Lecturers' Efficacy and Readiness towards Utilization of ICT for Academic Research in College of Education

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A B S T R A C T

The study investigated Lecturers' Efficacy and Readiness towards the Utilization of ICT for Academic Research in the College of Education in Kwara State. Non-experimental research design involving a descriptive survey was adopted. The instrument used for data collection was a questionnaire. The instruments were given to three experts in science education, test, measurement, and evaluation. ICT experts who determined the validity of the instrument. The lecturers' Efficacy, lecturers' readiness, and lecturers utilizations were measured through a questionnaire. The population of the study was all the lecturers in the two Colleges of Education used as case studies comprising state and private colleges of education. The study also made use of 140 academic staff in both colleges of Education adopting Krejcie and Morgan, 1970 i.e. Kwara State College of Education, Ilorin (153 participants) while Kwara State College Of Arabic and Islamic Legal Studies Ilorin Kwara State (52 participants) Structured questionnaire titled: "Lecturers' Efficacy and Readiness towards Utilization of ICT Questionnaire" (LERUQ) was used to elicit information. Descriptive statistics of the frequency and percentage were used to answer research questions while Pearson Product Moment Correlation (PPMC) was used to test the research hypotheses formulated in the study at a 0.05 level of significance. The findings showed most of the lecturers' had positive reactions towards it, limited knowledge, and limited understanding.

1. INTRODUCTION

A lecturer has an important role to integrate Information and Communications Technology (ICT) into their teaching methodThe lecturer has the challenge to Adjust the conventional method by using ICT tools as media in their teaching. The more a lecturer employs instructional technology in the classroom resulted the less lecturer-centered a classroom becomes. While it encourages the interactive classroom and Promotes student-centered learning. On the other hand, lecturers who lived different decades with the students, are immigrants in the world life nowadays so using ICT may trigger a bad attitude towards it.

As Dudeney argued that a large part of the negative attitudes lecturers have towards technology is usually the result of a lack of confidence, a lack of facilities, or a lack of training, resulting in an inability to see the benefit of using technologies in the classroom. Although the use of ICT by lecturers. The use of technology is still not widespread. The use of technology in the classroom is becoming increasingly important. Therefore, it is necessary to comprehend lecturers' perceptions, obstacles, and expectations in using ICT. By that point, it is fascinating to investigate those points toward ICT in teaching. We formulated the following research questions:

(i)   What are the lecturers' perceptions of the use of ICT in teaching?
(ii)   What are lecturers' obstacles to the use of ICT in teaching?
(iii)   What are lecturers' expectations toward the use of ICT in teaching?

It is expedient for lecturers' to merge Information and Communication Technology in the utilization of their academic research. ICT poses a serious challenge to lecturers' in the conduct of their research activities. The more a lecturer makes use of ICT in teaching and learning, research work, etc the less lecturer-centered classroom activities will become (Bolaji & Adeoye, 2022). ICT are divergent designates of technological tools and resources used for creating, storing, managing, and communicating information, and to support teaching and learning, and research activities (Vajargah & Azadmanesh, 2010).

The lecturer has an important role to integrate ICT into their teaching method. The lecturer has the challenge to adjust the conventional method using ICT tools as media in their teaching (Jadhav *et al.,* 2022; Daramola, 2023). The more a lecturer employs instructional technology in the classroom, the less lecturer-centered a classroom will become (Erben *et al.,* 2009). While it encourages the interactive classroom and promotes student-centered learning.

On the other hand, the lecturer who lives in different decades with the students who are immigrants in the world life nowadays so using ICT may trigger a bad attitude towards it. Dudeney and Hockly argued that a large part of the negative attitudes lecturers have towards technology is usually the result of a lack of confidence, a lack of facilities, or a lack of training, resulting in an inability to see the benefit of using technologies in the classroom.

The lecturers' use of the web and other ICTs for academic research in Colleges of Education in Kwara state has been phenomenal. This is established on the dynamics of changing environment, globalization, demand for ICT and lifelong learning as well as competition among private and public institutions (James, 2008; Anh, 2022).

These rapid changes in the digital age call for the lecturers' efficacy and readiness towards utilization of ICT for academic research in the College of Education in Kwara state to its potential effect on educational, social, and economic dynamics. The educational benefits of ICTs in teaching and learning are well cataloged (Tok & Sora, 2013) Such benefits include their impact on catalyzing teaching practice thoughts; language acquisition; motivating learners; enhancing students' academic performance, and enhancing pedagogy (Jaffer & Czerniewicz, 2007). Research has shown that despite the benefits, Colleges of Education in Kwara state

have been rather slow in making use of ICT potentiality, particularly for academic research purposes. Many higher institutions are no exception to these notions.

The sample lecturers in Colleges of Education (Kwara State College of Education Ilorin and Kwara State College of Arabic and Islamic Legal Studies Ilorin) have reciprocated slowly to ICT utilization. Fewer research studies have looked into investigating Lecturers' Efficacy and Readiness towards Utilization of ICT for Academic Research in the College of Education. This is notwithstanding global evidence that points to lower ICT utilization by few lecturers'.

