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## Challenges And Coping Strategies In Utilizing e-Teaching By Agricultural Education Lecturers In South-South Universities In Nigeria

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### Abstract

This study identified challenges and coping strategies of lecturers of Agricultural Education in utilization of e-teaching in Universities in South-South, Nigeria. Two research questions were raised and answered. Survey research design was used for the study as it used questionnaire to elicit information from the respondents. The population of the study was 56 lecturers of Agricultural Education in South-South universities. There was no sampling as the population was small and manageable. A structured questionnaire titled; Challenges and Coping Strategies of Lecturers of Agricultural Education in Utilization of E-teaching Questionnaire (CCSLAEUEQ) was used for data collection. The CCSLAEUEQ was validated by three experts. Cronbach alpha reliability method was used to determine the internal consistency of the instrument. A reliability coefficient of 0.87 was obtained. Data collected were analyzed using arithmetic mean for answering the research questions; standard deviation was used to measure the amount of variation or dispersion of the data. It was found that challenges in utilization of e-teaching in universities include; unstable power supply, high cost of e-teaching gadgets, high cost of data bundle, among others. The coping strategies in utilization of e-teaching in universities include; organizing e-teaching seminars, provision of alternative power supply. It was recommended among others that there should be e-teaching allowances to assist lecturers in the purchase of data bundles and e- teaching gadgets for effective utilization of e-teaching in universities,

**Keywords:** Universities, agricultural education-lecturers, e-teaching, challenges, coping strategies.

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### Introduction

University education is the apex of education and it provides high quality career counselling and lifelong learning programmes that prepares students with the knowledge and skills for self-reliance and the world of work. The word ‘university’ is derived from the Latin “Universitas magistrorum et Scholarium”, which roughly mean “community of teachers and scholars. Universities typically provide undergraduate and postgraduate education (Ibekwe. 2017). In Nigeria, the National

Universities Commission (NUC) is the major accreditation and regulatory body that enforces uniform standard and sets admission capacity of every university.

Agricultural Education is one of the programmes offered in universities. According to Association of Career and Technical Education (ACTE) (2008), Agricultural Education is a field of study that prepares individuals for career in aspects of food and agricultural system. Ekong & Paul (2020) described agricultural education as a programme that is geared towards preparing people for skilled work, stipulating the training and retraining of the individuals to enable them acquire specific appreciation of the patterns of behaviour, attitudes, skills, knowledge, values and culture needed to become more productive and efficient in the society. Ebusoh (2010) stated that Agricultural Education is basically undertaken to prepare students for employment in the agriculture and education sectors. Agricultural Education in this study implies a field of study in Universities in South South Nigeria that trains an individual to acquire knowledge, skills and attitude in agriculture.

In universities, lecturers of Agricultural Education train their students to be competent and graduate them to be teachers of Agriculture in Junior and Senior Secondary schools. A lecturer is one who teaches at universities, polytechnics or colleges. Lecturers of Agricultural Education as specified in the minimum standard requirement of National University Commission (NUC) (2009) are academic staff within the programme that should possess minimum qualification of Bachelor's Degree not below Second-class honour division. Lecturers are expected to be competent to teach the content of Agricultural Education Curriculum to students in the universities.

Teaching is a set of events, outside the learners which are designed to support internal process of learning (Sequeira 2017). Chibuike (2019) opined that teaching implies the principles and procedures used by the teacher to enable students to learn and conclude that the goal of teaching is to bring about desired learning in the students. To the author, learning is the permanent change that takes place at the end of teacher-student interaction. It is relatively permanent change in behaviour that comes from a reinforced practice. In the quest for improving teaching and learning process and solving educational problems, educational researches came up with e-teaching (Electronic teaching)

Electronic teaching is a set of activities which is facilitated by electronic means such as processing, transmission and display of information. E-teaching also refers to the handling and processing of information (text, images, graphics, instructions) for use by means of electronic and communication devices such as computers, cameras, telephone. among others. When e-teaching combines with internet it creates a channel for students to obtain a huge amount of human experience and guide students to enter the global community (Rodriguez & Wilson, 2010). In this way, the students not only can extend their personal view, thought and experience, but also can learn to live in the real world (Francis, 2014).

