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Perception and Readiness of online Teaching among Lecturers of Colleges of Education in Jigawa State

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Abstract: *The study examined the perception and readiness of online teaching among lecturers of Colleges of education in Jigawa State. The study was carried out with four objectives, which are to; find out lecturers' perception on online teaching in Colleges of Education in Jigawa State; identify lecturers' readiness for the use of internet in teaching in Colleges of Education Jigawa State; find out the; determine the extent of interaction between lecturers' perception and readiness in the use of mobile phones ,computers, tablets and software applications on the use of online teaching in Colleges of Education in Jigawa State; and assess the extent of lecturers' utilisation of online teaching in Colleges of Education in Jigawa State. Four research questions and four hypotheses were formulated in line with the above-mentioned objectives. The study employed descriptive survey design with a total population of four hundred and thirty-two (432) and a sample size of three hundred and sixty-four (365) which was arrived at using researcher advisor table. The Data for the study was collected using questionnaire developed by the researcher titled Lecturers' Perception and Readiness of Online Teaching Question (LPRAOTQ). The data collected were analyzed statistically using Statistical Package for Social Sciences (SPSS) version 25, at both descriptive and inferential levels. At descriptive level, the research questions were answered using mean and standard deviation. At inferential level, the hypotheses were tested using Chi-square and Kruskal-Wallis (H) tests. The findings of the study revealed a significant difference between lecturers' perceptions of online teaching and the actual practice of online teaching. This suggests that lecturers may harbor misconceptions about the practical aspects of online teaching. The study also found that there was no significant difference in the preparedness of lecturers on the use of Internet for teaching in colleges of education in Jigawa State. This finding suggests that lecturers view online pedagogical approaches favourably and do not perceive strong barriers to their adoption. Another finding from the study is that there was no significant difference in*

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lecturers' perception and readiness in the use of ICT tools for online teaching in colleges of Education in Jigawa State, among other findings. Based on the findings of the study, it was concluded that there was a significant difference between lecturers' perceptions of online teaching and the actual practice of online teaching and It was recommended among others that teacher educators should positively perceived online learning as effective leaning method for teacher education; teachers, school managers and National Commission for Colleges of Education (NCCE) should promote the use of ICT and internet in teacher education institutions; and college management and other relevant stakeholders should provide ICT and internet facilities in the Colleges of Education in Jigawa State.

Keywords: Perception, Readiness, Online, Teaching, Lecturers, College

INTRODUCTION

Science and technology are influencing the lives of all the living and non-living creatures on earth, whereby changing the world into a better place to suits human needs. This change is clearly visible in Information and Communication Technologies (ICTs) which turns the world into a global village, where information and actions can reach a wider coverage within a shortest possible time. Education as one of the most important aspect of human life, is not left behind on this technological trend. By and large, teaching pedagogy, sourcing of instructional resources, seminars, workshops to mention but a few, are all greatly influenced by ICTs.Teaching and learning are changing from the traditional (conventional) approach its used to be, to a developmental (learner-centred) approach. To this end, the National Commission for Colleges of Education Minimum Standard Federal Republic of Nigeria FRN, (2012) states that the teaching and learning at the Nigerian Certificate in Education (NCE) level should be geared towards producing competent teachers with the much-needed skills to be able to develop functional knowledge of concepts and principles, as well as build capacities of teacher educators in ICTs. The integration of ICTs in education has contributed greatly towards changing the course of teaching and learning in developed, developing and even underdeveloped countries the world over. ICTs greatly facilitate the acquisition and absorption of knowledge, offering developing countries unprecedented opportunities to enhance educational systems (Mikre, 2011). Therefore, teachers in Nigeria should be up and doing in updating themselves in computer and ICTs to face the challenge of the 21st century education. Lecturers in Colleges of Education in Jigawa State usually attend seminars, conferences and workshops in order to update themselves on how to appreciate and apply ICTs as a tool for teaching and learning. The knowledge and understanding of computer is usually the basis of ICTs skills. Based on this, Nigeria updated its National Policy on Education to accommodate changes and innovations among which include the introduction of Information and Communication Technologies (ICTs) into the school system. The goals of educational services as in the NPE, among others is: to develop, assess and improve educational programs; to enhance teaching and improve the competence of teachers; and to develop and promote effective use of innovative materials in schools. The policy stressed that Information Technology (IT) shall be incorporated into all teacher training programmes (FRN, 2013). Therefore, teachers need to accommodate ICTs in their activities, and the available ICTs

gadgets are considered as the materials which aid teaching and learning in the 21st century education.

The ICTs includes all the technologies used in communication like radio, television and telephone as well as other high technology gadgets, newer digital devices such as personal digital assistant, smart phone, tablets, computers and Internet connectivity devices have been treated as generally powerful enabling tools for educational change and reform (Schutt & Linegar, 2013).). In the same vein, Elliott cited in Steketee, (2005) stressed that even though a wide cross-section of society today has accepted Information and Communications Technology (ICTs) as an entrenched characteristic of its culture, education has been slow to adopt it as an integral tool within the classroom. This might not be unconnected to the fact that teachers of the analog era did not find it easy to accept change, and even those teachers of the digital era do not find it easy to update themselves on ICTs. Perhaps knowledge of ICTs or lack of it can be of great importance to paradigm shift in teaching and learning.

