



ASSESSMENT OF INTERNET RESOURCES UTILIZATION BY BUSINESS EDUCATION STUDENTS FOR LEARNING IN THE UNIVERSITY OF CALABAR

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ABSTRACT

The study assessed internet resources utilization by business education students for learning in the University of Calabar. Two specific purposes and two research questions guided the study. Descriptive survey design was adopted in the study. The population of the study comprised two hundred and four (204) business education students in the University of Calabar in the 2022/2023 academic session. The entire population was used, thus, no sampling was done. A checklist developed by the researcher titled: Internet Resources Utilization Checklist (IRUC) was used as instrument for data collection. The instrument was validated by two subject experts in business education and one expert in test and measurement. The instrument was further tested for reliability using split-half approach. The overall reliability results obtained was 0.86. Frequency count and percentage was used to analyse data. Finding revealed that business education students in the University of Calabar to large extent utilize internet resources for learning. Search engines were the most utilized internet resources, contributing approximately 22% to students' learning. They were closely followed by database which contributes 21% to students' learning. The next were social media sites and multimedia, contributing 19% each and the last was Emails which contributed 16% to learning. The study concluded that the utilization of internet resources for educational purposes enhanced students' learning. It was recommended that schools should provide students with reliable internet facilities to enable easy access to learning resources on the Internet.

INTRODUCTION

In today's digital age where many people rely on internet resources for daily tasks, it is essential to understand the meaning and significance of internet resources to make the most of the opportunities they offer. In the assertion of Egyankosh (2010), the term internet resources refers to various resources in electronic format that provide information or an indicator to the information and are accessible over the Internet.

According to Ashikuzzaman (2017), internet resources provide users instant access to knowledge, enabling research, learning, collaboration, and exploration of knowledge in various subjects and cover diverse fields, catering to various interests and needs. Internet resources refers to all the products which a library provide through a computer network, covering bibliographic databases, electronic reference books, search engines for full text books, and digital collections of data.

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These resources have revolutionized the way people access and utilize information. They provide limitless sources of data and resources that can be accessed anytime, anywhere.

Internet resources are essential in education, as higher institutions of learning utilize them to enhance teaching and learning as well as administrative duties. Azizan (n.d) affirmed that internet resources has brought considerable benefits to students and lecturers in teaching and learning activities. Furthermore, the United Nations Educational, Scientific and Cultural Organization (2003) maintained that internet resources increases the accessibility of reference materials and data for all categories of users; enhance information retrieval; individualized learning and teaching; collaborative activities and group learning and teaching via the Internet. Internet resources offers a great number of virtual worlds which can be accessed by first downloading, then, installing appropriate software onto a computer system to be used whenever needed to enhance personalized learning (Kruk, 2014). Students can utilize internet resources for their assignment and to find answers to their questions quickly. They provide access to information on a wide range of topics which can be utilized to enhance research and learning. Due to the enormous importance associated with internet resources, Dogruera, Eyyamb and Menevis (2011) encourages students to use this invaluable sources to get any kind of information they need in their academic studies.

There are various types of internet resources utilized in education today. Glazunova and Voloshyna (2014) noted that the most commonly used internet resources are professionally oriented sites, massive open online courses, blogs, social networks and news sites. Agada and Tofi (2021) mentioned the types of internet resources to include websites, Blogs, Webliography, E-books and e-journals. Others are emails, online database and social media platforms Great (2021); search engines, academic journals, research databases and encyclopedia. This article focused on the following internet resources: search engines, emails, online database, multimedia files, learning management system (LMS) and websites.

Search engines are internet resource which uses different algorithms and techniques to locate and rank information online. They are the most important resource when it comes to locating

information on the Internet. This aligns with Olubiyo, Fagbemi and Awoyemi (2021) that search engines continue to dominate, topping the list of resources most used in online content. Search engines function by enabling users to type in keywords or topic of interest and it direct them to possible results. The users have the liberty to select from the search results as it best suit their needs. Some examples of search engines are Google, Ask, Yahoo, Microsoft Bing, Baidu, Yandex, DuckDuckGo and Ecosia. Among the search engines, Apuke and Tunca (2020) found that Google was to be the most preferred search engine by users.

