time limitations, postgraduate students of the Law Department were also not included. The study did not include "use" statistics from the vendors, as these do not identify individual users and it would be impossible from the

statistics to determine the use of electronic databases by law students only.

Literature Review

A number of surveys on the use of electronic resources in academic libraries have been carried out in the past. In some of these studies, the participants were students (Mawindo, 2005; Soyizwapi, 2005), whilst others involved academic staff (Bar-Ilan, Peritz and Wolman, 2003). Studies on students targeted their awareness of the availability and use of electronic resources. The current study investigated the same factors, but with regard to undergraduate law students at the UB. Some of the studies in African universities were based on other forms of electronic resources, for example, the internet (Luambano and Nawe, 2004; Ojedokun, 2001; Tella, 2007). Morupisi and Mooko (2006) examined how undergraduate students at UB used the OPAC.

Students need to be able to access the electronic databases whenever they need them. It was noted by Rosenberg (2006) that, even though electronic resources were available in most African universities, what is still lacking is facilities for access. The university is obliged to put adequate facilities in place, as was emphasised by Arms (2000). He stressed that access to and use of electronic content is dependent on a number of types of specific and general purpose electronic equipment and facilities. In supporting the point that provision of and use of databases requires more facilities, Forsman (1998) mentions that access is only as good as the resources that can be afforded. Such resources include the number of computers, the existence of network systems, and a network infrastructure that supports rapid and convenient connections. Most electronic databases emphasise authentication and authorisation, which is a process of checking the users' identity and rights to enable them to use the system. Users are expected to provide user names and passwords. Most students in a study by Jagarnath (2004) had stated that the password requirement was one of the hindrances to the use of electronic databases.

Williamson (1999) conducted a study at the Law School at De Montfort University (DMU) in the United Kingdom to investigate students' use of electronic information. The Law School had 40

computers for students and, in addition to that, there was a Computer Resource Centre, with 30 computers to access Butterworths books on screen, including the All England Law Reports, the World Wide Web, LexisNexis and e-mail. The DMU Library had 300 computers with CD-ROM databases, Internet, law reports, journals and printed books. Printing facilities were offered freely to students. Findings of the study revealed that about 32% of the students spent their time doing word processing, 35% used the Web, 27% for e-mailing, 4% used the All England Reports and 1% used LexisNexis. Findings of the study showed that even though the students were fortunate that their institution had state-of-the-art information technologies they did not utilise them effectively, but rather conducted other tasks such as e-mailing, which at times are not done for academic purposes but for socialising. The underutilisation of library electronic databases presents a challenge to librarians to ensure that the students are adequately trained to allow them to use all the library resources effectively.

A longitudinal study was performed between the years 1998 and 2000 by Rogers (2001). The aim of the study was to justify the budget spent on subscribing to electronic journals. The participants were the academic staff and students of Ohio State University. There was a high use of journals in biological and medical sciences and a relatively low use for business, humanities, law, food and agricultural sciences, business and the arts.

In an attempt to measure students' adoption of electronic resources, Bravy and Feather (2001) conducted a study at Georgetown University Law Library. Students who were admitted to the University were reported to be computer literate and owned laptop computers. Since the students could access a wide variety of legal materials through the electronic databases and the library's Web pages using their computers there was no need to regularly visit the library, physically. The library also provided free of charge printing. The authors stated that the purpose of the study was not to promote either a print or electronic format, but to investigate the perception echoed by most studies that the generation of university students are more comfortable using electronic resources than print materials, as their primary source of information. A similar study was conducted by Valentine (1993) in Waldman (2003), which revealed that students looked for the fastest

way that would lead to satisfactory results when doing research and therefore consulted electronic information sources first.

Bravy and Feather (2001) detailed statistics on photocopying, shelving and student circulation. The findings revealed a decline in shelving and student checkout transactions. However, the statistics for photocopying rose dramatically. The explanation for this was that students were accessing electronic resources, downloading and printing them regularly. The results revealed that students at Georgetown University wholly embraced and used electronic resources mostly for their academic work.

Meredith's (2007) study at Oxford University investigated which resources law students used and the frequency of such use. The study reports on the findings of two studies done in 2004 and 2006. It was found that students increasingly used networked computers as their primary information source. Most of the students used legal databases to find cases, statutes and articles. In 2004, the percentage of students who reported to be using electronic databases, at least fortnightly, was 62%, and it rose significantly in 2006 to 78%. As regards those students who did not use the electronic databases, there was an indication that databases were gaining popularity, as their numbers decreased from 22% to 9%. Other findings of the study were that students did not only use databases frequently but numerous databases. Many also used the Internet. Due to frequent use, the students' skills developed rapidly and they proved to be good at citation-searching in several databases.