However, teacher educators in Nigeria needs to appreciate/apply computers and ICTs in order to conduct their duties effectively. In this regard, lecturers from colleges of education in Nigeria needs to be familiar with developmental approach to teaching like online teaching which is more pronounced amidst COVID-19 pandemic the world over. Initially, distance learning was a practice which involved teaching of students who may not be physically available in schools all the time. Traditionally the distance learning involves correspondence courses where students interact with the school in regards to teaching and learning via mail. Later online teaching become the order of the day as technology improves. Both online and distance learning requires online learning tools, but the major difference between the two are location, interaction and intention (Stauffer,2020). In the same vein, application software like Microsoft Teams, Google classroom, Slack, Floop and Zoom are now popular by many online users. On-line teaching as innovative teaching has been accepted widely and teachers at all level should not be left behind. Apart from the above-mentioned online applications, others include networking, webinars, role of e-moderator, e-learning etc. Web –sites which are very popular with teachers, students and researchers alike are Google, Yahoo, Gmail, Rediff mail, outlook and so forth.

The internet, World Wide Web and related applications have changed the world greatly in the area of teaching and learning. With the prevalence of internet usage, online learning has become widely accepted and many tertiary institutions are using it to support teaching and learning globally (Kanuka & Anderson, 2007). Perception and readiness are important parametres in educational instructions. Teachers have different opinion about online teaching because of its nature, preparedness by teachers and even the technological equipment required for the online teaching/learning. Onasanya, Shehu, Oduwaiye and Shehu (2010), opined that most teachers in Nigeria do not have enough knowledge for the effective use of technological resources for online teaching or not at all use technology tool in their instructional delivery. The Colleges of education in Jigawa state comprises Jigawa State College of Education, Gumel and Jigawa State College of Education and Legal Studies, Ringim. In this state, teachers have the opportunity pre-service and in-service training on ICTs which usually give them the basis on the use of internet as a pre-requisite of online teaching. For teacher to be up-date in teaching, he needs to possess practical abilities and skills as the use of ICTs in teaching (Umar & Gumel,

2012). Therefore, there is the need for teacher educator to appreciate ICTs as an ingredient for online teaching in Colleges of education in Jigawa State.

Teachers and Institutions of learning alike, should accept ICTs skills and practice to accommodate the innovation of online teaching. Deng and Tavares (2013) are of the opinion that the latest developments of internet technologies have caused universities investing considerable resources in online learning systems to support teaching and learning especially in the developed world. According to the Giga Information Group (GIG), about 75% of the 129 topmost United States universities make use of online learning systems (Wen-Shen & Wang, 2012). This innovation that started in developed countries is rapidly becoming a global phenomenon. Online learning has recently become more popular in many developing countries. Tagoe (2012) asserts that though the implementation of online learning in developing countries, especially in Africa, is slow compared to that of countries in the western world, the last decade has seen proactive efforts on the part of university administrators to roll-out online learning strategies in order to map up with their counterpart countries in the developed world. Nigeria as a developing country in Africa also join the quest for the new innovation of online teaching. Perhaps, teachers in Jigawa State Colleges of Education should therefore accept, get ready and have a better perception of online teaching. It is against this background that the research is aim at investigate the Perception, Readiness of Online Teaching by Lecturers in Colleges of Education in Jigawa State.

Statement of Problem

Teacher educators may be in the quest of knowledge for content and teaching method to update themselves in the challenging 21st century teaching and learning. It appears that traditional teachers are not ready to accept ICTs as part of their daily routine in teaching and learning. Perhaps some teachers in Jigawa State Colleges of Education Perceived ICTS as a means for the young age to connect to the world. It seems that mixed reaction is observed on how teachers perceived and be ready to involve themselves on an online teaching. In this regard, Iqbal and Ahmad (2010); Bacow, Bowen, Guthrie, Lack and Long, (2012); and Barbour (2010) reported that there are mixed perceptions among teachers of tertiary institutions with the respect to either stay with the traditional or the online learning situation. Some teachers are of the opinion that traditional classroom is better while others perceived the online learning as a better and easier means of teaching with a wider coverage in teaching and learning. In the same vein, readiness is an important factor for effective interaction, concentration and achievement in teaching and learning. In a study by Demir Kaymak and Horzum (2013), it was concluded that readiness of students for online learning increased the interaction in learning environment or the decrease in readiness caused a decrease in interaction.

Moreover, it appears that most of the colleges of education in Jigawa state do not have basic materials and equipment to support the online teaching. Government, College authorities and other relevant authorities are not fully supporting the online teaching in colleges of education. In Nigeria, although the potential of e-learning has still not been fully tapped, its implementation may not have yielded the desired results in view of other challenges such as the high cost of computers, internet bandwidth and poor power supply, among others (Ibinaiye, 2012; Madu & Pam, 2011). This indicated that there are numerous challenges bedeviling the

online teaching in the colleges of education in the Jigawa state. Research conducted by Adedoja, Botha and Ogunleye, 2012, has shown that technologies such as electronic learning (e-learning) and more recently mobile learning (m-learning) may have the potential to facilitate teaching and learning, thereby addressing the problem of poor access to education. Perhaps the level of awareness of online teaching and the readiness to accept and use of ICTs as learning tools might not be there.