Emails are communication tools that facilitates sending of messages to a large number of persons at the same time. Email has been reported to be a beneficial tool in education and it is one of the most widely used means of communication and collaboration in academia, especially for disseminating information to its community and for receiving feedback (El-Sabban, 2014). Examples of Emails services are Gmail, Yahoo, Uymail, Outlook, AOL Mail, Neo, Titan, iCloud Mail, Proton Mail, Zoho Mail, Hostinger and GMX Mail.

Online database comprise journals, reports, e-books, image collections, magazines and online news that can be accessed electronically through academic library. This mean that with online databases, one does not need to go to the library as they can be made available to users anywhere and anytime; thus they have great significance in the research and learning process (Larson, 2017). Online database are the easy way to access professional and specific information.

In this vein, Mahmood in Suleiman and Joshua (2019) revealed that the most internet resources used are the e-books, e-journal and online databases, because of the current and relevant information obtained from them. However, Suleiman and Joshua (2019) found online database and e-mail as the most internet resources and services utilized by the respondents.

Multimedia as the name suggest is a way of presenting information to users using more than two interactive media. Multimedia files, in the assertion of Pavithra, Aathilingam and Prakash (2019) are those that uses numerous forms of information content and information processing such as text, audio, graphics, animation, and video interactivity to inform, entertain or educate the users.

They are files that are capable of integrating two or more multimedia elements such as text, images, maps, graphs, audio, video and animations to make the presentation of information interesting and memorable.

Learning Management Systems (LMS) are systems that provide online classroom environments that reinforces teaching and learning processes for teachers and students. For Kasumu (2023) learning management system is not just for eLearning, it is capable of housing videos, slide decks, written instruction, and various other learning materials in a user-friendly, centralized location. LMS has features such as course management, assessment and grading tools, tracking progress and communication tool among others that makes teaching and learning interesting. Crouse-Machcinski (2020) noted that facilitators can use online tests or quizzes to gauge progress and knowledge of students, post materials or lectures, host discussions amongst students, have students submit assignments through the platform, mass email the class list, and much more. LMS stand out as one of the educational technology systems that best solve problems related to usability, accessibility, and evaluation (Pozo-Sánchez, Segura-Robles, Moreno-Guerrero and López-Belmonte, 2022). Examples of LMS include Google Classroom, Zoom, Schoology, Canvas and Moodle.

Websites are the collection of webpages that can be identified by a common domain name (Aravindan, 2023). They are a set of web pages accessible through the Internet by using web address or query in a search engine. Websites covers wikis, blogs, News sites and social media sites. Attention is given to social media sites such as Facebook, YouTube, Twitter, Instagram among others.

The benefits of internet resources cannot be overemphasized. These resources are constantly updated with the latest information to ensure that users have access to current data and stay informed about various topics. They provide instant access to information and global communication; they enhanced collaboration, improved productivity and cost-effective solutions in education. Suleiman and Joshua (2019) revealed that internet resources are capable of providing Nigerian researchers and scholars, the enabling environment to overcome the barriers of communication and collaboration and also provide scholars, researchers, individuals and their

organization the advantage of presenting their research findings and ideas. In addition, Apuke and Tunca (2020) found that students affirmed that the use of internet resources enabled them to perform research ahead of time, tackle multiple homework, widens the scope of reading and learning, promotes self-learning, encourages and enhances peer learning as well as ameliorates student's examination preparation. However, there are concerned over the poor utilization of internet resources among business education students in the University of Calabar. There are also fears that some students may utilize the internet for other purposes which may not contribute to their learning. Based on this backdrop, it became imperative to assess how business education students in the University of Calabar utilize these resources for learning.

STATEMENT OF THE PROBLEM

The emergence of the Internet has provided a preferred alternative in education to traditional teaching and learning. The Internet comprise of a wide range of resources that facilitates access to and sharing of information. Most tertiary institutions of learning have upgraded to digital libraries and are providing internet access to students to enable them obtain learning resources to improve their learning. It is expected of the students to be able to utilize those resources for their learning, assignments and research works. Unfortunately, most students are not taking advantage of internet resources for academic purposes. Majority seems not to be aware of internet resources that can make learning more effective and meaningful to them. The shortcoming in the utilization of internet resource has not been address probably because of lack of scholastic attention in this area particularly in the University of Calabar. It is on this backdrop that this study is anchored.