That few lecturers make use of available ICTs for academic research for teaching and learning purposes is a cause for concern for colleges of education. It is in this context that this study investigated Lecturers' Efficacy and Readiness towards Utilization of ICT for Academic Research in the College of Education in Kwara State.

This study seeks to investigate Lecturers' Efficacy and Readiness toward the Utilization of ICT for Academic Research at the College of Education in Kwara State. The study provided answers to the following research questions:

(i)   Are lecturers aware of the existence of ICT for academic research?
(ii)   Are lecturers' in the College of Education in Kwara state ready to adopt ICT's educational resources for teaching and research?
(iii)   Does gender influence lecturers' efficacy towards the utilization of ICT for academic research in the College of Education in Kwara State?
(iv)   Does gender influence lecturers' readiness for utilization of ICT for academic research in the College of Education in Kwara State?

The following null hypotheses were tested in this study:

(i)   Ho1: There is no significant difference between male and female lecturers' efficacy toward the utilization of ICT for academic research in the College of Education in Kwara State.
(ii)   Ho2: There is no significant difference between male and female lecturers' readiness toward utilization of ICT for academic research in the College of Education in Kwara State.

2. METHOD

This study was carried out in Colleges of Education in Kwara State (Kwara State College of Education Ilorin and Kwara State College of Arabic and Islamic Legal Studies Ilorin). A quantitative method survey studied exploring the lecturers' efficacy, lecturers' readiness toward the use of ICT for academic research. For the study, all the lecturers in the two Colleges of Education have been used as case studies comprising state and private colleges of education. The study also made use of 140 academic staff in both colleges of Education adopting Krejcie and Morgan, 1970 i.e. Kwara State College of Education, Ilorin (153) while Kwara State College Of Arabic and Islamic Legal Studies Ilorin Kwara (52) were selected as participants to this survey.

The researcher designed a structured questionnaire was used to obtain information from the 140 respondents. According to Bowling (1999), questionnaires are the best data collection instruments because they are carried out in natural settings and the questions increase the natural validity of the study. The instrument was given to lecturers in the Science Education department, and experts in the test, measurements, and evaluation Faculty of Education, AL - Hikmah University , Ilorin . Kwara State . Respondents consented to respond to the instrument. The data collection activity lasted one week through Google form after which 15 usable instruments' data were analyzed.

3. RESULTS AND DISCUSSION

From observation through the questionnaire, it can be seen from the following table regarding the demographics of the respondents (see **Table 1**). This section presents the results of data obtained from the respondents in percentages.

Table 1 shows the distribution of respondents by gender and professional qualifications status. It was revealed that 140 respondents including. 50 (35.7%) of the respondents were female while 90 (64.2%) were males. The professional qualifications of the respondents depicted that those With BED qualifications were 35 (25.0%), MED 85 (60.7%), while those with other qualifications were 20 representing (14.3%) of the respondents. It can be deduced that the majority of the academic staff in both colleges of Education under observation have a Master's degree in Education representing 60.7%.

Table 1. Demographic distribution of respondents

Variable	Frequency	Percentage
Gender		
Female	50	35.7
Male	90	64.2
Total	**140**	**100.0**
Professional Qualification		
BED	35	25.0
MED	85	60.7
Others	20	14.3
Total	**140**	**100.0**

Table 2 shows the majority of the lecturers strongly agreed (85%) that using ICT enhanced their academic research, while (15%) thinks that ICT merely contribute to their academic research success. On the other hand, 55% strongly agreed that ICT is tasking for academic research while 35% agreed to that and 7% of the respondents strongly disagree that ICT is not tasking while 3% of respondents said it's not asking for academic research if one knows what they are looking for. As regards the technicality involved in making use of ICT, 67.3% of respondents strongly agreed that ICT involved major technicality while 22% of respondents agreed that, and 10.7 of the respondent thinks that the technicality involved does not matter.

Table 2. Lecturers' efficacy toward utilization of ICT in academic research

Variable	SA(%)	A(%)	SD(%)	D(%)
Using ICT enhanced my academic research success	85.0	15	0.0	0
ICT is tasked with using for academic research	55.0	35	7.0	3
The technicality involved in making me dislike ICT	67.3	22	10.7	0
ICT is taking too much of my time when searching for academic materials	72.0	28	0.0	0
I have not been able to get maximum productivity in ICT due to the high cost	65.0	20	10.0	0

On the issue of time constraints, only 72% of the respondents strongly agreed to that while the remaining 28% said yes but not too much. 65% of the respondents strongly agreed that they have not been able to get desired productivity from ICT while 20% agreed that. Also, 10% of the respondents said they have been able to get the desired productivity and 5% thought

that they have been able to enjoy maximum productivity in the use of ICT which means all lecturers have a positive benefit from the utilization of ICT in academic research.