This prompted the study to look critically into the perception and readiness of online teaching among teacher educators in colleges of education in Jigawa State. Based on this premise, the study is aimed at assessing the Perceptionandreadiness of online teaching among lecturers in colleges of education in Jigawa State This is with the view to providing information that facilitate decision making on the effective maintenance and utilization of online platform among teacher educators in Jigawa State Colleges of Education.

Objectives of study

The study is design to achieve the following objectives to

1. Find out lecturers' perception on online teaching in Colleges of Education in Jigawa State;
2. Identify lecturers' readiness for the use of internet facility in teaching in Jigawa State Colleges of Education;
3. Determine the extent of interaction between lecturers' perception, readiness and the use of mobile phones and related ICTs tools on the use of online teaching in Jigawa State Colleges of Education.
4. Assess the extent of lecturers' utilisation of online teaching in Jigawa State Colleges of Education.

LITERATURE REVIEW

The study is to examine the perception and readiness of online teaching by lecturers of Colleges of Education in Jigawa State. This study reviewed relevant literature related to the variables in the study.

Theoretical Framework

The theoretical framework for this study is based on the constructivist theory of learning and cultural-historical activity theory. These theories are relevant to the variables in the study. The details of the theories are as follows:

Constructivist Theory

The proponents of this theory include John Dewey, Jean Piaget, Jerome Bruner and Lev Vygotsky. John Dewey who is often cited as the philosophical founder of this approach. In the same vein, Bruner and Piaget are considered the chief theorists among the cognitive constructivists, while Vygotsky is the major theorist among the social constructivists. Constructivism is basically a theory based on observation and scientific study about how people perceive and get ready to actively be involved in a particular learning situation. It says that people construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences (WNET, 2017). The theory is about people using

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their experiences and cognitive ability and perception to solve problems, learn skills or concepts. Learners use their senses perceive a particular learning situation and actively construct new ideas using the existing knowledge and skills. The elements of constructivist theory linked to this work is on learning as a social activity and the need for knowledge to learn and assimilate new knowledge. Constructivism is a major learning theory, and is particularly applicable to the teaching and learning of science- based courses like computer. It is basically a theory -based on perception, readiness and scientific study about how people accept a particular learning situation.

Elements of Constructivism

The constructivist theory operates on some parameters which are referred to as elements of constructivist. The American Association for the Advancement of Science (2011), stated that there are eight elements that underline the constructivist learning which are;

1. Learning is an active process in which the learner uses sensory input and constructs meaning out of it.
2. People learn to learn as they learn: learning consists both of constructing meaning and constructing systems of meaning.
3. The crucial action of constructing meaning is mental: it happens as reflective activity in the mind. Physical actions, hands-on experience may be necessary for learning, especially for children, but it is not sufficient; we need to provide activities which engage the mind as well as the hands.
4. Learning involves language: the language we use influences learning.
5. Learning is a social activity: Our learning is intimately associated with our connection with other human beings, our teachers, our peers, our family as well as casual acquaintances.
6. Learning is contextual: We learn in relationship to what else we know and believe.
7. One needs knowledge to learn: it is not possible to assimilate new knowledge without having some structure developed from previous knowledge to build on.
8. It takes time to learn: learning is not instantaneous.

In constructivism, when concepts are presented as wholes, students seek to perceive it and make meaning out of it by breaking the wholes into parts that they can see and understand; they construct (constructivism) the process and understanding rather than having it done for them. This process can only be successful with the guide and support from the teacher. Piaget suggested that through accommodation which involve perception and assimilation which is about readiness, individuals construct new knowledge from their experiences (Herr, 2016). This study is based on the cognitive theory of learning and Dewey's idea of influential education suggests that education must engage with and enlarge experience and the exploration of thinking and reflection associated with the role of educators. The online teaching is used according to this theory as form of obtaining knowledge for one self by use of mental process. Bruner in Shehu (2016), opined that the greater the students' involvement in the learning process, the greater the learning. Piaget's role in the constructivist teaching suggest that we learn by expanding our knowledge by experiences which are generated through play from infancy to adulthood which are necessary for learning. Their theories are now encompassed in the broader movement of progressive education. The constructivist theory focuses on providing students with physical experiences that induce cognitive conflICTs and encourage students

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with physical and metal experiences. Hence, online learning aids the development of cognitive skills (Safqat, Saeed & Mohammad, 2011).

Similarly, Kroll and Bosky cited in Suwaid (2013), opined that knowledge is acquired through the involvement with contact instead of limitation or repetition. They stressed that learning is an active constructive process and the learner is an information constructor. Therefore, online learning is related to the constructivist approach learning because they all support hands on activities. Thus, students actively construct or create their own knowledge by linking new information to prior knowledge. Constructivist teachers encourage students to constantly assess how the activity is helping them gain understanding. Among the characteristics of constructivist teacher as opined by UCD (2017), is that they encourage students to engage in dialogue, both with the teacher, the material and with one another and support student inquiry by asking thoughtful, open-ended questions and encouraging students to ask questions of one another. By questioning themselves and their strategies, students in the constructivist classroom ideally become "expert learners." This gives them ever-broadening tools to keep learning. This idea is in line with the online learning which allow learners to work together, interact with materials and help each other. As it is there in the constructivist ideology that learning is a social activity, online learning encourages social interaction with teachers and the machines as materials and the spirit of team work during learning. If online learning is well planned and accepted, the students will learn how to do things by themselves while interacting with the teacher the computer and their colleagues.