Purpose of the Study

The main purpose of the study was to assess internet resources utilization by business education students for learning in the University of Calabar. Specifically, the study sought to:

1. Ascertain the extent of utilization of internet resources by business education students for learning in the University of Calabar.
2. Identify the internet resources mostly utilized by business education students for learning in the University of Calabar.

Research Questions

The research questions formulated for the study:

1. What is the extent of utilization of internet resources by business education students for learning in the University of Calabar?
2. Which internet resources are mostly utilized by business education students for learning in the University of Calabar?

METHODOLOGY

Descriptive survey design was adopted in the study. The population of the study comprised two hundred and four (204) business education students in the University of Calabar in the 2022/2023 academic session. The entire population was used, thus, no sample for the study. A checklist developed by the researcher

titled: Internet Resources Utilization Checklist (IRUC) was used as instrument for data collection. The instrument was validated by two subject experts in business education and one expert in test and measurement. The instrument was further tested for reliability using split-half approach. The overall reliability results obtained was 0.86. Frequency count and percentage was used to analyse data.

RESULTS

The results of data analyses were present in tables according to the respective research question they represent.

Research Question One

What is the extent of utilization of internet resources by business education students for learning in the University of Calabar?

Data analysis of research question one is presented in Table 1

Table 1: Extent of utilization of internet resources by business education students for learning in the University of Calabar

S/N	Search Engines	N0 Utilized	%	N0 Not Utilized	%	Decision
1	Google	204	100	0	0	Utilize
2	Ask	163	80	41	20	Utilize
3	Yahoo	155	76	49	24	Utilize
4	Microsoft Bing	147	72	57	28	Utilize
5	Baidu	71	35	133	65	Not Utilize*
Emails						
6	Gmail	132	65	72	35	Utilize
7	Yahoo	163	80	41	20	Utilize
8	Uymail	40	20	164	80	Not Utilize*
9	Outlook	116	57	88	43	Utilize
10	AOL Mail	92	45	112	55	Not Utilize*
Online Database						
11	Journals	184	90	16	10	Utilize
12	Online News	120	60	80	40	Utilize
13	E-books	140	70	60	30	Utilize
14	Image Collections	128	64	72	36	Utilize
15	Magazines	112	56	88	44	Utilize
Multimedia Files						
16	Text Materials	190	95	10	5	Utilize
17	Images	124	62	76	38	Utilize
18	Animations	90	45	110	55	Not Utilize*
19	Audio Materials	120	60	80	40	Utilize
20	Video Materials	108	54	92	46	Utilize
Learning Mgt Systems						
21	Google Classroom	37	18	167	82	Not Utilize*
22	Zoom	51	25	153	75	Not Utilize*
23	Schoology	0	0	204	100	Not Utilize*
24	Canvas	0	0	204	100	Not Utilize*
25	Moodle	0	0	204	100	Not Utilize*
Social Media Sites						
26	Facebook	163	80	41	20	Utilize
27	YouTube	122	60	82	40	Utilize
27	Twitter	110	54	94	46	Utilize
29	Instagram	104	51	100	49	Utilize
30	WhatsApp	153	75	51	25	Utilize

Table 1 reveals that eight (8) items out of thirty items representing approximately 27% are not utilized. The not utilized are Baidu search engine; Uymail and AOL Mail email services; animated multimedia files and all learning management systems (Googl classroom, Zoom, Schoology, Canvas and Moodle). Twenty-two (22) of the items in the Table representing approximately 73% are

utilized. This findings indicates that business education students in the University of Calabar to large extent utilize internet resources for learning.

Research Question Two

Which internet resources are mostly utilized by business education students for learning in the University of Calabar?

Data analysis for the mostly utilized internet resources by business education students for learning in the University of Calabar is presented in Table 2

Table 2: Internet resources are mostly utilized by business education students for learning in the University of Calabar

S/N	Internet Resources	Gross %	Net %
1	Search Engines	363	22
2	Database	340	21
3	Social Media Sites	320	19
4	Multimedia	316	19
5	Emails	267	16
6	Learning Management Systems	43	3
Total		1649	100

Table 2 shows that search engines are the most utilized internet resources, contributing approximately 22% to students' learning. The next most utilized internet resource is database which contributes 21%. This is followed by social media sites and multimedia. They contributes 19% each. Emails comes next and contributes 16% to learning while LMS is the least, contributing 3% to learning.

