# PERCEPTION OF TERTIARY INSTITUTIONS STUDENTS TOWARDS THE USE OF E-LEARNING RESOURCES FOR LEARNING AND RESEARCH IN ACADEMIC LIBRARIES IN DUTSIN-MA METROPOLIS

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#### **Abstract**

This study investigated the perception of tertiary institution students towards the use of e-learning resources for learning and research in the academic library in Dutsin-Ma Metropolis. The study adopted a descriptive survey design. The target population was all undergraduate Long Vacation Training (LVT) students at the Federal University Dutsin-Ma and regular library patrons at Isakita College of Education in Dutsin-Ma Metropolis. Two hundred (200) respondents were selected for the study using simple random sampling technique from the total population of 490. The instrument used in collecting data was an adapted questionnaire developed by Wisdom (2020) in assessing electronic resources in Kogi State University. The data collected were analyzed using descriptive statistics of frequency counts and percentages to answer the research questions and inferential statistics of ttest for testing the hypotheses. The findings of the study revealed that tertiary institutions students in Dutsin-Ma Metropolis are aware of elearning resources available for learning and research, satisfied with majority of e-library resources available except video and audio conferencing, agreed that e-library resources have positive impact on learning and research and confirmed that the strategies that can be used to improve the use of e-library resources include provision of reliable internet services, provision of technical support services, training of students on the use of e-resources and creation of dialogue database for user-librarians interaction among others. There is no significant difference in the perception of tertiary institution students toward the use of e-learning resources based on gender. There is significant difference in the perception of students from state owned institution (Isakita College of Education) and students from

federal owned institution (Federal University Dutsin-Ma) towards e-learning resources based on types of schools. Based on these findings, it was recommended that the training on the use of video and audio conferencing should be provided for both students and library staff so as to be able use them effectively.

**Keywords:** Perception, Tertiary Institutions, E-learning Resources, Academic Libraries.

#### Introduction

The Covid 19 issue in the world has opened the eyes of the academics and researchers to several information resources that could be used for learning and research. The policy of social distance has placed more importance on the use of e-learning resources in virtually all institutions in the world as observed by researchers. E-learning resources are very crucial now that every member of the society has to observe 3 meters apart for social distance policy. As the university programme is advancing and learning is open to all, the provision of e-learning resources has become a paramount factor to consider first as reported by Viswanatha and Sasireka (2016). Information and Communication Technologies have helped to facilitate access to quick information through a computer terminal. The use of e-learning resources for learning and research involve provision for and deployment of e-resources in conducting problemsolving research by students and other users of the library. This also reflects how readily accessible electronic resources are presented to members of the university community for the purpose of learning, teaching and research. Research is an important aspect of the learning process which is mandatory for every student in Nigerian higher Institution of learning.

The term electronic resources are not used consistently: some may refer to them as electronic information resources, Electronic Information Services (EIS) or electronic library resources or e-resources (Appleton 2006). According to the Library of Congress (2008), electronic resources can be defined as "work that is made available for access through the use

of a computer". Ukachi, Onuoha, and Nwachukwu (2014) support this definition by defining electronic resources as library resources that can only be accessed with the aid of computing devices such as laptops, tablets, smartphones, etc. Mamafha (2013) defines electronic resources as library resources that need special equipment and skill to be accessed. For one to access electronic resources, user can be either physically present in the library or can accessed the resources remotely with the aid of a computer. Within the context of this study, electronic library resources can be defined as library resources that are made available to library users through the use of computers or related technologies. According to Unisa (2016), these resources include bibliographies, indexes, e-reference sources, full-text journals and books, working papers, statistical data sets, image databases, institutional repositories and theses, and dissertations.

E-learning resources simply refer to materials that contain information that can be accessed through digital or online means with the aid of computer technologies. The information contained in electronic resources is not different from what is contained in printed versions except in the mode of access, storage and dissemination. Anyim (2018) defined elearning resources as contents of the information in a format that could be accessed through a computer or machine which in some cases require internet connections; this includes CD-ROMs, electronic books (e-books), electronic journals (e-journal), electronic indexes, digital reference materials, online databases and other e-collection.