Constructivist learning theory states that learning is an active process of creating meaning from different experiences. In other words, students will learn best by trying to make sense of something on their own with the teacher as a guide to help them along the way (Brooks in Shehu, 2016). The constructivist advocates the use of activity –oriented instruction like online teaching to teach many subjects.

Online teaching is an offshoot of Constructivism, as it incorporates the idea that the best learning occurs when students are actively engaged in the learning process and working in collaboration with other students to accomplish a shared goal (Idea, 2006). While Constructivism focuses on personal experience as the foundation for learning new materials, online teaching also utilizes student's own experience to solidify knowledge, in collaboration with others even when they are apart. The theory emphasizes the importance of interactivity with respect to the design and implementation of lesson plans. The perception and readiness of lecturers on online teaching matters a lot towards its success.

However, the critics of this theory are of the opinion that constructivism has been criticized on various grounds. Hirsch (2017), stressed that some of the charges critics level against it are;

1. Its elitist. Critics say that constructivism and other "progressive" educational theories have been most successful with children from privileged backgrounds who are fortunate in having outstanding teachers, committed parents, and rich home environments. This means that students from high socio-economic status have a better chance to succeed in teaching/learning.

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2. Social constructivism leads to "group think. This indicate that good and talkative students might have a better chance to dominate the discussion process. This will make the slow learners to be at disadvantage during the learning activities.
3. Lack of constant and individualized evaluation. Students in constructivist classrooms may be lagging behind those in more traditional classrooms in basic skills.

If teachers support and guide, facilitate and organize the lesson very well even when students are not together in a conventional classroom, these critics might be overcome. This theory guides the present study in the sense that it allows learners to use their experiences and abilities to solve problems on ground which is advocated by online teaching. The students' commitments, government and community involvement may aid constructivist learning on track.

METHODOLOGY

The study employed the following methodology for effective conduction of the research, this includes: -research design, population of the study, sample and sampling techniques, instrumentation, validity of instrument; pilot study, reliability of instrument, procedure for data collection; and procedure for data analysis.

Research Design

The research design used for this study is descriptive survey. This according to Lokesh (2019), has undoubtedly been the most popular and most widely used research method in education. This is due to the fact that it helps to explains educational phenomena in terms of the conditions or relationship that exist, opinion that are held by the students, teachers, parents and experts process that are going on, effects that are evident or trades that are developing. The choice of the design is because the study involved the use of questionnaire to gather information from respondents. According to Akuezilo and Agu cited in Agbanu, Nwankwo, Ogalue, and Olorunfemi (2019), a survey design is preferable when developing information on opinions, attitudes and perceptions of individuals in sparsely populated and distantly located population. This design will enable the researcher collect factual information from a specific population using a questionnaire on perception and readiness of online teaching by lecturers of Jigawa State Colleges of education..

Population of the study

The population for this study comprises of all the academic staff of Colleges of Education in Jigawa State. Conversely, the target population of the study comprises all the academic staff of Jigawa State Colleges of Education, which are four hundred and thirty two (432). The population of lectures was used because they directly involved in teaching and learning processes in the Jigawa State Colleges of Education.

Findings

The study revealed the following outcomes, thus:-

1. There was a significant difference between lecturers' perceptions of online teaching and the actual practice of online teaching.(chi -square value of 31.14 was obtained with a probability level of 0.001).

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There was no significant difference in the preparedness of lecturers on the use of the Internet for teaching in Jigawa State colleges of education . (chi –square value of 1.71 and a probability value of 0.989) among others.

Analysis of data

This study presents the analysis, results, and discussion of the study's findings. Data were collected using the Lecturers' Questionnaire on Perception and Readiness of Online Teaching in Colleges of Education in Jigawa State (QPRAOT). The collected data were analyzed using the Statistical Package for Social Sciences (SPSS) version 20. This analysis addressed the four research questions descriptively and tested the four null hypotheses inferentially, using a 0.05 significance level. This level of significance determined whether each of the null hypothesis was retained or rejected. SPSS was used as the basis for conducting both descriptive and inferential analyses to examine lecturers' perception, readiness and utilization of online teaching in Colleges of Education in Jigawa State. The results of these analyses were presented and discussed. Key findings related to each research question and hypothesis were highlighted. The implications and meanings of these results were also explored about the study's objectives and existing literature.

Answering of Research Questions

In this study, four research questions were answered using mean, standard deviation, and mean rank, and presented as follows:

Research Question One: What is the lecturers' perception of online teaching in Colleges of Education in Jigawa State?

Responses to the question one: Below is the table (table 3) that summarized the lecturers' perception.