A study which aimed at examining the extent and pattern of use of electronic resources at the University of Nigeria was conducted by Ekwelem, Okafor and Ukwoma (2009). The study revealed the students' preference for the Internet, rather than for any other electronic resource. The library's subscription databases and CD-ROM were not that popular among the students. Although they did perceive these other electronic resources as useful, students were hindered by problems such as inadequate skills, inadequate bandwidth and unstable power supply.

At the University of Dar es Salaam in Tanzania, Luambano and Nawe (2004) set out to determine the purposes for which students used the Internet and investigated the problems the students

had in use. The study revealed that very few students used the Internet since there were few computers with Internet access. The few students who managed to access the Internet were not using it for academic purposes but mainly for chatting or socialising with friends. Students did not have adequate training to enable them to effectively use the Internet for academic purposes.

Nyika (2004) investigated how students and academic staff in two Tanzanian universities used electronic resources provided by the libraries. The two universities were Sokoine National University of Agriculture and the University of Dar es Salaam. The findings showed low usage of electronic resources by students. Some students showed a positive attitude towards the electronic databases and visited the library for electronic information. However, it was reported that at the Faculty of Law, the attitude of users was different. Law students and lecturers had a preference for print publications. Findings further revealed that respondents noted their inadequate knowledge of using the Internet prevented them from using the electronic databases. To address the situation, librarians offered training workshops on how to search for information using the electronic databases.

Mawindo (2005) conducted a study seeking to evaluate students' use of print and electronic resources at the Malawi College of Medicine. The survey was done on 179 undergraduate students. A self-administered questionnaire was distributed to the students and an interview held with the College Librarian. The results of the study revealed that print resources in the form of books were the most-used followed by newspapers and short loan materials. Students who used electronic resources accessed them through search engines and Websites. There was a low level of usage of electronic resources. Some of the problems that the students highlighted in the use of electronic resources were: slowness of the Internet, limited access to computer terminals, frequent failure of the server, lack of computer skills to search and retrieve information and the unavailability of staff to offer assistance. The study showed that some of these problems of accessing electronic resources contributed to their low usage and preference for print sources.

The current study was influenced by the study conducted at the University of KwaZulu-Natal,

Pietermaritzburg, by Soyizwapi (2005). The study population comprised postgraduate students in the Faculty of Science and Agriculture. Soyizwapi had set out to investigate the extent of use of electronic databases by students in that Faculty. She also investigated which databases the students used and why those databases were preferred and problems the students encountered in their use. The findings revealed that two-thirds of the studied population used the databases. Problems highlighted in the study included, among others, the following: slow connectivity, slowness of the network and lack of off-campus access (Soyizwapi, 2005:78).

Sibanda (2004), a law librarian, at a conference for law librarians, highlighted the following problems encountered by undergraduate law students at the University of Zimbabwe: shortage of hardware and software, connectivity problems, inadequate knowledge on the use of the electronic resources.

In 2006 Morupisi and Mooko, conducted a survey aimed at assessing the use of OPAC by undergraduate students at the UB. The study aimed at establishing the type of search strategies the students used, the problems they encountered during searching and the level of satisfaction with the outcome of the searches. Findings indicated that most respondents searched the OPAC, but were mainly confident in author, title, subject and keyword searches. What was gratifying was that users were able to access and search other databases through the OPAC. The problems encountered were mostly in connection with access rather than with use. Problems highlighted were: lack of Internet connection and inadequate computers, some students occupied computers for long periods, denying others the opportunity to access the resources.

Another study on Internet use by students at the UB was conducted by Ojedokun (2001). The findings of the study were that 23% of the students were not using the Internet. One of the problems identified by the study was that there were not enough computers with Internet facilities, which resulted in denying many students an opportunity of access.

Tella (2007) carried out a survey on undergraduate students at the UB. The researcher wanted to investigate the purposes for which the students used the Internet and how often they

accessed it. His intention was to investigate how the use of the Internet affected the students' academic performance. The results showed that students accessed the Internet from one to five hours per week and the main reason for seeking information was to support their academic research. It was revealed that Internet use positively affected the performance of the students.