Electronic teaching involves computational systems that communicate and cooperate with learners at many levels. These systems might use the World Wide Web or CD/DVD – ROM and asynchronous learning environment to provide lectures outside the classroom. E-teaching provides customized responses and on-demand advice through intelligent interfaces, inference mechanisms and cognitive models of the

learner. (Leong et al 2016). Through e-teaching, teachers aim not only at student gaining from the video lessons they provide but, also whatever teachers want to convey through their teaching is absorbed by students. The moral responsibility of imparting education to underprivileged students who are unable to afford expensive coaching is greatly solved by e-teaching. E-teachers provide instruction through computers and the internet. Common duties of e-teachers include creating, revising and updating curricula; creating, 'distributing and grading assignments; corresponding with students, monitoring discussion groups, coordinating with other educators. The discourse and research on e-learning should be complemented by an e-teaching co-equal, focusing on the new roles that teachers should acquire in order to control digital literacy and be able to manage effectively e-learning practices of their students. Across African countries, lecturers face serious challenges in establishing and utilization of e-teaching in universities.

Challenges are new or difficult task that test somebody's ability and skill. Challenges in this study refers to difficult tasks and conditions that hitches the utilization of e-teaching by lecturers of Agricultural Education in universities in South-South Nigeria. Coping strategies are plans that are intended to achieve a particular purpose to cope with a difficult situation. It is the process of planning something or putting a plan into operation in a skillful way. Coping strategy in this study refers to plans put in place by lecturers of Agricultural Education in the utilization of e-teaching in universities in South-South Nigeria to manage the difficult task of e-teaching. E-teaching resources as stated by Bede et al (2015) aid teachers to take students beyond traditional limits, ensure their adequate participation in teaching and learning process and create vital environment to experiment and explore. However, the application of e-teaching needs expensive hardware and software which becomes the big obligations for schools and parents. It is also necessary that both teachers and learners should have basic technology knowledge before they apply e-teaching/learning resources. This new development is a strong indication that 'the era of teachers without e-teaching skills are gone. Unfortunately, most teachers today do not have technological training to guide their students in the use of computers to enhance their learning achievement.

Due to innovations and advancement in instructional technology, the significance and role of the teachers in accepting and integrating e-teaching resources has become the focus of attention when it comes to the learning and achievement of students in today's classroom learning environment. There are different interpretations as to the benefits of integrating technology into the classroom, as there are many studies that have focused on highlighting the benefits of technology integration by teachers into their teaching practices. Integration of e-teaching into the classroom depends on the ability of teachers to structure the learning environment from non-traditional way, to new technological pedagogy. The integration of e-teaching resources into education empowers learners, teachers, educators, managers and leaders to use e-teachings resources judiciously and effectively for expanding learning opportunities and ensuring educational quality and relevance (Evoh, 2017). The utilization of e-teaching in education is the bedrock of knowledge that would enable any country to contribute both to achieving education for all and reducing the digital divide world towards the aim of globalization and also promote teaching and learning of Agriculture.

E-teaching has received emphasis and attention from researchers, teachers, curriculum planners and other relevant organizations in the education sector which include the

inclusion of ICT as core subject for secondary school students, establishment of e-libraries, compulsory use of projector for academic seminars and project presentations etc. With all these emphasis and attention on e-teaching, the researcher observed that most of our universities are yet to fully incorporate e-teaching in their instructional delivery system. This probably might be as a result of some challenges in the utilization of e-teaching by lecturers in the universities hence, the need for the study on the challenges and coping strategies of lecturers of Agricultural Education in utilization of e-teaching in universities in South South, Nigeria. This is the gap, the study sought to fill, A study must fill a gap for it to be relevant (Fieldman 2013; Uzoaghulu, 2011).

