COLLEGE OF EDUCATION STUDENTS' ACCESSIBILITY, ATTITUDES AND COMPETENCE TOWARDS THE USE OF INTERNET IN OYO STATE, NIGERIA

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Abstract

This study was a descriptive research of the survey type. It examined students' accessibility, attitudes and competence towards the use of ICTs and the internet for learning among Emmanuel Alayande College of Education students in Oyo State Nigeria. Students of the college were randomly sampled from the school of Arts and Social Sciences; Education; Sciences; Languages; and Vocational and Technical Education in the two campuses of the college. The researcher-designed questionnaire was employed and entails items on students' accessibility, attitude and competence towards the use of ICT and the internet for learning. Three hundred and forty-six (346) subjects were involved in the study and the data collected were analyzed using frequency counts and percentage. The findings revealed that a considerable number of students have access to ICTs and the internet; cultivated positive habit towards searching for information to widen their academic base and most of the students were not formally trained on the use of ICT devices and the internet for learning. It is recommended that ICT and internet facilities should be adequately procured for lecturers and students' used in the college. Courses related to ICT should be made compulsory and as core course(s) for every student to facilitate skills and competence development on the use of internet before graduation from the college.

Keywords: College of Education students, Internet ICT, Attitudes, Competence

Introduction

Learning as an integral part of education has over the years moved from one stage of development to the other using diverse of methods and media. Myriads of strategies and innovations using Information and Communication Technologies have been used to improve performance and sourcing of information in various learning institutions. Internet as an integral aspect of the Information and Communication Technologies (ICTs) has become an indispensable tool for quality teaching, learning and research in academic setting. Its impact on the field of education has been massive, thereby engendering such terms like e-teaching, e-learning, virtual teaching/learning, e-training, e-library and so forth, all developed around the application of the Internet (Yusuf, 2004).

Information and Communication Technology (ICT) subsumed the use of the internet to access and disseminate information with ease. The unquantifiable roles play by the ICTs has transformed the present society into a knowledge-based. The use of ICT facilitates rapid dissemination of information from an individual to a vast number of other users through myriads of media formats (Adegbija, Bola & George, 2011). According to Scholastic (2003), the internet affords the user to easily retrieve the needed information for upgrading and updating of knowledge-bank. Also, the use of the internet provides solutions to academic assignments given by lecturers, and receiving and dissemination of researches to professional colleagues. Yusuf (2004) defined internet as an information superhighway that provides unlimited access to a wealth of information on different topics contributed by people throughout the word.

Kosakwoski (2005) enumerates some of the benefits of the use digital devices and the internet facilities as learning resources that: facilitates presentation of knowledge in myriads forms; enables individualistic learning process; improves learners' communication and writing skills; enhances greater problem solving and critical thinking; and develop learners' spirit to interact and collaborate with their fellow students. In spite of the plethora of resources for enriching learning, teaching and research, it should be underscored that the attitude and competence of the user to maximally utilize the internet and other ICT facilities is very paramount.

Having ICT in schools ordinarily will not guarantee their effective use. The potentials of ICTs can fully be explored by resourcefulness, display of good competence of the teachers and students via positive attitude towards their usage. According to Yusuf and Balogun (2011), attitudes refer to one's positive or negative judgment about a concrete subject. Attitudes are determined by the analysis of the information regarding the result of an action and by the positive or negative evaluation of these results (Ajzen & Fishbein, 1980; Yusuf &Balogun, 2011). Studies have established the close associations between users' attitude and their use of ICT. Positive attitudes displayed towards the use of ICT devices and the internet is associated with a higher level of computer skills, experience and competence in their usage (Dyck & Smither, 1995; Teo, 2008; Yusuf & Balogun, 2011). According to Monereo, Fuentes and Sancluz (2000), acquisition of some basic abilities and skills on the use of the ICT and internet will help in no small measure on finding information in the contemporary knowledge based society. Lee (1997) found that a good number of teacher-trainees lacked the basic ICT operational skills. Therefore, failure to acquire these skills and abilities would define a new type of illiteracy and alienation from society.