A study by Radijeng (2007), on 45 academics and students of law at the UB, aimed at establishing how they appreciated electronic resources in their field. It sought to investigate whether they used legal electronic resources and the challenges they encountered. Even though the majority of respondents alleged to be computer literate, they were not making effective use of computers. The challenges identified in Radijeng's study were insufficient infrastructure, connectivity problems, lack of printing facilities and lack of access to computers due to cost constraints. The objective of the current study was to investigate if the undergraduate UB students were faced with similar challenges when they used the electronic databases.

Research Methodology

The study employed a combination of quantitative and qualitative approaches. The quantitative approach involved a survey and the instrument used to collect data was the self-administered questionnaire. The questionnaire was designed to elicit views about the use of electronic databases by undergraduate law students of the UB and consisted of both closed and open questions. The qualitative approach used an adapted semi-structured interview schedule to gather data. The purpose for the interview schedule was to establish background information regarding legal electronic databases at the UB Library. Two law librarians were interviewed to provide this background information to support the student questionnaire. The population for the study was second, third, fourth and fifth year undergraduate law students registered at the UB. There were 362 second, third, fourth and fifth year registered undergraduate law students in the academic 2009/2010 year. Given the size of the population of study, it was not necessary to do any sampling. The entire population was studied. Out of the 362 registered students, 244 received and completed the

questionnaire, yielding a response rate of 67.4%. This response rate was deemed satisfactory, as Punch (2003:42) indicated that response rates of 60% and above is good, since they diminish the chance of bias and are representative of the population. The questionnaire was pre-tested on seven undergraduate law students of the University of KwaZulu-Natal (UKZN) in Pietermaritzburg. The population for the pre-test consisted of three second-year students, two third-year students and two fourth-year students.

Data were analysed using SPSS, as it is useful for creating frequency tables for each of the variables (Bell, 1999:173). A coding matrix was made and data entered into SPSS for analysis. Responses to the

interview for the librarians and some of the open questions from the questionnaire were analysed qualitatively. They were analysed using thematic content analysis.

Results and Discussion

The results and the discussion follow the order of the research questions:

Law Students' Use of the Electronic Databases

Students were asked to indicate if searching was done through an intermediary or independently. The results are shown in figure 1.