The advent of e-learning resources significantly changed the information-seeking behaviour of students in the way they access and retrieval information. In recent times as reported by Ternenge and Kashimana, (2019), e-learning resources have been identified as the major sources of information in universities especially for researchers including students and teaching staff. Library users seem to prefer using electronic resources including online databases, multimedia resources, CD-ROMs to other forms of information resources as asserted by Singh and Sharma, (2018).

Other electronic resources mostly preferred by learners are e-journals, e-books, online databases, electronic conference proceeding (Amankwah, 2014). Despite the availability of e-learning resources for learning and research, their suitability and used is an issue for investigation (Alzahrani, 2019).

There are different types of libraries ranging from school libraries, state libraries, national libraries, private libraries, special libraries and academic libraries each set-up for specific purpose. In the context of this study, the academic library is the researchers' focus. Academic libraries are libraries that are established in Universities, College of Education, Polytechnics and other institutions of higher learning. These types of libraries exist to provide services of research, reference and lending materials for the institution. These libraries house documentary records that support the students' programme of instruction and encourage the habit of reading and use of the library. Academic libraries can also serve as research libraries. It is a library that is established to serve primarily the researchers, scholars, lecturers, undergraduates, faculty and graduate students of the institution (Columbus, 2018).

As reported by Ani (2013), one of the major goals of universities worldwide is "providing an enabling environment for conducting research and dissemination of knowledge for the betterment of society". In order to realize this goal, universities need to ensure the availability of information resources and other resources and services. Academic libraries endeavour to ensure that information resources are available to address and support their users' teaching, learning and research needs (Gakibayo, Ikoja-Odongo & Okello-Obura 2013; Khan, Bhatti, Khan & Ismail 2014; Hermosa & Anday 2008). To fulfill this mission, academic libraries worldwide are developing ways to enable their users to access information in the best possible ways. The advent of Information and Communication Technologies (ICTs) has had a major and positive effect on this endeavour as pointed out by Khalid in Amjad, Ahmed and Naeem (2013). This has, in turn, led to libraries adding what is termed an "electronic library

resources collection" to their "traditional/hard copy resource collection" (Nazir 2004). Amjad, Ahmed and Naeem (2013) and Kumar (2009) observe that developments in information technologies have resulted in some libraries changing the conventional format of resources and research to digital and electronic format. Modern information relies more heavily on electronic resources than on print resources – to the extent that, if a resource is not available online, then it practically does not exist for them (Kennedy 2011).

A study from literature reviewed showed that electronic publications in Chinese public libraries established that, in China, electronic resources had replaced print resources in both academic and public libraries (Bin & Miao 2005). Chirra and Madhusudhan (2009) note that electronic library resource subscriptions have become more important to academic libraries than building on-site collections. The advantages of electronic library resources over print sources cannot be overemphasized. Electronic library resources allow remote access 24/7; enable access to enormous numbers of resources at a lower cost; promote efficiency in the dissemination of information; can be more easily updated; save space; are easy to maintain; have searching capabilities, which are not available in print (Ani 2013; Atakan, Atilgan, Bayram & Arslantekin 2008; Buchholz 2011; Nazir 2004; Tenopir 2003). Also, electronic resources have enabled libraries to serve their users better, as they allow users access to a wider range of materials even material that is not held locally by their libraries. Eighty-five percent of college students participating in the Online Computer Library Centre (OCLC) study completely agreed that electronic magazines/journals provide worthwhile information (De Rosa, Cantrell, Cellentani, Hawk, Jenkins & Wilson 2005). In view of the advantages of electronic library resources, it is important that awareness and usage of these resources are realized, in order for users to meet their information, research and learning needs. The use of library resources does not only benefit library users; it also enables the library as an entity to realize its purpose and to calculate the benefit of investing in these resources (Calland & Diallo

2013). Institutions can reap the benefits of investing in electronic library resources if their users have adequate information literacy skills to use the resources meaningfully (Ukachi 2015).

