Perception, access, and use of electronic resources for instructional practices among education lecturers in public universities in Niger State, Nigeria

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Abstract
Electronic resources are an indispensable tool for meaningful instructional engagement and academic practice. Therefore, educators at all levels of education especially in the university must leverage it to engage in research and create a classroom environment that is motivating, engaging, and personalised to meet the needs of the present generation of learners who are digital natives. The perception, accessibility, and use of these e-learning resources could impact university lecturers' academic and instructional practices. Therefore, this study investigated the perception, accessibility, and usage of electronic resources for instructional practices among education lecturers in public universities in Niger State, Nigeria. Descriptive survey was adopted for this study. All education lecturers in the three public universities in Niger State form the population of the study and 102 university education lecturers were selected as the sample size using simple random sampling. Three research questions guided the study. The data were collected using structured questionnaire on university education lecturers' perception, accessibility, and use of e-resources for instructional practices. The instrument was validated by experts in the field of education and psychometrics, thereafter, the instrument was pilot-tested, and using Cronbach Alpha, the instrument yielded a reliability coefficient of between 0.70, 0.76, and 0.72. The data were analyzed using mean, standard deviation. The findings showed that education lecturers have positive perception of e-resources for instructional practices. However, there was low level of accessibility of e-resources among education lecturers in the three public universities in Niger State. The results also indicated high level of use of e-resources among lecturers. It was recommended conducive environment should be provided and more e-resources are made available, while regular workshop and training the organized for lecturers for academic and instructional practices respectively.

Keywords: Perception, access, use of electronic resources, instructional practices, education lecturers, public universities, Niger State, Nigeria

Introduction
Electronic resources are indispensable for the 21st-century instructional and research practices of the university community. The level of accessibility, availability, and usage has implications for the quality of research and instructional practices in the university and must be considered a key priority and part of a deliberate strategy for teaching and learning. The higher institution can be regarded as the fortress of knowledge where researchers and students from different disciplines obtain knowledge and skills for self-development. The availability, accessibility, and usage of electronic resources will provide the needed resources for instructional services. The quality of services and resources offered by the university library heavily influences the attainment of the aims of the universities. The university library, which serves the university community, is the driving force behind every objective and goal of the university. Agboola (2011) argued that any educational program's quality and strength depend on the library, not the library as a beautiful structure but rather the utilization of its resources.

Members of academic community should have access to sufficient information resources for reading, learning, and research. Libraries are therefore utilizing technology to enhance the management of scholarly knowledge that is not locally accessible. E-

resources, according to Bhat and Ganaie (2016), are collections of information in text, graphical, and numerical representations that can be found in e-books, e-journals, multimedia material, and online databases, among others.

There are a variety of electronic library options available, from video conferencing to websites that give multimedia content. A range of electronic library resources can support effective student learning in addition to information and knowledge management delivery of education (Abdullahi & Tijani, 2013). It is important to mention that due to the trend of technological improvement, students and other stakeholders in the educational system today primarily use electronic resources, which are considerably more convenient and accessible than traditional library resources like books and journals. Therefore, university education lecturers' perception, accessibility, and usage of e-resources are essential variables that could impact instructional practices positively or negatively in the university.

Perception is the extent to which an individual believes that using a particular device, system or technology will impact positively their job performance. Chen and Lishing-Hang (2011) reported that perception positively influences an individual's attitudes towards the utilisation of resources or a new product. All instructional contents are built or structured with specific skills and competencies to be acquired and to acquire these specific skills and competencies, there is the need to take advantage of relevant e-resources. Given that, digital devices are essential materials that can enhance research, teachers' preparations, learners' engagement, and meaningful learning, their accessibility and usage are important issues for consideration, especially in Niger State.

The quality of graduates from Nigeria's university education system could be impacted by the country's universities' low accessibility to e-resources for instructional practices. Instructional practices include planning and administering lectures, conducting research, engaging students in academic interaction, classroom management, and evaluating academic activities, among others. The level of perception, accessibility and use of e-resources could positively or negatively impact instructional activities.