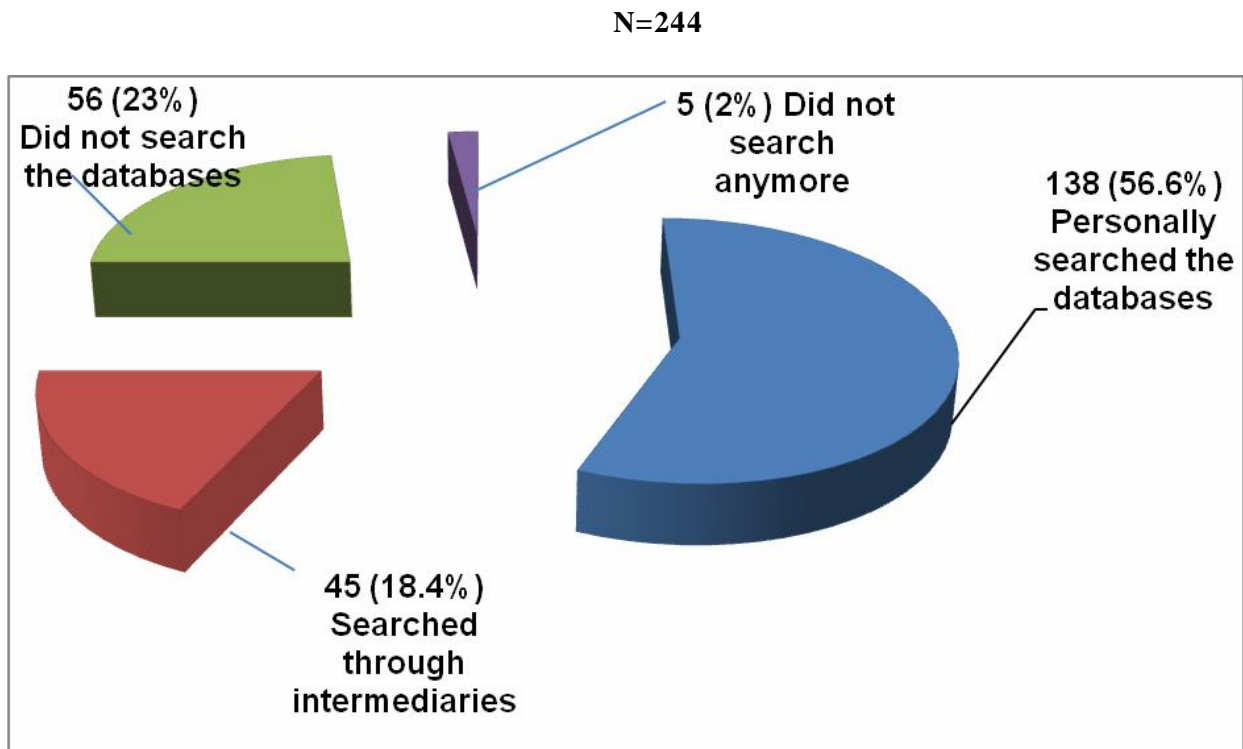


Figure 1: Searching of databases

More than half of the respondents (138 or 56.6%) indicated that they searched the databases independently, while 45 (18.4%) searched through intermediaries. It is encouraging to learn that most of the respondents (183 or 75%) were able to search the databases, either independently or through an assistant. Sixty-one (25%) respondents did not search the databases while 183 (75%) students searched the databases. The findings of the current study were similar to those of Meredith (2007), who found that the number of students at Oxford University who allegedly used the databases was 78%.

The students who did not use the databases provided various reasons. Not having access to the

computers, not knowing how to search and not being aware of the presence of databases were the three major reasons given by the students. During the interview, the law librarians pointed out the problem of lack of access to enough computers. However, there was a difference of opinion regarding awareness of the presence of the databases.

Electronic Databases Students Used

A list of databases was provided from which students had to make a selection of the databases they used. The list included the following: OPAC, EBSCOHost, JSTOR, LexisNexis, Westlaw, SAe-Publications and Juta Publications. Results are shown in figure 2.

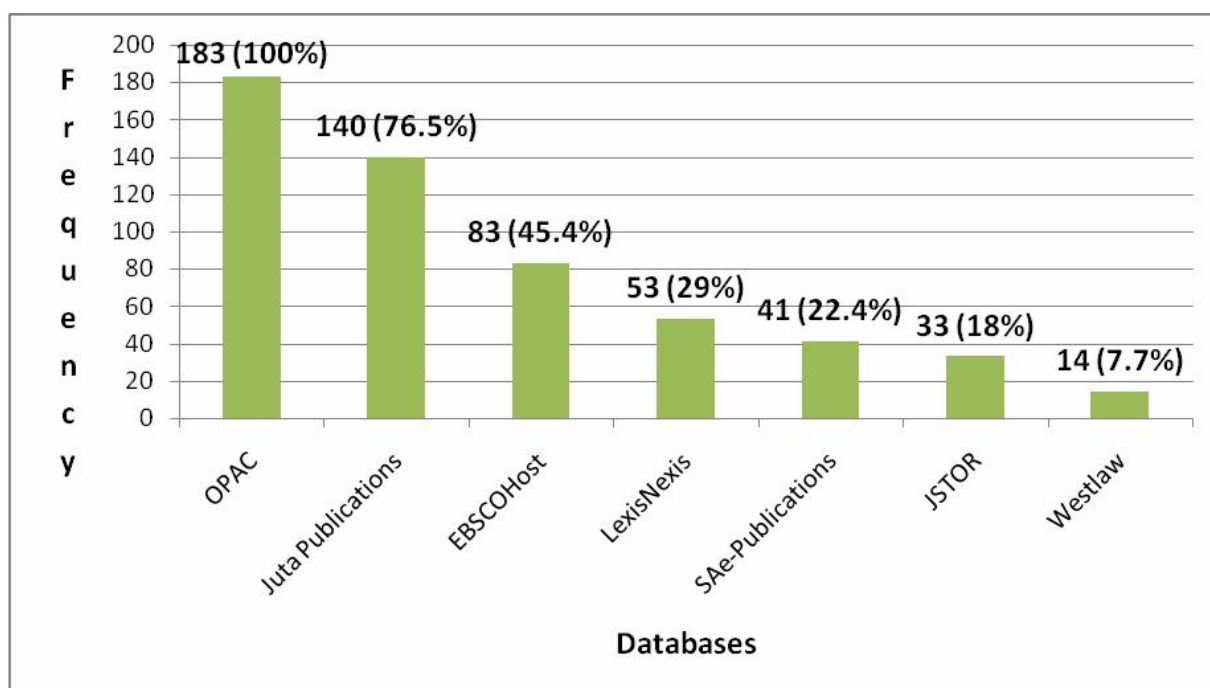


Figure 2: Databases used N=183

The OPAC was the only database that was searched by all 183 students who used the databases. The next most popular database after OPAC was Juta Publications, which was used by 140 (76.5%) respondents. EBSCOHost was searched by 83 (45.4%) of the students. Fifty-three (29%) searched LexisNexis and 41 (22.4%) used SAE-Publications. The database which had the lowest usage was Westlaw, with 14 (7.7%) students. Respondents were asked to indicate other databases that they used but were not listed. The students indicated that they also used the following databases:

- Black Hall publishing (six or 3.3%);
- Botswana Law Reports (six or 3.3%);
- SAFLII (six or 3.3%); and
- Findlaw (one or 0.5%).

Morupisi and Mooko's (2006) study found that the OPAC was the most heavily used electronic database. It is significant that the subject specific law databases, such as LexisNexis and Westlaw, were used by few students. The low use of LexisNexis could have been due to the difficulties of its complicated interface. Low usage of the LexisNexis database was also found in Williamson's (1999) study.

One of the advantages of using the databases was that they could be accessed anywhere through computers with an Internet connection. Respondents were asked to specify the places from which they accessed the electronic databases. These included the library, faculty laboratories or any other place. The results are illustrated in figure 3.

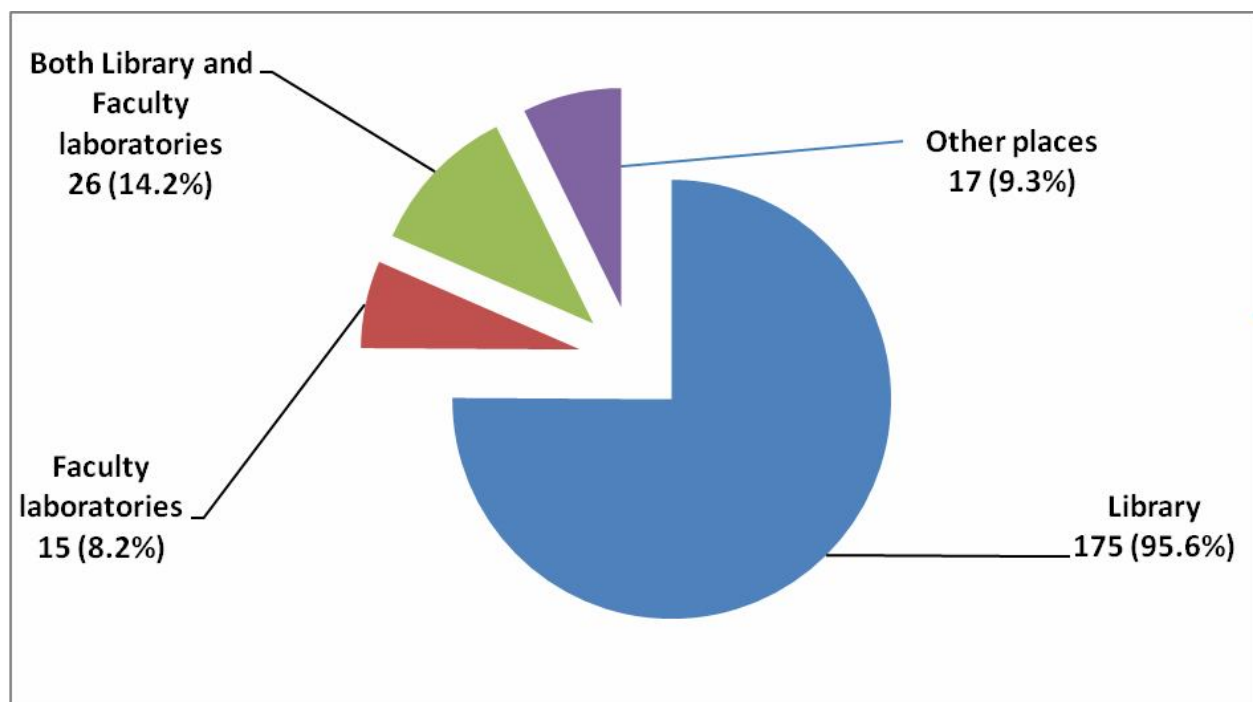


Figure 3: Points of accessing databases N=183

A majority of 175 (95.6%) students accessed the databases from the library, while 15 (8.2%) accessed the databases from the faculty laboratories. There were 26 (14.2%) respondents who indicated both the library and the faculty laboratories as locations from which they accessed the databases. There were 17 (9.3%) students who indicated that they had laptop computers and accessed the databases from the hostels and others from locations within the vicinity of the UB campus. Findings of the current study were in agreement with those of Radijeng (2007), who found that the library was the most common place from where databases were accessed. During the time of Radijeng’s (2007) study, there was no wireless connection in the students’ hostels, while during the current study, there was wireless connection in the student’s hostels. However, these findings are in contrast to that of Bravy and Feather’s (2001) study, which found that students were not regularly visiting the library to access the electronic databases, especially since they had access to their own laptop computers and they did not require the libraries’ computing facilities for access.