Gender and types of schools are issues that are yet to be concluded in several studies relating to performance and use of technologies. The schools involve in this study are two. One of them is a Federal owned school while the other one belongs to Katsina State. Several patrons using libraries are in different schools and they could be either male or female. Stating and viewing their opinions differently are paramount to this study so as to be able to make a better clarification about the findings of this study thereafter.

It is therefore glaring that, for any library to justify its existence in any environment it is situated, the library collection must be relevant to the needs of its patrons and it must be in various formats. After the Covid 19 pandemic experience in the world, there is need for librarians to expose library users to the potential benefits of e-learning resources so as to be able to reduce the influx of library users in the library to be able to observe social distancing policy and as well keep on learning and engaging in research activities. In developing countries, in precise, electronic resources seem to be more underutilized by the student populations than in the developed countries. Although a number of studies have been done to establish awareness and utilization of electronic resources in a tertiary education environment, but not many have been done to establish perception of students towards the use of electronic resources.

This study provides valuable insight into tertiary institution students' awareness and use of electronic resources in Dutisn-ma metropolis. In some tertiary institutions, library patrons are dispersed geographically, with some not being able to visit the physical library and, therefore, it is important for these learners to be aware of the electronic resources available to them and that they use these resources to fulfill their learning needs. In view of the advantages of electronic library resources, it is important that awareness and usage of these resources are realized, in

order for users to meet their information, research and learning needs. Academic libraries make major investments in subscription fees, storage, information management systems, and awareness and promotion initiatives, in order to ensure that users are aware of and actually use the resources. It is, therefore, important for library patrons to be aware of and to make maximum use of the electronic library resources to fulfill their information needs so that the library can realize the benefit of investing in these resources.

## Purpose of the study

The main purpose of this study is to examine the perception of tertiary institution students towards the use of e-learning resources for teaching and research in academic library in Dutsin-Metropolis, Katsina. Specifically, the study examined:

- 1. the tertiary institution students' level of awareness of e-learning resources
- 2. the tertiary institution students' level of satisfaction with e-learning resources available.
- 3. the perception of tertiary institution students towards the use elearning for teaching and research.
- 4. the strategies that could be used to improve the utilization of elearning
- 5. the difference in the perception of tertiary institution students towards e-learning resources based on gender
- 6. the difference in the perception of tertiary institution students towards e-learning resources based on type of schools

### **Research Questions**

The following research questions are used to guide the study:

1. What is the level of tertiary institution students' awareness of elearning resources available in the academic libraries in Dutsin-Ma Metropolis?

- 2. What is the level of tertiary institution students' satisfaction of elearning resources available in the academic libraries in Dutsin-Ma Metropolis?
- 3. What is the perception of tertiary institution students towards the use of e-learning for teaching and learning?
- 4. What strategies could be used to improve the utilization e-learning resources for teaching and learning in academic libraries in Dutsin-Ma Metropolis?
- 5. What is the difference in the perception of tertiary institution students towards e-learning resources based on gender?
- 6. What is the difference in the perception of tertiary institution students towards e-learning resources based on types of schools?

## **Hypotheses**

**Ho1:** there is no significant difference in the perception of tertiary institution students towards the use of e-learning based on gender.

**Ho2:** there is no significant difference in the perception of tertiary institution students towards the use of e-learning based on type of schools.

## Methodology

The design adopted in this study was a descriptive survey research. This design is assumed to be appropriate because, its consistency is due to its efficiency, generalizability, versability and its efficient methods for systematically collecting data from a broad spectrum of individuals and educational settings. The target population for this study was all the undergraduate students in the tertiary institutions in Dutsin-Ma Metropolis (Federal University Dutsin-Ma and Isakita College of Education, Dutsin-Ma). Purposive sampling technique was used to choose all the 244 students studying library and information science at the Long Vacation Training (LVT) in Federal University Dutsin-Ma, Katsina State and purposive sampling was used to chosen 246 students who are regular library patrons at the Isakita College of Education for this study. Simple

random sampling technique was used to select two hundred respondents for the study from a total of 490 students from the two schools.

