PERCEPTION AND ATTITUDINAL BEHAVIOR OF LECTURERS' IN THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGY TOOLS IN TEACHING/LEARNING IN MICHAEL OKPARA UNIVERSITY OF AGRICULTURE UMUDIKE

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Abstract

The study investigated perception and attitudinal behavior of lecturers in the use of ICT in classroom teaching and learning in Michael Okpara University of Agriculture, Umudike. A structured questionnaire was administered on a 5 point Likert-type questions to 120 of the 550 lecturers following simple random technique. The collected data were analyzed by finding means of respondents' feelings and hypothesis with correlation coefficient. The means showed that ICT facilities are not frequently used in classroom teaching/learning by the lecturers ($\bar{x}$ = 2.20). However, multimedia projector ($\bar{x}$ = 3.49) and computer ($\bar{x}$ = 3.36) were mostly used. The lecturers perception ($\bar{x}$ = 3.05) was positive and their attitudinal behavior ($\bar{x}$ = 2.89) was negative in the use of ICT in classroom. The correlation coefficient (r) was 0.373 and significant at 5% critical alpha level. It implies that there was a positive significant relationship between perception of ICT and attitude of the lecturers in the use of ICT. We advised that lecturers should put in more effort in the use of ICTs order than the multimedia and computer in classroom teaching/learning.

Key words: attitude, lecturers, perception, information and communication technology

INTRODUCTION

The utilization of Information and Communication Technology tools in education has been increasingly felt in this era of globalization where information is received through satellite and internet connectivity [12, 16]. According to [13] ICT is seen as constituting a digital divide among University freshmen. ICT is described as an expanding assembly of technologies that are used to handle information [3]. Based on this growing popularity of the use of ICT for effective teaching and learning, many institutions are investing heavily in ICT infrastructure and aim at exploiting it to the maximum extent possible [15].

One major concern in this endeavor however has been on lecturers' willingness to use ICT facilities in classroom teachings. Thus, [5] are of the opinion that not all University academic teachers use ICT in delivering their lectures and creative output for academic purposes but many use such facilities frequently for personal gains. They stressed that majority of university lecturers rely heavily on manual and traditional teaching methods in delivering their lectures. Although, [10] noted that teachers use less of ICT facilities in the classrooms and for research purposes because they are yet to be sufficiently skilled in its use.

It is assumed that how a lecturer perceives ICT influences his or her attitude to its usage. There should be a strong correlation between a lecturer's perception and his or her attitude towards ICT use for effective use of the technology in teaching. Perception means the opinion of the individual or a group on an issue and this precedes action/behavior [7]. The opinion guides action or behavior of the individual or group towards the way a technology is used. However, [2] described attitude closely as a way of thinking or feeling of a person which makes him or her to behave or act in a particular way. Also [4] stated that people's attitude correspond with their behavior.

One weakness of the University is poor usage of information and communication

technology (ICT) and low level of computer use [8]. On the interim, there is existence of AfriHUB-MOUAU Integrated ICT Centre. However, [5] affirmed that one of the greatest challenges to ICT usage is absence of positive attitude to change. Since perception guides action and influences the attitude and behavior, it is imperative we examine at the perception and attitudinal behavior of lecturers on the use of ICT tools for classroom teaching/learning in a Nigerian University to help influence education policies.

Hence, the specific objectives of this study were to:

-determine the perception of lecturers towards usage of ICT facilities in teaching and learning;

-determine frequency of use of ICT facilities for teaching/learning in the study institution;

-determine attitudes of the respondents in the use of ICT facilities in the study institution.

The following in null form was tested:

Ho_1: There is no significant relationship between the lecturers' perception and their attitude on the use of ICT tools in classroom teaching/learning.

MATERIALS AND METHODS

The study was carried out in Michael Okpara University of Agriculture, Umudike. This University of Agriculture in Umudike is among the three specialized universities of Agriculture in Nigeria. It was established by the Federal Government of Nigeria in 1992, with formal activities started in1993. Umudike is about 10km from Umuahia the capital city of Abia state in Southeastern part of Nigeria. Umudike lies between Longitudes 7^0 o'E and $7^0$5'E and Latitudes 5^0 0'N and $5^0$25'N [11] on an altitude of 122m above sea level. The major link road to the University is Umuahia-Ikot Ekpene federal road that is a direct route to state capitals of Akwa Ibom and Cross River States. The University runs a collegiate system with academic activities grouped into colleges, housing departments. Simple random sampling procedure was adopted across the colleges and departments to interview 120 lecturers using a structured questionnaire. The questionnaire consisted of 5 point Likert-type questions.

Descriptive statistics of mean and standard deviation were used for the analysis. On the question of use of ICT tools, ratings were: very high frequency use (5); high frequency use (4); moderate frequency (3); low frequency use (2) and very low frequency use (1).

The objectives that sought for perception and attitude were achieved based on perceptional and attitudinal statements asked in the questionnaire. These were rated with: strongly agree (5); Agree (4); undecided (3); disagree (2) and strongly disagree (1). Values of 5, 4, 3, 2 and 1 were assigned to the options respectively. The values were summed up and further divided by 5 to sustain the midpoint value of 3.0, i.e.

$$\frac{5+4+3+2+1}{5} = 3.0$$

The mean score dichotomized perception and decision into positive and negative. Mean score of 3.0 and above was rated positive perception or attitude, while order wise it was negative. In testing the relationship between perception and attitude of the respondents in ICT use, Pearson product moment correlation t-test was used:

$$t = \frac{r\sqrt{n-2}}{1-r^2} \quad \text{with n-2 d.f.}$$

where;

n = sample size,

r = correlation coefficient

RESULTS AND DISCUSSIONS

Perception of lecturers to use of ICT Facilities

Table 1 reveals that the perception of the academic staff on the use of ICT facilities was positive with grand mean score of 3.05. This implies that the respondents appreciated the benefits accrued by the use of ICT facilities such as receiving information through satellite and internet connectivity.