### **Purpose of the Study**

The main purpose of this study was to ascertain the challenges and coping strategies of lecturers of Agricultural Education in utilization of e-teaching in universities in South South Nigeria.

Specifically, the study sought to identify:

1. Challenges of lecturers of agricultural Education in utilization of e-teaching in universities in South- South, Nigeria; and
2. Coping strategies of lecturers of Agricultural Education in utilization of e-teaching in Universities in South- South, Nigeria.

### **Research Questions**

1. What are the challenges of lecturers of agricultural Education in utilization of e-teaching in Universities in South- South, Nigeria?
2. What are the coping strategies of lecturers of Agricultural Education in utilization of e-teaching in Universities in South- South, Nigeria?

### **Methodology**

The survey research design was used for this study. This design was considered appropriate because the views of a representative of the respondents were obtained using a questionnaire and findings were drawn. The study was carried out in South-South, Nigeria consisting of five states namely, Rivers, Bayelsa, Akwa-Ibom, Delta and Cross Rivers State. The population of the study was 56 comprising of 34 male lecturers and 22 female lecturers of agricultural education in the five (5) Universities in South South Nigeria that offer agricultural education programme (National Universities Commission, 2017). The entire population was involved, since it was not a large population.

An instrument titled Challenges and Coping Strategies of Lecturers of Agricultural Education in utilization of E- teaching Questionnaire (CCSLAEUEQ) was structured by the researcher from literature reviewed and used for data collection. The questionnaire had two parts, Part A and B. Part A was used to obtain information on personal data of the respondents. Part B was divided into two sections of challenges and coping strategies of lecturers of Agricultural Education in utilization of e-teaching. Each of the response options had a corresponding value of 4, 3, 2 and 1 respectively (4 strongly agree, 3= agree, 2=disagree, 1=strongly disagree). The validity of the questionnaire was established by giving draft copies of the questionnaire to a panel of three experts, one from the department of computer education, University of Uyo, Akwa Ibom State, One from the department of Science Education, Ignatius Ajuru University of Education, Rumuolumeni and one from

department of Agricultural Education Delta State University, Abraka. Fifteen copies of CCSLAEUEQ were administered to lecturers of Agricultural Education in Federal College of Education, Omoku and was used to establish the reliability coefficient of the questionnaire items. Cronbach Alpha formula was used to determine the reliability of CCSLAEUEQ items which gave a reliability index of 0.87, indicating that the items were reliable for the study.

Five research assistants who were familiar with the five states in the South South Nigeria were selected and given orientation on how to administer and retrieve copies of the questionnaire from the respondents. Fifty-six copies of the questionnaire were administered to the respondents. After five working days of administering the questionnaire, a follow up visit was made to remind the respondents of the questionnaire and completed ones were collected. All the 56 copies of the questionnaire were returned and used for data analysis. The data collected were analyzed using arithmetic mean to answer the research questions with 2.50 as the mean cut off point. Mean rating from 2.5 and above were accepted, while mean ratings below 2.5 were rejected as challenges or coping strategies in utilizing e-teaching by lecturers of Agricultural Education in South South, Nigeria.

## Results

The results for the study were obtained from the research questions answered through data collected and analyzed.

**Table 1**

Mean and Standard Deviation of Respondents on the Challenges to Utilization of E-Teaching in Universities in South South (N=56)

S/N	Item Statement	Mean	Std.Dev	Remark
1	Unstable power supply	2.51	0.33	AG
2	High cost of e-teaching gadgets	2.65	0.27	AG
3	Poor network in campuses	2.38	0.41	DA
4	High Cost of data bundle	2.58	0.31	AG
5	Low level of computer literacy among lecturers	2.35	0.42	DA
	<b>Grand mean</b>	<b>2.49</b>	<b>0.35</b>	AG

Std. Dev = Standard deviation, AG = Agreed, DA = Disagreed

Data in Table I showed that the mean responses of the-respondents on items 1, 2 & 4 ranged from 2.51 – 2.65. This indicated that the respondents (Agricultural Education lecturers) agreed that the three items (1, 2 & 4) were the challenges in utilization of e-teaching by Agricultural Education lecturers. While items 3 & 5 had mean ratings ranging from 2.35 – 2.38 and are below the mean cutoff point of 2.50, hence were not accepted as challenges in utilization of e-teaching by lecturers of Agricultural Education.