Edozie, Olibie, and Aghu (2010) further reiterated that skillful use of information and communication technology and the internet facilities could enhance learners' abilities to improve on various life-skills thus strengthening their studying and information surfing capabilities. Such empowerment could be facilitated through positive attitude, skillful and competence displayed for the use of information sourcing via the internet and other ICT facilities. Cloke and Sharif (2001) posited that a considerable level of ICT competencies and positive attitudes are needed in every facet of life in order to fit well into the digital world.

The use of the Internet is more prevalent in tertiary institutions and among the students in sourcing for current information using diverse of media with less stress. The use of ICTs and the internet facilities for surfing information is faster irrespective of gender and location across the globe. The need for teachers and teacher trainee to be dynamic in the use of ICTs in the contemporary knowledge age is acknowledged by Nigerian teacher education institutions. The acceptance of the value of ICTs in teaching and learning engendered the inclusion of components of ICTs in the Nigerian teacher education program as spelt out in Nigerian Policy of Education (FGN, 2009). The uses of ICT devices and internet facilities have been a powerful and useful tool for learning and research in tertiary institutions. The internet itself cannot assume good learning but its potentials can be exploited by skill and competent user or students. Onasanya, Nathaniel, Laleye and Akingbemisilu (2013) found out that the college of education student's learners cultivated a great deal of interest for accessing and surfing myriads of internet sites frequently for fun, entertainment, social interactions chatting, and watching of audio / visuals due to a great deal of interest cultivated for such. Attitude is a major predictor of use ICT devices. This conscious and unconscious attitude put up by the students to acquire covet learning experiences is termed hidden curriculum. Thus, the study investigated the accessibility, attitudes and competences of Emmanuel Alayande College of Education Oyostudents' on the use of ICTs for internet for learning.

Research Questions

The following research questions were generated for the study:

(i) Do the students of EACOED have access to the use of ICT devices and the internet for learning?
(ii) What are the attitudes of EACOED students towards the use of the internet?
(iii) What is the level of competence of EACOED students on the use ofICTs and the internet facilitiesfor learning?

Methodology

Subjects: The subjects involved in the study are students from Emmanuel Alayande College of Education Oyo. The institution has two campuses (Lanlate and Oyo main campus) and five schools: school of Arts and Social Sciences, Education, Science, Languages and Vocational and Technical Education. Students of 200 and 300 levels in the college were randomly sampled from the five schools in the two campuses that are running different courses for the award of Nigerian Certificate in Education. These levels of students were chosen because they would have been familiar with the use of ICT devices and the internet to access academic related materials.

This study was a descriptive research of the survey type. Three hundred and forty-six (346) subjects were randomly sampled from the five schools in the two campuses that were running varied courses for the award of Nigerian Certificate in Education. However, a total of Three hundred and forty-six (346) copies questionnaires were retrieved out of 400 copies that were administered representing 86.5% responses. The instrument employed was a researcher-designed questionnaire to elicit response from the students of Emmanuel Alayande College of Education Oyo.The researchers-designed questionnaire was used to ascertain the respondents' opinion of useICT and the internet accessibility, attitudes and competence. The instrument was segmented into four sections. Section A was to gather the respondent's bio-data; section B entails items on students' accessibility; section C was on students' attitudes and section D was on students' competence in the use of ICT and the internet for academic learning.

The items were structure to elicit the respondents' responses based on Likert rating scale of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SA). Students' responses on Strongly Agreed and Agreed were collapsed as 'Agreed', while Strongly Disagreed and Disagreed responses were also collapsed as 'Disagreed'. The draft of the instrument was given to senior lecturers in the Department of Educational Technology and Computer Science, at the University of Ilorinfor face and content validity andto ensure the suitability of the items for the study. The reviewed draft of the instrument was later developed and tested. Cronbach Alpha was used to measure the reliability coefficient of the instrument section by section and has $r=0.75$ $p<0.00$, $r=0.82$ $p<0.00$,$r=0.79$ $p<0.00$ at 0.05 level of significance; forstudents' accessibility, attitudes and competence of use of ICT and the internet for learning respectively. These responses were then analyzed using frequency counts, means and percentages.