In order to improve access to the databases, 111 (45%) students suggested that the speed of the Internet should be increased, while 107 (43.6%) wanted an increase in the number of computers in the library. Five (2%) students proposed that the

initial password assigned to students should be used throughout their studies without having to be changed regularly and 21(8.6%) were of the view that passwords should be cancelled. In order to enable other students to access the available computers, seven (2.9%) students wanted the log-on time to be regulated. Five students suggested that the number of printers in the library should be increased. Two students (0.8%) put forward the suggestion of 24 hour access to the library and its resources, whilst three (1.2%) suggested that since, for late night study, the library is open for 24 hours, computers should be installed there to enable students access when the library was closed. To deal with the problem of insufficient computers, two (0.8%) students stated that sponsors should be approached with the proposal of giving loans to students to purchase personal computers.

Students’ Perceived Importance of the Electronic Databases

This research question assessed the students’ perceived importance of the databases searched. The response patterns for this question are captured in Table 1. The 183 respondents who searched the databases rated them as follows: very important, important, neutral and unimportant.

Table 1: Ratings of library databases N=183

Online Databases	Very important		Important		Neutral		Unimportant		No Response		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
OPAC	156	85.2%	10	5.5%	15	8.2%	2	1.1%	0	0%	183	100%
Juta Publications	101	55.2%	33	18%	2	1.1%	4	2.2%	43	23.5%	183	100%
SAe-Publications	31	16.9%	5	2.7%	3	1.6%	2	1.1%	142	77.6%	183	100%
LexisNexis	29	15.8%	20	10.9%	0	0%	4	2.2%	130	71%	183	100%
EBSCOHost	27	14.8%	34	18.6%	12	6.6%	10	5.5%	100	54.6%	183	100%
JSTOR	19	10.4%	10	5.4%	0	0%	4	2.2%	150	82%	183	100%
Westlaw	5	2.7%	4	2.2%	2	1.1%	3	1.6%	169	92.3%	183	100%

The OPAC was rated as both very important and important by 156 (85.2%) students and 10 (5.4%), respectively. Juta Publications was rated as very important by 101 (55.2%) and important by 33 (18%) students. Some students 10 (5.5%) rated EBSCOHost as unimportant. Juta Publications, JSTOR and LexisNexis were ranked as unimportant by four (1.1%) students each. Westlaw was

considered unimportant by three (1.6%) students.

Frequency of use of the databases

Students who indicated that they searched electronic databases were requested to state their frequency of use. Table 2 shows the frequency of use of the databases.

Table 2: Frequency of use of the databases N=183

Databases	Daily		Weekly		Monthly		Yearly		Never used		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Juta Publications	43	23.5%	56	30.6%	32	17.5%	9	4.9%	43	23.5%	183	100%
OPAC	41	22.4%	90	49.2%	30	16.4%	22	12%	0	0%	183	100%
SAe-Publications	11	6%	17	9.3%	11	6%	2	1.1%	142	77.6%	183	100%
LexisNexis	6	3.3%	28	15.3%	19	10.4%	0	0%	130	71%	183	100%
Westlaw	3	1.6%	4	2.2%	5	2.7%	2	1.1%	169	92.3%	183	100%
JSTOR	2	1.1%	17	9.3%	12	6.6%	2	1.1%	150	82%	183	100%
EBSCOHost	0	0%	38	20.8%	35	19.1%	10	5.5%	100	54.6%	183	100%

Juta Publications was used by 43 (23.5%) daily, 56 (30.6%) weekly, 32 (17.5%) yearly, and was never used by 43 (23.5%). The OPAC was ranked second after Juta Publications. The OPAC was used by 41 (22.4%) respondents on a daily basis, on a weekly basis it was used by 90 (49.2%), monthly by 30 (16.4%) students, and yearly by 22 (12%). The usage for SAe-Publications was 11 (6%) daily, 17 (9.3%) weekly, 11 (6%) monthly, two (1.1%) yearly, and was never used by 142 (77.6%).