The instrument used in this study was an adapted questionnaire developed by Wisdom (2020) in assessing electronic resources in Universities in Kogi State. The instrument was divided into three parts. The first one measures the e-library resources awareness and availability, the second measures the students' perceptions on e-library resources and the third parts measures the strategies that can be used to improve the utilization e-library resources. The instrument was validated by the two lecturers at the Federal University Dutsin-Ma, Katsina State. One of the lecturers was an expert in measurement and evaluation while the other one was from the Library and Information Science Department. Four research questions and two hypotheses were raised to guide the conduct of this study. The reliability of the instrument was established using Cronbach Alpha which are 0.78, 0.72 and 0.76 respectively were the value arrived at. The administration of the questionnaire was done by the researchers starting from Federal University Dutsin-Ma and later moved to Isakita College of Education. After administration of the questionnaire, collation of the collected data was done. Research questions one to four were analyzed using descriptive statistics of frequency counts and percentages while hypotheses one to two were analyzed using inferential statistics of t-test and thus answer the research questions and testing the hypotheses at 0.05 significant level.

### Results

# **Research Question One**

What is the level of tertiary institution students' awareness of e-learning resources available in the academic libraries in Dutsin-Ma Metropolis, Katsina State?

**Table 1**: Students' level of awareness of the e-learning resources available for learning and research

	How aware are you	Highly Aware		Av	Aware		Less Aware		Aware
	of the e-learning	Freq.	%			Freq.	%		
	resources below?			Freq	. %			Freq.	. %
1	Online database	189	93.1	10	4.9	0	0	1	.5
2	Search Engine	57	28.1	107	52.7	31	15.3	5	2 .5
3	Social Media	168	82.8	22	10.8	8	3.9	5	2.5
4	e-journal	32	15.8	106	52.2	40	19.7	10	.8
5	e-book	66	32.5	88	43.3	21	10.3	25	2.3
6	OPAC	130	64	24	11.8	36	17.7	1	.5
7	Portal	171	47.3	89	42.4	16	7.9	1	.5
8	Internet	124	61.1	65	32	6	3	5	2.5
9	Multimedia	96	57.6	65	32	12	5.9	6	3
10	Video conferencing	33	16.3	119	8.6	23	11.3	25	12.3
11	Audio conferencing	42	20.7	92	45.3	55	27.1	11	5.4

The result of the analysis in the Table 1 above showed that, tertiary institution students in Dutsin-Metropolis are aware of the e-learning resources in their academic libraries. This is upheld because the mean percentages for highly aware and aware are 77.7% which shows that majority of the respondents are aware of e-learning library resources.

## **Research Question Two**

What is the level of tertiary institution students' satisfaction of e-learning resources available in the academic libraries in Dutsin-Ma Metropolis, Katsina State?

**Table 2**: Students' level of satisfaction of the e-learning resources available for learning and research

S/N	Are you satisfied	Highly		Satisfied		Dissatisfied		Highly	7
	with e-learning	Satisfied						Dissa	tisfied
	resources available?	Freq.	%	Freq	. %	Freq.	%	Freq.	%
1	Online database	184	90.6	13	6.4	2	1	1	.5
2	Search Engine	25	12.3	136	67	32	15.8	7	3.4
3	Social Media	161	79.3	29	4.3	9	4.4	1	.5
4	e-journal	56	27.6	97	47.8	32	15.4	15	7.4
5	e-book	16	7.9	134	66	42	20.7	8	3.9
6	OPAC	120	59.1	33	16.3	20	9.9	27	13.3
7	Portal	164	80.8	21	10.3	9	4.4	6	3.0
8	Internet	167	82.3	19	9.4	8	3.9	6	3.0
9	Multimedia	68	33.5	116	57.1	12	5.9	4	2.0
10	Video conferencing	28	13.8	11	5.4	132	65	29	14.3
11	Audio conferencing	3	5.3	20	9.9	38	18.7	111	54.7

The result from Table 2 revealed that respondents in this study are satisfied with online database (90.6%), search engine (67%), social media (79.3%), e-journal (47.8%), e-book (66%), OPAC (59.1%), portal (80.8%), internet (82.3%) and multimedia (57.1%) but dissatisfied with video conferencing (35%) and audio-conferencing library resources (46.7%).