Table 1: Showing Mean Rating of Responses on Lecturers' Perception of Online Teaching in Colleges of Education from Northwest, Nigeria

	Item	N	Mean	Std. Dev.
.	Online teaching makes classroom management much easier	365	2.81	1.12
.	Online teaching enhances students' academic achievement	365	3.22	1.14
.	Online teaching makes communication between the teacher and students much easier	365	3.32	0.99
.	Online teaching develops lecturers' teaching skills	365	2.88	1.01
.	Online teaching encourages students to participate in class activities	365	2.92	0.75
.	Online teaching course stress for teachers who have poor ICTS skills	365	3.42	0.80
.	Online learning makes lesson preparations more difficult	365	2.84	0.73
.	Online learning disrupted lesson delivery	365	3.57	0.63
.	Online learning makes lesson/teaching expensive	365	2.83	1.03
0.	Online learning makes lessons more interesting	365	3.18	1.13

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1.	Lectures see online teaching as time-consuming to learn how to do online teaching	365	3.49	0.96
2.	Computer eased searching of learning resources	365	2.99	1.04
3.	It is easier and stressless to type with a computer	365	2.95	0.75
4.	Relying on computer and internet information makes lecturers to be lazy and helpless in their duties	365	3.55	0.76
5.	Online learning encourages students' laziness in learning	365	3.36	1.05
	Cumulative average and SD		3.16	0.93

Research Question Two: What is the level of preparedness by lecturers on the use of the Internet in teaching in Colleges of Education in Jigawa State?
As indicated, mean and standard deviation were used in the analysis, as indicated in table 4:

Table 2: Showing Mean Rating of Responses on Level of Preparedness of lecturers on the use of internet in teaching in Colleges of Education in Jigawa State

	Item	N	Mean	Std. Dev.
6.	Lecturers can convert Word documents to PDF	365	3.43	0.90
7.	Lecturers are familiar with how to create Word documents with graphics	365	2.98	1.13
8.	The majority of lecturers can create PowerPoint slides	365	3.26	1.07
9.	The majority of lecturers can create voice-over PowerPoint slides	365	3.40	0.93999
10.	The majority of lecturers can create a database in MS Excel for recording marks	365	2.83	1.26
11.	The majority of lecturers can perform simple calculations in MS Excel	365	3.28	1.02
12.	The majority of lecturers are familiar in using Pad-let or Google Jamboard	365	2.98	1.14
13.	The majority of lecturers can create Audio Files	365	3.21	1.08
14.	Lecturers can create animation using tools such as Plotagon, Animato, Flipa Clip	365	3.25	1.02
15.	Lecturers can design online interactions/games using Socrative Cahoots	365	2.91	1.20
16.	Lecturers use the internet to update information in teaching	365	3.26	0.99
17.	Lectures see online teaching as time-consuming and learning how to do online teaching	365	2.98	1.16
18.	Lecturers are familiar with how to use power point in lecture presentation	365	3.19	1.11
19.	Lecturers have access to teleconferencing facilities	365	3.27	0.97
30.	Lecturers are well prepared and equipped to use ICTS gadgets in teaching	365	2.92	1.18
			3.14	1.08

Table 2 above indicated a high cumulative mean of 3.14 and a cumulative standard deviation of 1.08. The overall level of preparedness of lecturers to use internet was high. All the means were above the bench mark mean of 2.50. The cumulative standard deviation indicated moderate deviation from the mean, which supported the mean analysis.

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Research Question three: What is the level of interaction between lecturers' readiness and perception of the use of mobile phones and related ICTS tools for online teaching in Colleges of Education in Jigawa State?

The analysis was done on the four issues as follows

Table 3: Showing Mean ratings and ranks on the level of interaction between lecturers' perception, readiness and use of ICTS tools for Online Teaching among lecturers of college of education of Northwest, Nigeria

Variable	N	Mean	Std. Dev.	Mean Rank
PL	365	47.35	3.41	2.61
RL	365	47.13	4.49	2.53
UL	365	46.69	4.23	2.48

PL- Perception level, RL- Readiness level, UL- Utilization level
Sources: Spss x 20

Table 3 indicated mean ranks of the responses by the lecturers on perception level (2.61), readiness level (2.53), perception level (2.38) and utilization level (2.48). The perception and readiness level were significant, as the mean ranks were above the bench mark of 2.50, while those of perception and utilization levels were below the bench mark.

Research Question Four: What is the extent of lecturers' utilization of online teaching in Colleges of Education in Jigawa State?
The data was analyzed as follows:

Table 4: Showing Mean Ratings of Responses on Extent of Lecturers' Utilization of Online Teaching in college of education of Northwest, Nigeria

	Item	N	Mean	Std. Dev.
1.	Lecturers use the internet to search for instructional materials online	365	3.24	1.03
2.	Lecturers use WhatsApp flatform to give assignments to their students	365	3.03	1.08
3.	Some lecturers use online platforms to meet with students once or twice every semester.	365	3.11	1.09
4.	Some lecturers use Zoom application to meet with their students online	365	3.08	1.05
5.	Lecturers ask their students to send their assignments through e-mails	365	3.05	1.11

16.	Lecturers use YouTube short videos in teaching	365	3.17	1.10
17.	The majority of students have Android phones which they use for browsing relevant learning materials	365	3.14	1.06
18.	Lecturers send softcopy reading materials to students online	365	2.87	1.12
19.	Lecturers search for lecture notes via the Internet regularly	365	3.15	1.12
20.	Interacting with my students online is fun	365	3.31	1.01
21.	Lecturers use internet-enabled computers for teaching	365	2.94	1.13
22.	Lectures use YouTube channels in teaching	365	3.19	1.07
23.	Lectures give printed materials to students	365	3.36	0.95
24.	Lecturers use their smartphones to assess information	365	2.99	1.12
25.	Lecturers discuss teaching and learning using social media groups	365	3.06	1.21
	Average Total		3.11	1.08

Sources Spss x 20

From table 4 above, it could be inferred that, all the mean scores in the questions raised had a mean above the bench mark. The cumulative mean was found to be 3.11, which was also over the bench mark of 2.50. this indicated that, the extent of lectures utilization of online teaching was highly significant. This was supported by the cumulative standard deviation from the mean value, which was found to be 1.08.