LexisNexis was used as follows: 6 (3.3%) daily, 28 (15.3%) weekly, 19 (10.4%) monthly, it was never used on a yearly basis and 130 respondents

had never used it. Westlaw was used most on a monthly basis by five (2.7%), followed by a weekly usage of four (2.2%), daily usage of three (1.6%), the least usage was on a yearly basis at two (1.1%). There were 169 (92.3%) students who never used Westlaw. JSTOR was used mostly on a weekly basis by 17 (9.3%) students, the monthly usage was second at 12 (6.6%), the daily and yearly usage were two (1.1%). One hundred and fifty (82%) students never used JSTOR. EBSCOHost was used mostly on a weekly basis by 38 (20.8%), monthly by 35 (19.1%), yearly by 10 (5.5%) while 100 (54.6%) students never used EBSCOHost.

How Law Students Learnt about the Availability of Databases

A list of sources from which respondents may have learnt about the availability of databases was

provided. Respondents were to select all the options through which they learnt about the databases. The results are given in table 3.

Table 3: Source of awareness of availability of databases

N=244

Source of awareness	Yes		No		Total	
	Count	%	Count	%	Count	%
Friends	160	65.6%	84	34.4%	244	100%
Library orientation	122	50%	122	50%	244	100%
Lecturers	107	44%	137	56.1%	244	100%
Library guides	38	15.6%	206	84.4%	244	100%
Library website	36	14.8%	208	85.2%	244	100%
Information literacy module	4	1.6%	240	98.4%	244	100%
Law librarian	3	1.2%	241	98.8%	244	100%
Library notice board	1	0.4%	243	99.6%	244	100%
Self-discovery	1	0.4%	243	99.6%	244	100%

The three most important sources of awareness were friends, which accounted for 160 (65.6%), library orientation with 122 (50%) and lecturers with 107 (43.9%). Library guides were a source of awareness for only 38 (15.6%) respondents. Thirty-six (14.8%) respondents learnt about the availability of the databases from the library website. The additional sources of awareness which the students mentioned under the "Other" option were: the information literacy module mentioned by four (1.6 %) students. Three (1.2%) students found out about the databases from the law librarian. Library notice boards and self- discovery were mentioned by one (0.4%) student each.

Findings of the current study were similar to those of Soyizwapi's (2005) study, in that friends, library orientation and lecturers proved to be the top three most important information sources concerning the library databases.

Barriers Students Encountered when Accessing the Electronic Databases

A list of known or common problems related to accessing the databases was provided. Respondents were asked to make a selection of the problems they faced when searching the electronic databases. Table 4 shows the students' responses.

Table 4: Problems experienced when using the databases

N=183

Problems	Yes		No		Total	
	Count	%	Count	%	Count	%
Slow connection	114	62.3%	69	37.7%	183	100%
Insufficient computers to access the databases	110	60.1%	73	39.9%	183	100%
Password requirements	96	52.5%	87	47.5%	183	100%
Not allowed to download, print, or e-mail results to self	85	46.4%	98	53.6%	183	100%
Staff not available to help	78	42.6%	105	57.4%	183	100%
Log on	64	35%	119	65%	183	100%
Printing	64	35%	119	65%	183	100%
Difficulty in searching	61	33.3%	122	66.6%	183	100%
Not certain which database to choose	54	29.5%	129	70.5%	183	100%

Most of the students 114 (62.3%) who used the databases considered slow connection to be a major problem, but 69 (37.7%) did not encounter this problem. Lack of sufficient computers affected 110 (60.1%) of the students accessing the databases. The requirement of passwords in the use of the databases was considered a problem by 96 (52.5%) of the respondents. Seventy-eight (42.6%) students mentioned the fact that staff were not available to help affected their use of the databases. Sixty-four (35%) students had problems with printing and logging on respectively. Not being able to decide which database to choose from was considered a problem by 54 (29.5%) students.

The following problems were mentioned by one (0.5%) respondent each under the "Other" option:

- Few or no electric sockets where laptop computers could be plugged in;
- Internet disruptions;
- Lack of off-campus access;
- Lack of operating software in some computers;
- Other students logging on for longer periods; and
- Provision of abstracts only.