## **Research Question Three**

What is the perception of tertiary institution students towards the use of e-learning for teaching and learning?

**Table 3**: Students' perception of the e-learning resources available for learning and research

S/N	Items		Agree		Strongly Agree		Disagree		Strongly Disagree	
		Freq	. %	Freq %		Freq.	%	Freq.	%	
1	It provides more up-to-date information	140	69	57	28.1	2	1.0	1	.5	
2	It provides speedy and easy access to information	91	44.8	102	50.2	6	3.0	1	.5	
3	Increases efficiency in distance learning	81	39.9	109	50.2	9	4.4	1	.5	
4	It makes distance learning more affording	124	61.1	68	33.5	4	2	4	2	
5	It enhances students' self-learning	87	42.9	102	50.2	8	3.9	3	1.5	
6	It provides access to unlimited information from different sources	78	38.4	91	44.8	30	14.8	1	.5	
7	It facilitates synthesis of information /data from different sources	142	70	37	18.2	18	8.9	3	1.5	
8	It provides flexibility of information to the users	113	55.7	69	34	8	3.9	10	4.9	
9	It provides round the clock access to information	117	57.6	65	32	12	5.9	6	3	
10	It provides remote access of information to users	38	7.18	112	60.1	11	5.4	29	14.3	
11	It provides users opportunity to share information with others	100	50	84	41.4	11	5.4	5	2.5	

The result in Table 3 indicated that the respondents agreed or perceived that e-learning library resources have positive impact on students' learning and research. This is accepted because the total average percentage for both agree and strongly agree equal to 85.4%.

## **Research Question Four**

What strategies could be used to improve the utilization e-learning resources for teaching and learning in academic libraries in Dutsin-Ma Metropolis, Katsina State?

**Table 4**: strategies that could be used to improve the utilization e-learning resources for teaching and learning in academic libraries in Dutsin-Ma Metropolis, Katsina State

S/N	Items		e	Stro	ongly ee		agree	Strongly Disagree	
		Freq. %		Free	Freq. %		eq. %	Freq.	%
1	Development of online user guideline for accessing e-resources	102	50.2	96	47.3	1	0.5	1	0.5
2	Creation of user-friendly interfaces for easy access to online contents	96	47.3	98	48.3	5	2.5	1	0.5
3	Provision of online information literacy platform	92	45.3	98	48.3	9	4.4	1	0.5
4	Display of different types of information available on the university library portals	139	68.5	47	23.3	11	5.4	3	1.5
5	Provision of online index and abstract that provides information contained in the e-resources	132	65	31	15.3	35	17.2	2	1.0
6	Notification of users on the newly arrived e-resources in the library	59	29.1	11	57.1	21	10.3	4	2.0
7	Provision of improved internet access to enhance accessibility of e-resources	119	58.6	62	30.5	15	7.4	4	2.0
8	Provision of technical support by the university library	107	52.7	75	36.9	11	5.4	6	3.0
9	Training of students on the use of e-resources	67	33	92	45.3	31	15.4	10	49
10	Creation of dialogue database for users-librarians' interaction	101	49.8	55	27.1	32	15.8	12	5.9

Results from Table 4 above showed that the respondents in this study agreed that, development of online users guidelines (97.5%), creation of user-friendly interface (95.6%), provision of literacy platform | (93.6%),

showcasing different types of information available on the portal (91.8%), provision online index and abstract (80.3%), notification of users on the newly arrived e-resources (86.2%), provision of reliable internet services (89.1%), provision of technical support service (78.3%), training of students on the use of e-resources and creation of dialogue database for user-librarians interaction (76.9%) are strongly supported by the respondents as parts of strategies that could be used to improve the utilization of e-learning resources for teaching and research in academic libraries.