It is an indication that the positive perception will precede action/behavior and people are

able to synthesize and integrate series of new information in the light of what they know and make a meaning out of it.

This is in line with [6] who opine that perception modifies actions in terms of people's behavior.

Table 1. Mean scores and standard deviation of the respondent's perception on the use OF ICT facilities

Perceptional Statements	Mean score	Standard Deviation
Quick and easy completion of my tasks on agriculture (provide conveniences)	3.27	0.22
Enhances the work productivity on agriculture	3.27	0.22
Updating agricultural information	3.19	0.14
Help to improve the preparation of instructional materials on agriculture	3.13	0.08
Makes teaching/research explanations very easy/understandable	3.17	0.12
Material on agriculture can be accessed from anywhere in the world	3.20	0.15
Helps to get more information from my fellow researchers about new technologies	3.13	0.08
Replace human being interaction	2.37	- 0.68
Difficult to use except someone help out	2.60	- 0.45
Difficult to use without electricity supply	3.15	0.10
Total Mean scores	**30.48**	
Grand Mean score	**3.05**	

Source: Own calculation

ICT frequently used in Teaching/Learning.

Table 2 shows the mean scores and standard deviation of frequency of use of ICT facilities in the classroom in the institution. A grand mean score of 2.20 was below benchmark mean score of 3.0, an indication that these facilities were not often used in the classroom teaching.

Table 2. Mean Scores and Standard deviation of frequently used ICT facilities by the respondents in the classroom.

ICT Facilities	Mean score of frequency of use	Standard deviation
Electronic Database (Agora TEEAL)	1.44	-0.76
Electronic Bulletin Board Service	1.60	-0.60
Multimedia Projector	3.49	1.29
Internet	2.45	0.25
Computer	3.36	1.16
Electronic Journal/Book	2.29	0.09
Geographic Information System (GIS)	1.49	-0.71
Video Conferencing	1.41	-0.79
Total Mean	**17.53**	
G. Mean	**2.20**	

Source: Own calculation

It implies that the lecturers rely on manual and traditional methods in delivering their lectures. This is in agreement with the works of [5] and [11] that University academic staffers rely heavily on manual and traditional practices and were less prepared for the use of ICT in the classroom. However multimedia projector ($\overline{x} = 3.49$) and Computer ($\overline{x} = 3.36$) were frequently used facilities for teaching/ learning. The concurrent frequent use of these facilities indicated that they are used simultaneously, since the use of one supported the use of the other. On the other hand, the mean score for video conferencing ($\overline{x} = 1.41$) shows that it is not widely used and known in the institution.

Respondents Attitudes to ICT use for Teaching/Learning in classroom.

Table 3 shows that respondents attitude towards ICT use in teaching/learning in the classroom has a grand mean score of 2.92. This grand mean score (2.92) indicates that the lecturers attitude towards the use of ICT in teaching/learning is negative, below the threshold mean score of 3 0. The reason could be attributed to the negative laissez faire attitude or still lacking in skills as they are not well versed with ICT usage or resist the use. The finding is in line with [1]; [9] and Dalgarno and Grey (2010) cited in [5] stating that lecturers exhibit laissez faire, lack skills and resist use of ICTs in the classroom. Thus the negative attitude corresponds with the frequency of use in the classroom, indicating that individual lecturer may have all the necessary knowledge but refuses to adopt and used ICT facilities in the classroom teaching.

Table 3. Attitudinal behavior of lecturers towards ICT use in teaching and learning

Attitudinal Statements	Mean score	Standard deviation
I still use old teaching methods even when ICT facilities are available	3.85	0.93
I combine both manual/traditional and new ICT facilities methods	2.93	0.01
I feel less confidence in using ICT facilities	2.25	- 0.67
It causes anxiety when I am using them	2.61	- 0.31
I feel it wastes more time than old teaching methods	2.96	0.04
I have a laissez faire attitudes towards using them	2.91	- 0.01
Total Mean scores	**17.51**	
Grand Mean score	**2.92**	

Source: Own calculation

Hence [5] confirmed that one of the greatest challenges to ICT is lack of positive attitude to change.

Correlation between perception and attitude of lecturers in ICT use

The Pearson's product moment correlation shows correlation coefficient (r) 0.373 was significant at 5% alpha level. It implies that there was a significant relationship between the perception of ICT and the attitude of the academic staff towards the use of ICT facilities in teaching and learning. Therefore, the null hypothesis which states that there is no significant relationship between the perception and attitude of lecturers in ICT use in the classroom teaching is hereby rejected. This shows that with constant use of ICT by lecturers, teaching will be more interesting and free flow of information which enhances learning.

CONCLUSIONS

ICT facilities are frequently not used by lecturers in classroom teaching/learning except multimedia projector and computer which seemed to be in constant use for the purpose. The perception of the lecturers towards use of ICT was positive while their attitude was negative to the use of ICTs in teaching/ learning. We recommend a constant use of ICT facilities in classroom teaching and learning as this will facilitate teaching and encourage free flow of information which enhances learning.

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