Hypothesis

The study formulated Four hypotheses and tested using the Chi-square test. All were stated in Null forms. One of them was tested using Kruskal Wallis (H) test at 0.05 alpha level of significance.

The analysis was as follows:

$H0_1$: There is no significant difference between lecturers' perception and online teaching in Colleges of Education in Jigawa State.

This compared the views of the lectures on their perception and the utilization of the online teaching. Below is the summary:

Table 1: Showing Chi- square analysis on the lecturers' perception and the actual utilization of online teaching in Colleges of Education in Northwest

N	X	SD	X^{-2}cal	DF	a	X^{-2}crit	P value
365	3.16	0.93	31.14	363	0.05	59.70	0.001

Sources Spss x 20

Table 1 show that a chi-square value of 31.14 was obtained with a probability level of 0.001. Since this p-value is less than 0.05, the null hypothesis is hereby rejected. In other words,

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there is sufficient evidence to suggest there is a statistically significant difference between how lecturers perceive online teaching and how it is practiced within the Colleges of Education in Jigawa State, based on the analysis conducted.

H_{O2}: There is no significant difference in preparedness on the use of the internet in teaching in Colleges of Education in Jigawa State.
To test this hypothesis, question seeking level of preparedness and those on use of internet were compared using Chi-square test, and the following were the results:

Table 2: showing chi – square analysis of lecturers' self-assessment on level of preparedness and level of internet use in Colleges of Education in Jigawa State

23N	X	SD	X^{-2} cal	DF	a	X^{-2}crit	P value
365	3.14	1.08	1.71	363	0.05	0.989	.05

Sources: Spss x 20

From table 2 above, the test yielded a chi-square value of 1.71 with a probability value of 0.989. Since the p-value is greater than 0.05, the null hypothesis is hereby retained. In other words, there is insufficient statistical evidence here to conclude there is a real difference between how ready lecturers perceive themselves to be in using internet technologies for instruction and their demonstrated level of proficiency based on this study. This portrayed that the preparedness level was more than the actual use of the internet in the colleges.

H_{O3}: There is no significant interaction between lecturers' perception and readiness of the use of mobile phones and related ICTS tools for online teaching in Colleges of Education in North-west, Nigeria.

Table 3: Kruskal Wallis H Test on the Interaction in Lecturers' Perception, and Readinesss of Using ICTS Tools for Online Teaching

Variables	N	H	*Df*	*P*
Perception Level Readiness Level Utilization Level	365	1.182	4	0.881

Sources: Spss x 20

Table 3 gave a summary of Kruskal Wallis test on four (4) levels, perception, readiness, and utilization in the use of ICTS for online teaching by lectures in Colleges of Education in Jigawa State. This revealed that the test yielded an H value of 1.182 with 4 degrees of freedom and a probability value of 0.881. Since the p-value is greater than 0.05, the null hypothesis is hereby retained. Based on the results of the Kruskal Wallis H test, there is no significant difference in the level of interaction of how the lecturers perceive, feel ready for, and accept the application of ICTs in their pedagogy.

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H_{O4}: There is no significant difference in Lecturers' utilization of online teaching in Colleges of Education in Jigawa State.
In testing this hypothesis, a Chi-square test was employed. Below was the summary:

Table 4: Chi –square test on lecturers and actual implementation level on utilization of online teaching in colleges of education in Northwest, Nigeria

N	X	SD	X^{-2} cal	DF	A	X^{-2}crit	P value
365	3.11	1.08	12.50	363	0.05	0.130	.05

Sources: Spss x 20

From table 4, chi-square test yielded a value of 12.5 and a probability level of 0.130. Since the p-value is greater than 0.05,the null hypothesis is hereby retained. This means there is insufficient evidence of a statistically significant difference between how online teaching is being utilized by lecturers compared to current implementation levels.

Summary of Findings

From the results presented and interpreted in this study, the major findings are summarized as follows:

- There was a significant difference between lecturers' perceptions of online teaching and the actual practice of online teaching. (chi -square value of 31.14 was obtained with a probability level of 0.001).
- There was no significant difference in the preparedness of lecturers on the use of the Internet for teaching in colleges of education in northwest Nigeria. (chi –square value of 1.71 and a probability value of 0.989).
- There was no significant difference in lecturers' perception and readiness in the use of ICT tools for online teaching in colleges of education in northwest Nigeria. (chi-square value of 1.182 and a probability value of 0.881).
- There was no significant difference in lecturers' utilization of online teaching in colleges of education in northwest Nigeria. (chi-square value of 12.50 and a probability level of 0.130).