Results

The results of students' frequency of accessibility to ICT devices and internet surfing using Desktop computers, Laptops, Palmtops, Tablets, Ipads, Notebooks and Mobile phones. Three hundred and forty-six students from Emmanuel Alayande College of Education Oyo responses were collected, collated and analyzed using frequency counts, means and simple percentages. Research Question 1found out the EACOED students' access to the use of ICT devices and the internet for learning.

Research Question 1: Do the students of EACOED have access to the use of ICT devices and the internet for learning?

The data related to students' access to ICT devices and the internet was collected, collated and analysed using frequency counts, means and percentages. Table 1 showed the responses of students' accessibility to ICT devices and the internet for learning.

Table 1: Responses of Students' Accessibility to ICT and the Internet

		Agreed		Disagreed		
S/No	Responses of students' access to ICT and the internet.	No of Responses	%	No of Responses	%	Total
1	I frequently surfs the internet with:					
	• Desktop computer	293	80.49	53	19.51	346
	• Laptop	229	62.91	117	37.09	346
	• Palmtop	125	34.34	221	65.66	346
	• Tablet	264	72.53	82	27.47	346
	• Ipad	188	51.65	163	48.35	346
	• Notebook	178	48.90	168	51.10	346
	• Mobile phone	308	84.62	38	15.64	346
	• Others	136	37.36	210	62.64	346
	Mean score	215	59.07	149	40.93	346
2	I have access to the use of ICT devices and the internet through:					
	• Desktop computer	286	78.57	78	21.43	346
	• Laptop	269	73.90	95	26.10	346
	• Palmtop	166	45.60	198	54.40	346
	• Tablet	273	75.00	91	25.00	346
	• Ipad	177	48.63	187	51.37	346
	• Notebook	186	51.10	178	48.90	346
	• Mobile phone	296	81.32	68	18.68	346
	• Others	107	29.40	257	70.60	346
	Mean score	220	60.44	144	38.56	346
3	I possess the following ICT devices:					
	• Desktop computer	42	11.54	322	88.46	346
	• Laptop	189	51.92	175	48.08	346
	• Palmtop	103	28.30	261	71.70	346
	• Tablet	292	80.22	72	19.78	346
	• Ipad	137	37.64	227	62.36	346
	• Notebook	186	51.10	178	48.90	346
	• Mobile phone	346	100	-	-	346
	• Others	127	34.89	237	65.11	346
	Mean score	180	49.45	184	50.45	346
	Grand mean scores	205	59.25	141	40.75	346

Table 1 showed that the students have access to ICT devices and frequently surfs the internet using desktop computers, laptops, palmtops, tablets, ipads, notebooks and mobile phones. The frequency counts of 215(59.07%), 220(60.44%) and 180(49.45%) affirmed access, frequent surfing of the internet and possess ICT devices. This implies that the students access the internet by other means like going to cybercafé or borrowing the needed ICT devices, while very few owned those devices. Moreover, the frequency counts of ownership of ICT devices by the students showed that all the students had mobile phones 346(100%), tablets 292(80.22%) and notebooks 186(80.22%). Thus, students averagely have access to some information and communication technologies. Research Question 2 found out the EACOED students' attitude towards the use of the internet.

Research Question 2: What are the attitudes of EACOED students towards the use of the internet?

Table 2 showed the responses of students' attitudes to the use of ICTs and the internet for learning. The data were collected, collated and analysed using frequency counts.