### **Hypothesis One**

**Ho**<sub>1</sub>: there is no significant difference in the perception of tertiary institution students' towards the use of e-learning based on gender.

**Table 5**: difference in the perception of tertiary institution students towards the use of e-learning based on gender

Group	N	X	Std	df	t	sig. (2- tailed)
Male	108	17.2593	2.2810			
				198	1.892	.060
Female	92	18.1739	4.3742			

The result of independent t-test in the Table 5 shows that, there is no significant difference in the perception of tertiary institution students toward the use of e-learning resources based on gender. This is because t(198) = 1.892; sig(2-tailed) = 0.06 and p > 0.05. The hypothesis one is hereby retained.

### **Hypothesis Two**

**Ho<sub>2</sub>:** there is no significant difference in the perception of tertiary institution students towards the use of e-learning based on type of school

**Table 6**: difference in the perception of tertiary institution students towards e-learning resources based on types of schools

Group	n	x	Std	Df	t	sig. (2-tailed)
State Owned School	100	19.500	3.9860			
				198	8.803	0.000
Federal Owned School	100	15.8586	1.0302			

The t-test analysis in Table 6 indicated that, there is significant difference in the perception of students from state owned institution (Isakita College of Education) and students from federal owned institution (Federal University Dutsin-Ma) towards e-learning resources based on types of schools. This is because t (198) = 8.803; sig (2-tailed) = 0.000 and p < 0.05 Alpha level. Based on this, the hypothesis is not accepted.

## **Discussion of Findings**

The result of the finding indicated that the respondents are aware of elearning resources available in the academic libraries. It was also confirmed from the results that, the participants are satisfied with all resources available except that of video conferencing and audio conferencing. The respondents agreed that e-learning resources have positive impact on their learning and research. The outcome of this study affirms the results of Lo, Cho, Law, Chiu, & Allard, (2017) and Jan (2019) which recognized that a vast collection of information could be searched and retrieved instantaneously. Students are driven to use the electronic resources at the library because it is easier for students as they can access

large volumes of information within a short possible time compared to what they would have had access to relative to printed catalogues.

The finding equally revealed that the following are strongly supported by the respondents as parts of strategies that could be used to improve the utilization of e-learning resources for teaching and research in academic libraries: the development of online users guidelines, creation of user-friendly interface, provision of literacy platform, showcasing different types of information available on the portal, provision of online index and abstract, notification of users on the newly arrived e-resources, provision of reliable internet services, provision of technical support services, training of students on the use of e-resources and creation of dialogue database for user-librarians interaction. These suggestions are necessary because the respondents are of the viewed that if all are dully followed, students' eagerness to use it will increase definitely.

The finding of the study showed that there is no significant difference in the perception of tertiary institution students toward the use of e-learning resources based on gender. However, there is significant difference in the perception of students from state owned institution and students from federal owned institution towards e-learning resources based on types of schools. This finding is in line with the finding of Akpotohwo and Ezeani (2014) on integrating information and communication technology (ICT) in accounting education instruction in Ekiti State University that the t-test showed no significant difference between the male and female responses regarding attitude towards ICT.

### Conclusion

From the findings of this study, it was concluded that, students are aware of electronic library resources, satisfied with majority of e-library resources available except video and audio conferencing, agree that e-library resources have positive impact on learning and research and confirmed that the strategies that can be used to improve the use of e-library resources include provision of reliable internet services, provision

of technical support services, training of students on the use of eresources and creation of dialogue database for user-librarians interaction among others.

#### Recommendations

The study, therefore, recommends that:

- 1. The academic library librarians and the school authority should embark on massive campaign to create more awareness among students because of the usefulness of electronic resources to academic work in the institutions.
- 2. Conducive environment should be made available for library users to enjoy the use of e-library resources.
- 3. Training on the use of video and audio conferencing should be provided for both students and library staff so as to be able use them effectively.
- 4. Provision of reliable internet services and provision of technical support services should be readily available in the school vicinity to encourage both library staff and students to e-library resources.

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