The slowness of the Internet was a major problem encountered by most of the students who searched the databases. The limited number of computers inhibited a majority of students from accessing the databases. Similar problems mentioned were confirmed by the law librarians during the interview schedule. The findings of the study revealed that the top two problems related to access to the databases. Similarly Luambano and Nawe (2004) and Ekwelem, Okafor and Ukwoma (2009) expressed problems relating to Internet access to the databases. Jagarnath (2004) found that password requirements were one of the hindrances to the use of electronic databases.

The problems that were highlighted in the current study were similar to those identified in related studies by Radijeng (2007), Mawindo (2005), Soyizwapi (2005) and Sibanda (2004), with students experiencing the same problems. Problems which

were highlighted in these studies included: lack of computer skills to effectively search for and retrieve information, slowness of the Internet and limited access to computer terminals. In terms of limited access to computers, Arms (2000), Rosenberg (2006) and Forsman (1998) pointed out that even though electronic resources are available in most libraries, facilities for accessing these resources is lacking.

Conclusion and Recommendations

Based on the results of the study the following conclusions were drawn:

A majority (75%) of the undergraduate law students surveyed used most of the electronic databases that the Library subscribed to. The OPAC, Juta Publications and EBSCOHost were the top three databases used by undergraduate law students. Most students who used the databases appreciated that they offered full-text. The other benefits which the students valued were ease of use and the ability to e-mail, save and print the retrieved results. With regard to the frequency of use of the databases, Juta Publications, OPAC and SAe-Publications were the top databases used daily, weekly and monthly. Westlaw and JSTOR were the least used databases by most undergraduate law students at the UB Library.

The OPAC was perceived as either very important or important by 85.2% of the students and 5.5%, respectively. The number of students who considered Juta Publications as either very important or important was 55.2% and 51.8 %, respectively. SAe-Publications were ranked third in importance, with 16.9% of the students rating it as very important and 2.7% as important.

Undergraduate law students learnt about the availability of the electronic databases from various sources. Friends and library orientation proved to be the best sources of information relating to their awareness of the databases. A majority of students were satisfied with the information they obtained from the databases.

The UB Library was the most common place from which the databases were accessed. The library was used by a majority of students (95.6%) to access the databases. Faculty laboratories and students' hostels did not offer as much access to the databases as the Library. Problems most encountered when

accessing the databases were, slow Internet connection, lack of sufficient number of computers and the password requirements.

The study found out that students were not utilising all the electronic databases to the fullest. Although there was evidence of use of the general databases like EBSCOHost, the disturbing finding was that there was minimal use of subject-related databases. The conclusion reached is that the library has to adopt an intensive marketing strategy of the databases and provide further or more intensified training to students.

In line with the above conclusions, the study proposed the following recommendations:

- In order to improve the use of the databases, the UB Library should increase the number of computers that are available to the students specifically for searching the databases. At the time of the study, there were 220 computers and only two printers in the Library.
- The number of printers available in the library should be increased. Some of the seminar rooms in the library should be designated for training on the use of the databases. Private companies should be allowed to offer printing services on campus. The library should work in collaboration with the IT department to offer off-campus access which did not exist at the time of the study. Off-campus access was available to staff on a trial basis only. On-campus access should be improved by increasing the speed of the internet. Faculty laboratories should offer students 24-hour access to computers.
- The library should enhance awareness of the available databases by approaching and informing all new and returning students at the beginning of every semester. Librarians could utilise the students' visits to the library to effectively market electronic databases, by displaying information relating to the availability and use of the electronic databases on notice boards and other

strategic places. Librarians should exploit the liaison programme that has been established with the academic staff to bring awareness of the databases to the students at least once every semester. A whole lecture hour could be dedicated to informing students about the databases. The library's advertising screen should be loaded with information about the databases and it should be updated as new databases are added.

- Targeting only first-year students may not be effective; training should be an ongoing basis and offered to all students at all levels of study. Training on use of the databases should not be limited to groups, but one-on-one training should be offered to cater for slow learners and those students who are intimidated by large groups of people.
- Librarians who conduct library orientation should use standardised and updated notes. The orientation should be intensified to include some details on use of the databases. Online tutorials on the use of the databases, which the students can follow at their own pace, should be offered. PowerPoint slides on the use of the databases could be continuously run in seminar rooms for interested students to watch and learn from.
- There should be a register on all floors provided for students needing training to record their contact details. The librarians should draw up training schedules based on how many students have requested training. Information relating to when training would be offered should be displayed on notice boards around campus, and individual e-mail messages should be sent to the students concerned.
- Where possible, the requirements for passwords to the databases should be limited.
- More training for staff specially designated to assist students on the use of the databases should be offered.

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