The theory of Diffusion of Innovation Theory (Rogers, 1995) provides support for this study. This theory explains how a group of people could be exposed to the same information but could respond differently. Put in another way; it is an explanation of the likelihood of an individual in a society to accept a new idea, technology, or product (Rogers, 1995). Therefore, to accept or reject an idea is controlled by an individual's perception which is influenced by several factors. This theory focused on the process in which an individual accepts communication or innovation or findings in a given culture. The theory highlighted the process of awareness, interest, assessment, and utilisation of a product (e-resources). In this study, the university lecturers' use of e-resources will largely depend on factors such as perception, and accessibility. Suffice it to say, those who have positive perception may adopt it for instructional practices, while those who have a negative perception may not adopt or use e-resources for instructional practices.

Statement of the problem
The evolving landscape of e-resources requires continued attempts to measure teachers' perspectives with regard to instructional practices. Furthermore, given

university educators are still the primary gatekeeper to the development of human resources in the country. It is critical to understand what influence university education lecturers' use of e-resources. This could help us understand the return on investment that could be expected from the integration of technology for instructional or academic practices.

Consequently, by assessing education lecturers' perspectives on e-resources, the findings will help to create awareness of the need for enabling policies and a friendly environment built on accessibility, and usage of e-resources. Hence, this study investigated the perception, accessibility, and usage of electronic resources for instructional practices among education lecturers in public universities in Niger State, Nigeria.

Research questions
The study was guided by the following questions:
1. What is the level of perception of electronic resources for instructional practices among education lecturers in universities in Niger State, Nigeria?
2. What is the level of electronic resources accessibility for instructional practices among education lecturers in universities in Niger State, Nigeria?
3. What is the level of electronic resources use for instructional practices among education lecturers in universities in Niger State, Nigeria?

Literature review
Udonza (2021) conducted a study to determine such as You tube and Facebook the effect of social media network took in teaching mathematics in Federal College of Education, Yola, Adamawa State group design was used. A simple size of 96 students were randomly selected trust second and third year of NCE I, II and III in Mathematics Department respectively. The data collection instrument used 20 item multiple choice questionnaires Mathematics Achievement Test (MAT) design by the researcher and validated by Mathematics Education and measurement and evaluation expects respectively. Means and standard deviation was need to answer research questions and t-test statistics was used to test the hypothesis at 0.05 level of significance. The result showed that the application to social media network tools in teaching mathematics enhanced students' achievement.

Chuks-Ibe (2021) conducted a study to determine the influence of accessibility and utilization of library electronic information resources on academic activities of postgraduate students in Public universities in North Central Nigeria. Multistage sample technique was used to select 566 respondents in seven Public universities. Four point rating scale questionnaire was designed and administered by the researchers. Descriptive and inferential statistics were used to analyzed data. Results showed that respondents access offline and online databases, and consult e-book for their information needs. There was high level of utilization of e-books and Journals, online and offline databases as well as perceived usefulness of e-resources for the identification of knowledge gap. There was problem of Internet connectivity, and erratic power supply which has affected effective utilization of LEIR for academic activities in the public universities in North Central Nigeria.

In assessing student's perception and attitude towards utilization of e-learning in

Kwara State College of Education, Sanni Abdulrahman, Oladosu and Adefuye (2021) raised two research questions and formulated two hypotheses. Descriptive survey research was adopted, target population consist of technical and vocational education and training students and random sampling technique was used to select 150 students. Structured questionnaire was used in data collection. In relation to the present study, the instrument was plot-tested through administration on the undergraduate students in University of Ilorin using test-retest technique and revealed mean scores of 3.15 and 3.13 respectively. The administration 150 copies of questionnaire revealed effectiveness of e-learning as a medium of instruction. Attitude of respondents have influence on the use of e-learning for instructions. There was no significant difference in perception of students on utilization of e-learning based on gender as well as no significant difference in the attitude of both sexes towards utilization of e-learning.