Table 2: Responses of Students' Attitudes Towards the Use of the Internet

		Agreed		Disagreed		
S/N	Students' Attitudes Towards the Use ICT and the Internet	No of Responses	%	No of Responses	%	Total
1	I use the internet in:					
	• accessing my mails	279	80.64	67	19.36	346
	• sending mails	242	69.94	104	30.06	346
	• for fun, leisure and entertainment	266	78.88	80	23.12	346
	• accessing Pornography	69	19.94	279	80.06	346
	• accessing learning materials	254	73.41	92	26.59	346
	• accessing social networking sites	328	94.80	18	5.20	346
	• accessing assignments related materials	257	74.28	89	25.72	346
	Mean score	242	69.94	104	30.06	346
2	I access educational materials through the internet:					
	• Daily	319	92.20	27	7.80	346
	• Weekly	294	84.97	52	15.03	346
	• Monthly	148	42.77	198	57.23	346
	• Once in a semester	95	27.46	251	72.54	346
	• Not at all	-	-	346	100.00	346
	Mean score	171	49.42	175	50.58	346
3	The use of the internet by trainee teachers improves learning.	326	94.22	20	5.78	346
4	My attitudes towards the use of the internet is that:					
	• It broadens knowledge base	306	88.44	40	11.56	346
	• It improves performance	298	86.13	48	13.87	346
	• It corrupts mind	44	12.72	302	87.28	346
	• It is time consuming	136	39.31	210	60.69	346
	• I dislike using it	39	11.27	307	88.73	346
	Mean score	165	48.27	181	51.73	346
	Grand mean scores	226	65.32	120	34.68	346

Table 2 showed the related responses of the students' attitudes towards the use the internet. The table showed that the students had flare for accessing social networking sites,

mails, learning materials and assignment related materials with the frequency counts of 242(69.94%) out of 346 respondents. Also, the frequency counts of students' attitudes for accessing educational materials through the internet were 171(49.42%). Thus, it showed that the students averagely surf the internet to access educational enriching information. In a similar vein, the frequency counts of 306(88.44%) and 298(86.13%) affirmed that the internet surfing broadens knowledge base and improves students' academic performances. Therefore, the grand mean score of 65.32% which corresponds to 226 out of 346 responses attested to the students' attitudes to the use of ICT devices and internet facilities. This showed that the students cultivated a positive habit towards searching for information to widen their academic base. Research Question 3 found out the level of competence of EACOED students on the use of ICT and the internet facilities for learning.

Research Question3: what is the level of competence of EACOED students on the use of ICTs and the internet facilities for learning?

Table 3 showed the students' competence of using digital devices and internet facilities for learning. The data were collected, collated and analysed using frequency counts, means and simple percentages.

Table 3: Responses to Students' Level of Competence of Using ICT and Internet Facilities

		Agreed		Disagreed		
S/N	Students' competence of using ICT and internet facilities	No of responses	%	No of responses	%	Total
1	I can operate ICT devices	266	76.88	80	23.12	346
2	I was trained on how to operate ICT to surf the internet at the:					
	• Learning institution (school)	197	56.94	149	43.06	346
	• Cybercafé /Computer training institute	187	39.60	209	60.40	346
	• Self	279	80.64	67	19.36	346
	• Friends and peers	248	71.68	98	28.32	346
	Mean score	215	62.14	131	37.86	346
3	My competence level in using ICT and internet facilities is:					
	• Excellently well	129	37.28	217	62.72	346
	• Good	206	59.54	140	40.46	346
	• Average	288	83.24	58	16.76	346
	• Below average	194	56.07	152	43.93	346
	• Not at all	39	11.27	307	88.73	346
	Mean score	171	49.42	175	50.58	346
4	My competence toward the use of the internet to access learning materials is:					
	• Excellent	146	42.20	200	57.80	346
	• Good	239	69.08	107	30.92	346
	• Average	296	85.55	50	14.45	346
	• Below average	107	30.92	239	69.08	346
	• Poor	28	8.09	183	52.89	346
	Mean score	163	47.11	183	52.89	346
5	I considered finding solution(s) to a given task via the use of internet:					
	• Extremely difficult	94	27.17	254	72.85	346
	• Difficult	156	45.09	190	54.91	346
	• Simple and interesting	271	78.32	75	21.68	346

• Extremely simple	193	55.78	153	44.22	346
Mean scores	179	51.73	167	48.27	346
Grand mean score	199	57.51	147	42.49	346

Table 3 revealed that the frequency counts of 266(76.88%) affirmed having knowledge of operating ICT devices, while the frequency counts of 279(80.64%) and 248(71.68%) attested to learning of ICT devices and internet surfing through self-training, peers and friends. This implies that most students were not formally trained on the use of ICT devices and internet surfing. The data collected rated the students' competence on the use of ICT devices and internet surfing as 171(49.42%) and 163(47.11%) respectively. This implies that the students need formal and extra training to facilitate better skills and competence development on the use ICT devices and internet surfing. Similarly, the data collected showed that the students found the use of ICT devices and internet surfing interesting due to flare and interests they cultivated for such. The grand mean score of students' competence of using ICT and internet surfing was 57.51% which translate to 199 out of 346 responses. This shows that the students' competence towards using the ICT devices and internet was average. Thus students' skills and competences need to be developed to maximize the inherent potentials in the ICT and the use internet for learning.