**Table 2**

Mean and Standard Deviation of Respondents on the Coping Strategies of Lecturers in Utilization of E-teaching in Universities in South South, Nigeria (N=56)

S/N	Item Statement	Mean	Std.Dev	Remark
1	Ownership of laptop to be made mandatory in school prospectus	2.59	0.26	AG

2	Organizing e-teaching seminars for lecturers	2.55	0.33	AG
3	periodically	2.60	0.29	AG
4	Providing alternative source of power.	2.70	0.27	AG
	Establishing e-teaching compatible classroom	<b>2.61</b>	<b>0.29</b>	AG
<b>Grand mean</b>				

Std. Dev = Standard deviation, AG = Agreed, DA = Disagreed.

Data in Table 2 showed that the mean responses of the respondents on all the 4 items ranged from 2.55 – 2.70 and were above the 2.50 Cut off point. This indicated that the respondents accepted all the 4 items as coping strategies in utilization of e-teaching by lecturers of Agricultural Education.

### Discussion of Findings

The findings of the study on Table 1 revealed that lecturers of Agricultural Education viewed some of the Challenges in utilization of e-teaching in universities to include unstable power supply in campuses, high cost of e-teaching gadgets, and high cost of data bundles. These findings correspond with the works of Ajuzie & Ipem (2017) on the perceived effects of e-learning on teaching and learning of economics in universities, were poor power supply and lack of electronic teaching equipment.

The findings of the study on Table 2 revealed that lecturers of Agricultural Education viewed all the four items as coping strategies in utilization of e-teaching in universities. The coping strategies include ownership of laptop to be made mandatory in school prospectus, organizing e-training seminars for lecturers periodically, providing alternative source of power and establishing e-teaching compatible classroom. These findings are in conformity with the findings of Wale (2012) in a study on improvement needs of primary school teachers were organizing of periodic seminar and in-service training were recommended for improving the teachers. The work of Emelalo (2009) on the effects of teaching environment on students' comprehension also corresponds with the findings from Table 2 were creating a conducive teaching environment like stable power supply, conducive classrooms were highlighted as factors to influence comprehension.

### Conclusion

E-teaching has come to stay and it will only take time before it spreads like a wild fire among citadels of learning. It is an appreciable system of teaching and learning as teachers can teach from the comfort of their home or classroom and reach wide range of learners.

The inability of most schools to implement e-teaching necessitated this study on challenges and coping initiatives of lecturers of Agricultural Education in utilization of e-teaching in Universities in South South Nigeria. The study found out that lecturers of Agricultural Education viewed unstable power supply, high cost of e-teaching gadgets and high cost of data bundles as challenges in the utilization of e-teaching in universities. The study also viewed mandatory ownership of laptop, organizing e-teaching seminars, providing alternative power supply and establishment of e-teaching compatible classrooms as coping strategies in utilization of e-teaching among lecturers of Agricultural Education in universities.

## Recommendations

Based on the result of the study, it was therefore recommended that:

- i. There should be alternative power supply in university campuses to ensure stable power supply for effective utilization of e-teaching.
- ii. Government should allocate e-teaching allowances to assist lecturers in the purchase of data bundles and e-teaching gadgets for effective utilization of e-teaching.
- iii. Agricultural Education classrooms should be compatible with e-teaching, hence adequate e-teaching facilities like projectors, sockets, light etc should be in place for effective utilization of e-teaching.

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