DISCUSSION

Findings indicated that business education students in the University of Calabar to large extent utilized internet resources for learning. This findings demonstrated that internet resources plays crucial role in modern education as invaluable tools for learning. They enhance educational experiences and support students in developing essential skills in research and developing knowledge. The findings agrees with Apuke and Tunca (2020) that students affirmed that the use of internet resources enabled them to perform research ahead of time, tackle multiple homework, widens the scope of reading and learning, promotes self-learning, encourages and enhances peer learning as well as ameliorates student's examination preparation. Internet resources are essential because they provide students with access to a vast amount of

information and facilitate interactive learning experiences. This aligns with the findings of Ashikuzzaman (2017) that internet resources provide users with instant access to knowledge, enabling research, learning, collaboration, and exploration of knowledge in various subjects and cover diverse fields, catering to various interests and needs. Internet resources enhances learning by providing diverse learning opportunities from online courses to virtual tours which students can explore various subjects at their own pace. Furthermore, internet resources particularly online platforms enable students to collaborate with peers, instructors and experts. In addition, internet resources help students to develop research skills by enabling them to evaluate and cite sources effectively. They also provide students the opportunity to learn how to analyse information and form their own opinions. More so, internet resources cater for different learning styles by providing visual learners with multimedia content and auditory learners can access podcasts and webinars.

Findings in Table 2 revealed that search engines were the most utilized internet resources, contributing approximately 22% to students' learning. The next most utilized internet resource was database which contributes 21% to student's learning.

This was followed by social media sites and multimedia. They contribute 19% each. Emails came next, contributing 16% to learning while LMS was the least, contributing 3% to learning. The emergence of search engines as the most utilized internet resources suggests that they are the gateway when it comes to locating and ranking information on the Internet. The finding aligns with Olubiyo et al (2021) that search engines continue to dominate, topping the list of resources most used in online content. Among the search engines, Google, Ask, Yahoo and Microsoft Bing were the most utilized by students. This finding is supported by Apuke and Tunca (2020) that Google was to be the most preferred search engine by users. The findings are also in line with LinkedIn (2022) that search engines are the backbone of the Internet, providing users with a way to find the information they need and the most popular search engines are Google, Bing and Yahoo.

In the findings, database was ranked second. Database are critical resources due to the current and relevant information obtained from them. The finding is in line with Suleiman and Joshua (2019) online database constitute part of the most utilized internet resources. Journals, e-books, image collection, online news and magazines were utilized in their respective orders. Most professional and specific information are provided in journals in various subjects and fields of knowledge. This fact was recognized by Mahmood in Suleiman and Joshua (2019).

Social media sites and multimedia were also found to be utilized by students for learning and each contributes 19% to learning. Ekechukwu (2017) agrees that most students of tertiary institutions in Nigeria are actively connected to the social networking sites. In buttress to the findings, Hudson (2018) found that social media allow people to share content quickly, efficiently and in real-time. In the same vein, Gupta (2015) revealed that social networking sites are about collaborating, networking, sharing and generating knowledge and content, and all of these features are of great value in the context of higher education. Similarly, multimedia deliver more interactive information in different forms to suit individual need.

Pavithra (2019) agrees that they use numerous forms of information content and information processing such as text, audio, graphics, animation, and video interactivity to inform, entertain or educate the users.

Emails were found to contribute 16% to students' learning. Emails are power tools for communication. The finding aligns with El-Sabban (2014) who confirmed that emails are beneficial tool in education and it is one of the most widely used means of communication and collaboration in academia, especially for disseminating information to its community and for receiving feedback.

CONCLUSION

Internet resources play a crucial role in modern education, functioning as invaluable tools for learning. They enhance educational experiences and support students in developing essential skills in research and developing knowledge. It was not surprising that business education students in the University of Calabar to a large extent utilized internet resources for their learning. Search engines were the most utilized internet resources, contributing approximately 22% to students' learning. They were closely followed by database which contributes 21% to students' learning. The next were social media sites and multimedia. They contribute 19% each and the last was Emails, contributing 16% to learning. The utilization of internet resources could be sustained and improved when the school provides students with easy access to reliable internet facilities.

RECOMMENDATION

It was recommended that:

1. Schools should subscribe to and ensure the availability of reliable internet facilities to enable students have easy access to learning resources on the Internet.
2. Students should develop the ability to concentrate on learning and avoid distractions associated with the utilization of internet resources.