Mahmud and Saka (2022) examined influence of accessibility and use of ICT facilities on academic activities among engineering lecturers in university libraries in North Central Nigeria. Four research questions were formulated, while survey research was used with population of 502 lecturers in five public universities in North Central Nigeria. Proportionate stratified sampling technique was used to select 171 respondents. Structured questionnaire and check list were used in data collection. Check list was used in data collection in respect of the availability or other wise of ICT facilities, while questionnaire was used to elicit responses on accessibility and use of ICT facilities by engineering lecturers. There was availability of ICT facilities and there was low level of accessibility to ICT facilities.

Methods
The study adopted a descriptive survey design. The population of the study is made up of all lecturers teaching in faculties/schools of education, sections or units under education teaching education as a course or various disciplines in three public universities in Niger State, namely: (Federal University of Technology Minna, National Open University Minna Centre, and Ibrahim Badamasi Babangida University Lapai). The three public universities in Niger State were adopted. Multi-stage sampling procedure was used in selecting the respondents for this study. First, the purposive sampling technique was employed to select 200 lecturers by consulting list of academic staff in faculty/school of education as well as sections and units of education in the three public universities (Federal University of Technology Minna, National Open University Minna Centre, and Ibrahim Badamasi Babangida University Lapai). Simple random sampling technique was used to further select 102 university education lecturers within the three public universities. The sample size was also made up of 24 female and 78 male teachers respectively.

The instrument for data collection was the adopted structured questionnaire. The questionnaire is a 5-point Likert- scale of Strongly agree (5) Agreed (4) Undecided (3) Disagree (2) and Strongly disagree (1). The instrument was made into sections A, B, C, and D. Section A is made up of respondent demographic data, and Section B is made up of 10 items that sought to determine university education lecturers' perception of e-resources for instructional practices. Section C consists of 7 items that sought to determine Education Lecturers' level of accessibility of e-resources, while

section D determined teachers' level of use of e-resources. The face, content, and construct validation of the structured questionnaire were determined by two educational technology experts, and two psychometrics. The instrument was pilot-tested and it yielded a reliability coefficient index of 0.72, 0.70, and 0.74 using Cronbach alpha. This agrees with Hair, Black, Babin, and Anderson (2010) who reported that Cronbach's Alpha reliability value of 0.60 and above is adequate for instruments developed in the field of education and social science.

The data collected were analysed using descriptive statistics. Research questions were answered using mean and standard deviation The benchmark for agreeing and rejecting an item and the grant mean was 3.00 and above and less than 3.00 respectively. This was determined using the average mean of a 5-point Likert scale (3.00).

Results
The results of this study are presented according to the research questions.

Research question one: What is the level of perception of electronic resources for instructional practices among education lecturers in universities in Niger State, Nigeria? In order to answer this research question, the mean and standard deviation was employed, and the analysis is presented in Table 1.

Table 1 shows the results of education lecturers' perception of e-resources for instructional practices. The education lecturers from the population perceive e-resources to be useful for education lecturers' instructional practices. The average mean of 3.0 was the benchmark for positive perception and less than 3.0 for negative perception on each item. Consequently, respondents had positive perceptions of all the items. The finding shows a mean of between 3.12 – 4.01, and a grand mean of 3.16, indicating that education lecturers have a positive perception of e-resources in the library. The finding indicated that more of the respondents perceive that e-resources enhance their research skills and competence (Mean=4.01). However, the grand mean of 3.33 implies that the respondents have a positive perception of e-resources. The standard deviation of the respondents' perception was between 0.82 - 1.46, while the standard deviation grand mean is 1.23. Indicating that the standard deviation means in the data set are close to the group mean of the data set. This implies that there is no large variations or deviation in the responses of education lecturers.

Research question two: What is the level of electronic resources accessibility for instructional practices among education lecturers in universities in Niger State, Nigeria? In order to answer this research question, the mean and standard deviation was employed, and the analysis is presented in Table 2.