Conclusion

Based on the findings, the following conclusions have been reached. The findings from this study revealed that a considerable number of students have access to ICT devices and the internet to facilitate their learning. The students also cultivated positive attitudes towards searching for information to widen their academic base. However, they lacked enough skills and competence in the use of ICT and the internet because majority of them were not formally trained.

Recommendations

The findings of this study suggest that lecturers should encourage students to use ICT devices and internet facilities within and outside the school premises to search for educative information in other to enhance learning. It is recommended that ICT and the internet facilities should be adequately procured for lecturers and students' used in the college for research and academic assignments. School administrators could help in supplying ICT devices to the interested students that want to possess such at a subsidized price. Also, Seminars, workshops and trainings could be organized for the students on how to use ICT devices and internet facilities within and outside the college to enhance teaching and learning of the students. Skill development tasks should frequently be given to students using ICT devices for competence and academic improved performances. Courses related to ICT should be made compulsory and as core course(s) for every student to facilitate skills and competence development on the use of internet before graduation from the college

References

Adegbija, M.V., Bola, O.D. & George, A. (2010). *Assessment of internet information utilization by lecturers and students of the University of Ilorin, Ilorin Nigeria.* A paper delivered at 31st Annual Convention and National Conference of the Nigeria Association for Educational media and Technology (NAEMT) held at Niger State College of Education, Minna; 20th-26th Sept. Student Information Handbook (2010) Emmanuel Alayande College of Education (EACOED), Oyo.

Ajzen, I. & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior.* Englewood Cliffs, NJ: Prentice- Hall.

Cloke, C. & Sharif, S. (2001). Why use information and communication technology in schools? Some theoretical and practical issues. *Journal of Information Technology for Teacher Education,* 10(1 &2), 7 - 18.

Edozie, C., G., Olibie, E. I. & Aghu, N. N. (2010). Evaluating university student's awareness of information and communication technology. Empowerment in South-east zone of Nigeria for entrepreneurship development. *Unizik Orient Journal of Education,* 5(2), 31 - 40.

Dyck, J. L. & Smither, J. A. (1995). Older adults' acquisition of word processing. The contribution of cognitive abilities and computer anxiety. *Computer in Human Behavior*, 12(1), 107 - 199.

Federal Government of Nigeria (2009). *The national policy on education*, NERDC Abuja Press, Nigeria.

Kainth, G. S. & Kaur, G. (2010). *Integration of ICT in teacher education.* Retrieved 12/05/10 fromhttp://zunia.org/uploads/medica/knowledge/integration%20of%20KT%20in%20 Teacher%20Education1258801653.doc.

Kosakowski, J. (2005). *The benefits of information technology.* ED: 42030298 Eric Digest.

Onasanya, S. A., Nathaniel, Samuel, Laleye, A. M. & Akingbemisilu, A. A. (2013). Distance education and the experience of hidden curriculum using mobile phones in Nigeria. *Journal of Frontiers of Education and Management,* 1(1), 114 - 124.

Scholastic (2003). *Welcoming the internet into your classroom*. Scholastic Inc. Retrieved December 3rd, 2003 from http://teacher.scholastic.corn/professional/teachtech/welcomeinternet.htm.

Yusuf, M. O. (2004). *Internet browsing for teaching, learning and research.* A paper delivered at the Two-day workshop organized by the faculty of education, University of Ilorin on the use of the internet to Enhance Lecturers' productivity (6th-7th May).

Yusuf, M. O. & Balogun, M. R. (2011). Student-teachers' competence and attitude towards information and communication technology: a case study in a Nigerian university. *Contemporary Educational Technology*, 2(1), 18-36.