REFERENCES

- Agada, E. O., and Tofi, S. T., 2021. Use of internet resources and its perceived effects on academic librarians in academic libraries in Nasarawa State, Nigeria. *Jewel Journal of Librarianship*, 16 (1), 102-110
- Apuke, O. D., and Tunca, E. A., 2020. The utilization of internet resources for learning and research among students of Taraba State University, Jalingo, Nigeria. *Library Philosophy and Practice* (e-journal). 3864. <https://digitalcommons.unl.edu/libphilprac/3864>
- Aravindan, A., 2023, November 13. Website – introduction, types and history notes pdf. [Web log post]. <https://entri.app/blog/website-introduction-types-history-notes-pdf/>
- Ashikuzzaman, M., 2017. Impact of internet resources on library. <https://www.lisedunetwork.com/internet-resources-library/>
- Azizan, F. Z. (n.d). The effectiveness of using internet as a principal information resource in teaching and learning activity in higher educational institutions in Malaysia. <https://core.ac.uk/reader/42980680>
- Crouse-Machcinski, K., 2020. The benefits of utilizing learning management systems in peer tutor training. <https://files.eric.ed.gov/fulltext/EJ1234385.pdf>
- Dogruera. N. D., Eyyamb, R., and Menevis, I., 2011. The use of the internet for educational purposes. *Procedia - Social and Behavioral Sciences*, 28, 2011, 606 – 611
- Egyankosh, 2010. Internet resources. <https://egyankosh.ac.in/bitstream/123456789/26328/1/Unit-7.pdf>
- Ekechukwu, P. C., 2017. The effect of social networking sites on academic performance of students of Abia State Polytechnic, Aba. *American Journal of Art and Design*, 2(4), 100-104.
- El-Sabban, F., 2014. Incorporating e-mail in teaching activities of the nutrition program at College for Women, Kuwait University: Assessment of a 5-year experience. https://www.academia.edu/45442340/Incorporating_e_mail_into_the_learning_process_its_impact_on_student_academic_achievement_and_attitudes
- Glazunova O., and Voloshyna T., 2014. Types of academic internet-resources for it students' individual work management. *Information Technologies in Education*, 2014 (21), 78-86. DOI: 10.14308/ite000513
- Great, P. D., 2021. Internet Resources and Effective Library Services. *Gaspro International Journal of Eminent Scholars*, 7 (2), 15-28
- Gupta, P., 2015. Importance of social media in higher education. <http://edtechreview.in/trends-insights/insights/2041-social-media-in-higher-education>.
- Hudson, M., 2018. What is social media? Retrieved from <https://www.thebalancesmb.com/what-is-social-media-2890301>.
- Kasumu, R. O., 2023. Learning management system in education: benefits and drawbacks. *International Journal of Trendy Research in Engineering and Technology Volume*, 7 (1), 17-23
- Kruk, M., 2014. The use of internet resources and browser-based virtual worlds in teaching grammar. *Teaching English with Technology*, 14(2), 52-67, <http://www.tewtjournal.org>

- Larson, A. G., 2017. Faculty awareness and use of Library subscribed online databases in the University of Education, Winneba, Ghana: A survey. *Library Philosophy and Practice* (e-journal). 1515. <http://digitalcommons.unl.edu/libphilprac/1515>
- Linkedin, 2022. What are the types of search engines in the internet world. <https://www.linkedin.com/pulse/what-types-search-engines-internet-world-yosef-raz-onpassive->
- Olubiyo, P. O.; Fagbemi, V. Y.; and Awoyemi, R. A., 2021. Online information resources utilization among students in Adeyemi College of Education, Ondo, Nigeria. *Library Philosophy and Practice* (e-journal). 5759. <https://digitalcommons.unl.edu/libphilprac/5759>
- Pavithra, A., Aathilingam, M., and Prakash, S. M., 2019. Multimedia and its applications. *International Journal for Research and Development in Technology*, 10 (5), 271-276
- Suleiman, I., Joshua, D., 2019. Awareness and utilization of the internet resources and services for academic activities by the academics of tertiary institutions in Adamawa State, Nigeria. *International Journal of Knowledge Content Development & Technology*, 9 (2), 7-31
- United Nations Educational, Scientific and Cultural Organization, 2003. Internet in education. <https://iite.unesco.org/pics/publications/en/files/3214612.pdf>