Table 1: Mean and standard deviation of the education university lecturers' perception of e-resources for instructional practices

Num.	Perception of e-resources for instructional practices	N	Mean	SD	Decision
1	E-resources enhance creative thinking skills during planning and delivering lectures	102	3.14	0.98	Positive
2	Using e-resources encourages and enhances active participation during instruction	102	3.42	1.30	Positive
3	E-resources enrich students understanding of the learning concept towards achieving learning goals	102	3.24	1.12	Positive
4	E-resources enhance my research skills and competence	102	4.01	1.63	Positive
5	E-resources assist me to obtain current useful information in real-time	102	3.32	1.43	Positive
6	Teaching and learning using e-resources allow learners and facilitators to brainstorm on the subject matter	102	3.46	1.35	Positive
7	I have the knowledge to employ e-resources for meaningful teaching and learning	102	3.53	0.82	Positive
8	I can facilitate and monitor student's learning process using e-resources	102	3.12	0.95	Positive
9	E-resources help lecturers engage in community of practice as part of capacity building	102	3.48	1.12	Negative
10	I feel e-resources minimize time-wasting and distraction to the student	102	3.40	1.46	Positive
	Grand (Mean and Standard Deviation)	102	3.33	1.23	Positive

Table 2: Mean and standard deviation of the respondents on electronic library resources accessible for instructional practices in the public universities

Num.	Electronic library resources accessibility	N	Mean	Std. deviation	Remarks
1	Education lecturers access computer-based course software for planning examinations.	102	2.67	.72	Low
2	Education lecturers access reference databases for the planning of teaching and learning activities.	102	2.53	.64	Low
3	Lecturers access electronic journals for carrying out research.	102	2.17	.81	Low
4	Lecturers access electronic books for planning their lectures.	102	2.42	.62	Low
5	Students access electronic mail for submission of assignments to lecturers.	102	2.60	.779	Low
6	Lecturers access video conferencing facilities for evaluation of students' progress.	102	2.24	.75	Low
7	Lecturers access electronic visual resources for online teaching and learning.	102	2.14	.82	Low
8	Lecturers access numeric and statistical databases for monitoring and evaluation of students' continuous assessments.	102	1.86	.93	Low
9	Lecturers access indexing and abstracting databases for students' research writing and ensure that students' research is not duplicated or plagiarized.	102	2.50	1.12	Low
10	Education lecturers have internet access to use electronic resources for instructional processes.	102	2.50	1.24	Low
	Grand Mean	**102**	**2.36**	**0.84**	**Low**

Table 2 reveals the finding of the level of accessibility of electronic resources for instructional practices among university education lecturers in Niger State. The average mean of 3.0 and above is considered the benchmark for positive high level of accessibility while a mean of less than 3.0 is considered low accessibility. The mean scores of items 1 - 10 showed the mean scores of `1.86 – 2.60. Indicating that there is low level of accessibility of e-resources in the library for academic purposes. It is important to highlight that more respondents in this population agreed that access to numeric and statistical databases for

monitoring and evaluation of students' continuous assessments is the lowest (1.86).

The grand mean of 2.36 is lower than the decision benchmark (3.00) showing that the respondents agree that there is low level of accessibility of e-resources for instructional practices among education lecturers in the universities in Niger State.

Research question three: What is the level of electronic resources use for instructional practices among education lecturers in universities in Niger State, Nigeria? In order to answer this research question, the mean and standard deviation was employed, and the analysis is presented in Table 3.

Table 3: Mean and standard deviation of the respondents on electronic library resources used for instructional practices in the universities

Num.	Electronic library resources used	N	Mean	Std. deviation	Remarks
1	Education lecturers used e-resources for organizing and administering examinations.	102	3.16	1.02	High
2	Education lecturers used reference databases for teaching and learning activities.	102	3.33	.82	High
3	Lecturers use electronic journals for carrying out research.	102	3.42	1.16	High
4	Lecturers use electronic books for planning their lectures.	102	3.26	.78	High
5	Students use electronic mail for the submission of assignments to lecturers.	102	2.80	.86	Low
6	Lecturers use video conferencing facilities for the evaluation of students' progress.	102	2.68	.75	Low
7	Lecturers use electronic visual resources for online teaching and learning.	102	2.65	1.14	Low
8	Lecturers use numeric and statistical databases for monitoring and evaluation of students' continuous assessments.	102	2.18	.89	Low
9	Lecturers use indexing and abstracting databases for students' research writing and to ensure that students' research is not duplicated or plagiarized.	102	3.50	1.08	High
10	Education lecturers use e-resources for the storage of information that could be retrieved anytime and anywhere	102	3.68	.84	High
	Grand Mean	**102**	**3.07**	**0.93**	High