They believed that ICT is pertinent and that it can add positive value to their research. In conclusion, most of the lecturers agreed that ICT can support their academic research and also help them to trigger more academic research success (Bolaji & Jimoh, 2023; Arciosa, 2022; Dwiana *et al.,* 2022). As Cox (1999); Cope and Ward (2002) claimed that technology can improve the presentation of academic research and make a good master of their research.

From **Table 3**, the majority of the lecturers strongly agreed (95%) that ICT is too expensive to get for their academic research, while (5%) think that ICT is expensive but not too exorbitant for their academic research success. On the other hand, 55% strongly agreed that ICT network is very bad and not encouraging for their academic research while 10% agreed to that and 85% of the respondents strongly agree that ICT is brain tasking while 15% of respondents said not brain tasking for academic research depending on what the researcher is surfing on the net. As regards the instructors involved in making use of ICT, 45% of respondents strongly agreed that ICT instructors are scarce to get while 35% of respondents agreed that instructors are scarce to get, and 12% of the respondent of the opinion that the ICT instructors are not scarce to get depending on their location.

Table 3. Lecturers' readiness toward utilization of ICT in academic research

Variable	SA(%)	A(%)	SD(%)	D(%)
ICT is too expensive	95	5	0	0
At times the ICT network is very bad and not encouraged academic research	55	35	10	0
In accessing ICT its brain tasking and experts are not always available	85	15	0	0
ICT instructors are scarce to get	45	35	12	8

From the analysis and results that are discussed above, first of all, the lecturer's efficacy toward utilization of ICT in academic research where the lecturers in this college of education have a positive understanding of these assertions. ICT is expedient in academic research, it enhances academic research success, it's tasking in carrying it out but lots of respondents agreed to it been educative, and the technicality involved makes ICT unlikeable for some of the lecturers sampled, ICT is taking too much of their time when searching for academic materials. On the other hand, there were 37.5% of lecturers stated that using ICT in teaching cannot guarantee that learning can be enjoyable.

Secondly, the perception of lecturers toward perceived ease of use of ICT in teaching was the lecturers have positive perceptions with the statements "I know how to teach using ICT, I have easy access to technology I would like to use, and I need support when I encounter technical problems." In line with this, there were no lecturers who stated that "I don't have time to access ICT". Besides that, there were 87% of lecturers argued that they have resources for teaching using ICT.

There were 75% of lecturers confirmed that they need training in how to use ICT in teaching. Moreover, there were 62.5% of lecturers reported that it will be easy to control the class. In addition, there were 62.5 % of lecturers said that "it is easy to use ICT when teaching". Thirdly, the obstacles to using ICT for teaching were all lecturers think that they have obstacles when using ICT in teaching, such as there was limited knowledge on how to make full use of ICT and limited understanding of how to integrate ICT into teaching. Besides that, 70% of

lecturers clarified that they lack time on campus. Meanwhile, there were 50% of lecturers stated that they lack software or website that supports state standards.

Finally, there were 55% of lecturers stated that they have technical support when things don't work. And 37.5% of lecturers claimed that they have no problems with this. And the last, the expectations of lecturers in using ICT for teaching were all of the lecturers hope computers can be used to provide more interactive activities for students, to do more interesting and imaginative work, and to communicate with their students can be easier after ICT is used (Akinoso, 2023; Shah, 2022).

Moreover, all lecturers need a trainer to teach them how to use software or how to integrate ICT into teaching. Besides that, there were 62.5% of lecturers said that the use of ICT will provide students with more practical and useful knowledge. In addition, there were 75% of lecturers reported that they hope an increased use of the computer will make the class more interactive. On the other hand, there were 50% of lecturers claimed that they do not hope ICT can be used more often to help students in learning. Besides that, there were 45% of lecturers admitted that they do not hope ICT will help them to teach more efficiently.

4. CONCLUSION

The study examined how effective and prepared lecturers were to use ICT for academic research at the college of education in Kwara State. Adopted was a non-experimental research strategy employing a descriptive survey. A questionnaire served as the data gathering tool. Three professionals in science education, testing, measurement, and evaluation received the equipment. ICT professionals who decided on the instrument's reliability. A questionnaire was used to assess the lecturers' effectiveness, readiness, and use. All of the lecturers at the two colleges of education—state and private schools of education—used as case studies made up the study's population. Kwara State College of Education, Ilorin (153 participants) and Kwara State College of Arabic and Islamic Legal Studies, Ilorin (140 participants), both institutes of education that adopted Krejcie and Morgan, 1970, were used in the study. State of Kwara (52 participants) Information was gathered using a structured questionnaire called the "Lecturers' Efficacy and Readiness towards Utilization of ICT Questionnaire" (LERUQ). The study's research questions were answered using descriptive statistics of frequency and percentage, and the study's research hypotheses were tested using Pearson Product Moment Correlation (PPMC) at a significance level of 0.05. The research revealed that the majority of lecturers responded well to it and had limited information and comprehension.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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