DISCUSSION OF FINDINGS

This presents an explanation for the results obtained in the study. This study is aimed at assessing the Perception and Readiness of Online Teaching among Lecturers of Colleges of Education in Jigawa State. At descriptive and inferential levels, four research questions were answered and four null hypotheses were tested respectively, and the major findings were presented in Table 1 to Table 4 and discussed as follows:

The finding of this study from research question one reveals a significant difference between lecturers' perceptions of online teaching and the actual practice of online teaching. Therefore, null hypothesis one was rejected as it reveals a significant difference between lecturers' perceptions of online teaching and the actual practice of online teaching. This suggests that lecturers may harbor misconceptions about the practical aspects of online teaching. Several factors could contribute to this perception-reality gap. Lecturers likely have had limited exposure and training in modern digital pedagogical approaches (Bordoloi, Das, & Das, 2021).

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Without direct experience, it is challenging to visualize technological applications and conceptualize non-traditional methods (Lukman &Krajnc, 2012). Structural barriers such as inadequate infrastructure, support, and institutional resistance also impede implementation and reform despite positive attitudes (Kuliya& Usman, 2021). Additionally, Nawaila (2022) opined that professional development interventions seeking to introduce online teaching modalities may struggle to gain support and participation if lecturers' preconceptions do not align with realities. Targeted capacity-building incorporating hands-on learning opportunities could help reduce misalignments by demonstrating practical applications (Jumaat &Tasir, 2014). At the same time, barriers to implementation must be addressed to establish realistic expectations. Only by removing perception-practice gaps through experience and structural reforms can changes in teaching methods hope to be received favorably.

The research question two indicated that there is no significant difference on Mean Rating of Responses on Level of Preparedness of lecturers on the use of internet in teaching in Colleges of Education in Jigawa State. Null hypothesis two was accepted because it was found out that there was no significant difference in the preparedness of lecturers on the use of Internet for teaching in Colleges of Education in Jigawa State. This suggests that unlike the first finding, lecturers' self-assessments of their abilities align reasonably well with demonstrated skill levels. This finding agreed with Machaba and Bedada (2022) who found that lecturers were generally able and interested in integrating technology into the teaching process but that barriers, primarily at the institutional level, hindered them from doing so. If intrinsic capacities match needs and available supports, large-scale remedial skill-building efforts may not be required (Inan& Lowther, 2010). Still, maintaining preparation levels requires ongoing education. As technologies rapidly progress, skills risk becoming outdated without continuous professional development (Mbatha, 2013). Periodic evaluations could identify any emerging competency-expectancy gaps to refine training as demands evolve. Support structures must also be sustained to stimulate intrinsic motivations. Otherwise, disuse may erode expertise over time. However, Downing and Dyment (2013) found that regarding readiness and preparation for teaching online, the majority of teacher educators reported a lack of confidence and competence in the technological and pedagogical skills required to teach online. Nonetheless, the finding from this study indicates lecturers currently feel capable and theoretically prepared for internet integration given present contextual realities.

Another finding from research question three revealed that there was no significant difference in lecturers' perception and readiness in the use of ICTs tools for online teaching in colleges of Education in North-west, Nigeria. Null hypothesis four was accepted because there is lack of significant differences in lecturers' perception and readiness of using ICTs tools for online teaching suggests a harmonized approach among educators in embracing technology for pedagogical purposes. This alignment indicates a uniform understanding among lecturers of the importance of ICTs tools in enhancing the quality of online teaching. The findings resonate with the Innovation Diffusion Theory, which posits that innovation are more readily adopted when users perceive compatibility and relative advantage (Wani & Ali, 2015). In this context, the equivalence in perception and readiness suggests a collective belief among lecturers that integrating ICTs tools into online teaching practices is advantageous and aligns with their teaching objectives.

This finding is crucial as it implies a cohesive and concerted effort among lecturers to utilize a common set of tools, potentially fostering collaboration and resource-sharing. The consistency in readiness and perception further indicates that lecturers share a positive view of the role of ICTs tools in facilitating effective online teaching. This could be attributed to institutional support, training programs, and policies that encourage the integration of ICTs tools into teaching practices. Ertmer's Model of Teachers' Adoption of Technology emphasizes that teachers progress through stages of technology adoption, from awareness to exploration and eventually integration (Ertmer, et al., 2012). The lack of significant differences suggests that, collectively, lecturers in the studied region may have progressed to a stage where the use of ICTs tools is an integral part of their teaching practices. However, the findings of Nathaniel, Makinde, and Ogunlade (2021) revealed that lecturers exemplified a high perception of the usefulness and ease of use of digital technologies and recommended the provision of institutional support, procurement of needed digital technologies and internet facilities, seminars, workshops and training to all university lecturers on usefulness, ease of use of newer digital technologies and skills.

Lastly, the finding of research question four showed that there was no significant difference in lecturers' utilization of online teaching in Colleges of Education in Jigawa State. Therefore, null hypothesis four is accepted. It revealed a consistent and comparable level of engagement with online teaching practices among educators. This finding reflects a degree of uniformity in how lecturers incorporate online teaching methods into their instructional strategies (Gombe et al., 2016). The Community of Inquiry framework emphasizing cognitive, social, and teaching presence may be relevant, as similar utilization patterns suggest a shared commitment to fostering an engaging and collaborative online learning environment (Swan et al., 2009).

The lack of significant differences could also be indicative of a supportive institutional environment that encourages and facilitates the integration of online teaching. Policies and initiatives promoting adoption, coupled with the availability of necessary resources and infrastructure, likely contribute to consistent utilization observed. This agrees with Hyginus et al. (2021), who identified challenges like power outages, costs, and lack of awareness that affect utilization by lecturers and students. Additionally, the findings may underscore lecturers' collective readiness to adapt to modern teaching methods and the changing education landscape. This aligns with the concept of technology readiness where individuals are predisposed to embrace and use new technologies like online platforms (Mankins, 2009).