Table 3 shows the finding of the level of electronic resource usage for instructional practices among university education lecturers in Niger State. The average mean of 3.0 and above is considered the benchmark for high usage while a mean of less than 3.0 is considered low usage. Therefore, the mean of items 1 – 4, items 9

and 10 shows the mean of `3.16 – 3.68 indicating that there is high usage of e-resources in the library for instructional practices. It is important to highlight that more respondents in the studied universities agreed that the use of numeric and statistical databases for monitoring and evaluation of students' continuous assessments, and

lecturers' use of electronic visual resources for online teaching and learning are the lowest with the means of (2.18) and (2.65) respectively.

The grand mean of 3.07 is higher than the decision benchmark (3.00) showing that the respondents agree that there is high level of usage of e-resources for instructional practices in the universities in Niger State. The standard deviation of the respondent's perception of the use of e-resources was between 0.75 - 1.16, while the standard deviation grand mean is 0.93 indicating that the standard deviation means in the data set are close to the standard deviation group mean of the data set. This implies that there is no large variations or deviation in the responses of education lecturers in this population.

Discussion

The study investigated the perception, accessibility, and usage of electronic resources for instructional practices among education lecturers in public universities in Niger State. The findings showed that there is a positive perception of electronic resources for instructional practices among education lecturers in the universities. This finding concurs with the earlier results of Chucks-Ibe (2021) who reported very high level of perception among post graduate students on the usefulness of library e-resources for identification of knowledge gap. This study finding disagree with that of Udonsa (2021) who reported the application of social media network tools to enhance students' achievement. The findings to research question two showed that there was is low level of accessibility to e-resources for instructional practices in this population. This result is supported by the earlier finding of Mahmud and Saka (2022) who investigated the awareness, accessibility, and use of ICT facilities among Engineering lecturers in university libraries in North Central Nigeria The study adopted the survey research design. The finding indicated that there was low level of accessibility to ICT facilities. The findings can be attributed to poor Internet facilities and poor electricity in the studied universities. The present study findings to research two confirm the findings by Sanni et'al (2021) as the researchers reported that the attitude of NCE students have influence on the use of e-learning for instruction.

Research question three sought to find out the level of electronic resource usage for instructional practices among university education lecturers in Niger State. The study discovered high level of e-resources usage among university education lecturers in Niger State. The finding agrees with the earlier result of Chuks-Ibe (2021) who reported that Library electronic information resources were easy to utilize in the area of academic activities
The findings of the study could be attributed to the fact that e-resources have impacted every sector of human endeavours, the education system inclusive. The use of e-resources could help to influence their perception as reported earlier.

Conclusion

E-resources is viewed as proper tools that will enhance instructional practices at all levels of education. Consequently, the quest to leverage e-resources to enhance academic and instructional practices is at the forefront of educational discourse. Given the findings, it is logical to conclude that e-resources have infiltrated the personal and instructional life of university educators. This was demonstrated by the positive perception of e-resources for classroom instructional practices. However, university education lecturers do not have access to e-resources, and the high usage of these

resources could be attributed to the respondents' positive perception of e-resources in public universities in Niger State. Hence, this study provided a theoretical understanding of university education lecturers' perception, access, and use of e-resources.

Based on the findings of this study, the following recommendations are made:

1. Management of public universities in Niger State should ensure that since education lecturers in the university have positive perception of e-resources, therefore, conducive environment should be provided and more e-resources be made available by the library

2. The management should also make sure that access to e-resources should be provided through the provision of Internet facilities and electricity for instructional practices.

3. Workshops and training should be organized for university education lecturers on the effective use of e-resources for academic and instructional practices by the university management.

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