The research suggests that there are no notable variations in usage, but additional investigations could delve into particular modalities employed, the frequency of utilization, and the perceived effectiveness in improving student outcomes. Examining the intricacies of online teaching usage can offer valuable insights into optimal approaches and areas that need refinement when incorporating technology in higher education.

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary

The study assessed the perception and readiness of online teaching among lecturers of Colleges of Education in Jigawa State.The study guided by four objectives which are to; find out lecturers'

perception on online teaching in Colleges of Education in Jigawa State; identify lecturers' readiness for the use of internet in teaching in Colleges of Education in Jigawa State; determine the extent of interaction between lecturers' perception and readiness the use of mobile phones and related ICTs tools on the use of online teaching in Colleges of Education in Jigawa State; and assess the extent of lecturers' utilisation of online teaching in Colleges of Education in Jigawa State. Four research questions and four hypotheses were formulated in line with the above-mentioned objectives.

The study employed descriptive survey design with a total population of four hundred and thirty (432) and a sample size of three hundred and sixty-four (365) which was arrived at using stratified random sampling technique. The Data for the study was collected using a questionnaire constructed by the researcher titled Lecturers' Perception and Readiness of Online Teaching Question (LPRAOTQ). The data collected were analyzed statistically using Statistical Package for Social Sciences (SPSS), version 25. At descriptive level, the research questions were answered by using mean and standard deviation. While at inferential level, hypotheses one, two, three and four were tested using chi-square test and null hypothesis four was tested using Kruskal Wallis H test at 0.05 alpha level of significance. The findings of the study revealed a significant difference between lecturers' perceptions of online teaching and the actual practice of online teaching. This suggests that lecturers may harbor misconceptions about the practical aspects of online teaching. The study also found that there was no significant difference in the preparedness of lecturers on the use of Internet for teaching in Colleges of Education in Jigawa State. This finding suggests that lecturers view online pedagogical approaches favorably and do not perceive strong barriers to their adoption. Another finding from the study is that there was no significant difference in lecturers' perception and readiness in the use of ICTs tools for online teaching in Colleges of Education in Jigawa State.

The lack of significant differences in lecturers' perception and readiness in using ICTs tools for online teaching suggests a harmonized approach among educators in embracing technology for pedagogical purposes. Another finding from the study is that there was no significant difference in lecturers' perception and readiness in the use of ICTs tools for online teaching in Colleges of Education in Jigawa State. The lack of significant differences in lecturers' perception and readiness in using ICTs tools for online teaching suggests a harmonized approach among educators in embracing technology for pedagogical purposes. The consistency in readiness further indicates that lecturers share a positive view of the role of ICTs tools in facilitating effective online teaching.

The finding of this study showed that there was no significant difference in lecturers' utilization of online teaching in Colleges of Education in Jigawa State. The absence of a significant difference in utilization indicates a consistent and comparable level of engagement with online teaching practices among educators. Conclusion, recommendations and contribution to knowledge were made in line with the findings of the study.

Conclusion

Based on the findings of this research, the following conclusions were made: there is a significant difference between lecturers' perceptions of online teaching and the actual practice of online teaching; there is no significant difference in the preparedness of lecturers on the use of the Internet for teaching in Colleges of Education in Jigawa State;; there is no significant difference

in lecturers' perception and readiness in the use of ICTS tools for online teaching in Colleges of Education in Jigawa State; and there is no significant difference in lecturers' utilization of online teaching in Colleges of Education in Jigawa State

Recommendation

Based on the findings of this study, the researcher recommends as follows:

1. Teacher educators should positively perceive online learning as effective leaning method for teacher education;
2. teachers, school managers and National Commission for Colleges of Education (NCCE) should promote the use of ICTS and internet;
3. college management and other relevant stake holders should provide ICTs and internet facilities in the Colleges of Education in Nigeria;
4. students and teachers should be prepared and ready to use ICTs and internet facilities in their teaching and learning activities; and
5. government, school management, communities, and non-governmental agencies should encourage and support teachers to go for professional development training on ICTs in order to acquire the skills for online learning.

Contributions to Knowledge

Considering the findings of this research, the study revealed that;

1. there is a significant difference between lecturers' perceptions of online teaching and the actual practice of online teaching;
2. there is no significant difference in the preparedness of lecturers on the use of the Internet for teaching in Colleges of Education in Jigawa State;
3. there is no significant difference in lecturers' perception and readiness in the use of ICTs tools for online teaching in Colleges of Education in Jigawa State; and
4. there is no significant difference in lecturers' utilization of online teaching in Colleges of Education in Jigawa State.

Suggestions for Further Studies

The researcher is of the opinion that further studies be carried out to cover other concepts in the following areas:

1. Assessment of the perception and readiness of online teaching among secondary teachers in north-west region of Nigeria;
2. Assessment of the perception and readiness of online teaching among Colleges of Education in Jigawa State;
3. Assessment of the perception and readiness of online teaching among polytechnics lecturers in north-west region of Nigeria; and
4. Assessment of the perception and readiness of online teaching among lectures of private tertiary institutions in north-west region of Nigeria.

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