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Undergraduates' Attitude toward Information and Communication Technology in University of Ilorin, Ilorin, Nigeria

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Abstract

This research found out the attitudes of undergraduates toward Information and Communication Technology in University of Ilorin, Ilorin, Nigeria. It also found out if there was any difference between the attitudes of male and female undergraduates toward ICT. It was a descriptive research of the survey type. The instrument used for data collection was a questionnaire tagged Undergraduates Attitudinal Questionnaire (UAQ) adapted from Anaza (2011). 100 Copies of the questionnaire were distributed in five faculties. Section A comprised personal data while Section B comprised questionnaire items that elicited responses from the students. Two research questions were stated in the study while percentage and frequency counts were used to answer the research questions. The result revealed amongst others that the attitude of undergraduates toward ICT were positive; the male undergraduates had positive attitude towards ICT than their female counterparts. Based on the findings of the study, the following recommendations were made; all faculties in universities especially University of Ilorin should be provided with ICT facilities, such as computers, internet facilities, interactive boards and other relevant facilities. Since the world is a global village, students need to be taught how to develop positively high attitude toward ICT. Female undergraduates should be encouraged to be more interested in ICT since it is now the order of the day and there is no how one can be an exception.

Key words: Attitude, Information Communication Technology, Internet facilities

Introduction

The introduction of information and communication technology (ICT) into the education sector has created a new social order just as the use is spreading rapidly into daily life and directly affecting people's ideas and behaviour. Information and Communication Technology has heralded the development and implementation of new and innovative strategies in education (Carole,2005). Educators who advocated ICT integration in the education process believed it will improve teaching and prepare teachers to effectively participate and deliver in the twenty first century workplace. Thus, recognizing the impact of ICT on the education and everyday life, educational institutions try to restructure their education programs and classroom facilities, in order to minimize the teaching and learning technology gap between today and the future. Educational institution requires effective integration of ICT into existing context in order to provide learners with knowledge of specific subject areas, to promote meaningful learning and to enhance productivity

McCarney, (2004) opined that while there is agreement that ICT can be a powerful tool for advancing education efforts going forward, the challenge is in turning the potential of Information and Communication Technologies for Education (ICTE) into reality with results.) also emphasized that ICT would play an important role in achieving the Millennium Development Goal (MDG) on education by making available the opportunity of transcending time and space in the education process.

Carole (2004) emphasized that ICT could contribute to the improvement of the quality of education if properly used and that the use of ICT in education is becoming a major consideration as developing countries focus on improving the quality of education. Also, investment in ICT use in education has grown steadily over the past decade in developing countries, even in some of the most challenging environments in some of the least-developed countries. ICT has helped in the advance of teaching basic technology as a science subject. Education for new emerging societies requires ICT to facilitate large-scale learning needs for social and economic development.

Undergraduate courses should have bearing with technological expectations of the society and must assist students in achieving this outcome. By training undergraduates to use ICT, it is hoped that they will transfer this knowledge and skills when they secure jobs at different organizations or establishment. In this regard, universities should write ICT skills unit into their course structure. These units may eventually increase student competencies in ICT and other basics such as word processing, database, spreadsheet manipulation, email and surfing the internet. (Brush, et al 2001)

The dramatic changes brought about by the application of ICT into the education sector go beyond mere increase in the number of computers appearing in schools to a more fundamental changed in the pedagogical method of teaching and learning. Thus, the role of ICT in schools is shifting dramatically (Sansawal, 2000). The potential for ICT to enhance teaching and learning cannot be realized unless students generally have the tendency to think analytically about their fields of specialization. Such analytical thinking should be geared toward understanding the effectiveness of ICT in the provision of new, more efficient and flexible ways of extensive learning .

According to Ogunlade (2010) ICT is also important in researches in the sense that it makes available online, full text databases, virtual libraries, virtual laboratories and in fact virtual classrooms which signify growth in telecommunications networks and technology. University of Ilorin was one of the universities that first commenced the Computer Based Test and Examinations (CBT) in 2008/2009 session. As a result of this laudable achievement, this study investigated undergraduates' attitude toward utilization of Information and Communication Technology in University of Ilorin.

Review of Related Literature

Nicolle (2005) affirmed that most developed countries have exploited the potentials of ICT to transform their educational landscape at the tertiary, secondary and even primary schools levels, particularly in the instructional process. Other key benefits of ICT in teaching and learning include: promotion of greater collaboration among students for communication and sharing of knowledge; raid and accurate feed backs to students that contributes towards positive motivation. It also allows students to focus on strategies and interpretations of answers rather than spend time on tedious computational calculations (Cox, M., Webb, M., Abbott, C., Blakeley, B., Beauchamp, T. and Rhoden, V. (2003).

ICT is an eclectic application of computing ,communication ,telecommunication and satellite technology(Yusuf,2000).ICT has the potential of ensuring effectiveness and efficiency in teaching professional development and research. It also has the potential of easing the administrative duties concerned with the role of ICT in the teaching and learning process. The National Policy on Education affirmed that government shall provide facilities and infrastructures necessary for the promotion and adoption of modern information technology in

According to *Kiiski ,S&Pohjol,(2001)*, ICT is a major tool that can help in improving the quality of education. They further emphasized that the unique role of ICT in improving education quality is based on their ability to effectively facilitate the fulfillment of both necessary and sufficient conditions for receiving quality education. In other words, ICT development significantly broadens opportunities available to students and teachers for gaining access to educational and professional information the teacher is no longer the all-knowing authority.

According to Pearson, J, (2003), the importance of ICT in the educational process cannot be over-emphasized in that ICT holds greater promise in the instructional process compared to other media such as books, materials, chalkboard, radio/television and film that have dominated instructional practices over the ages. The computer and other related technologies in capable of activating the senses of sight, hearing and tough of the users. It has the capacity to provide higher interactive potential for user to develop their individual intellectual creative abilities. (Kadel, R. 2005). They **s**hared the view that ICT provides productive teaching and learning in order to increase people's creative and intellectual resources. Information and Communication Technology also offers a problem-based learning environment that helps the users acquire active rather than passive knowledge.

Kirschner and Davis (2003) summarized the competencies required by teacher in ICT application in education as: teachers become competent to make personal use of ICT; competent masters of a range of educational paradigms that make use of ICT; sufficiently competent to make use of ICT as mind tools; competent to make use of ICT as a tool for teaching; competent in mastering range of assessment paradigms which make use of ICT; competency in understanding the policy dimension of the use of ICT for teaching and learning. It is not enough to get information and communication technology into educational system without its proper integration in the delivery of quality instruction.

The World Bank defines Information and Communication Technologies as "the set of activities which facilitate by electronic means the processing, transmission and display of information" (Rodriguez and Wilson, 2000). Information and Communication Technologies "refers to technologies people use to share, distribute, gather information and to communicate through computers and computer networks" (Economic and Social Commission for Asia and the Pacific 'ESCAP', 2000). Information and Communication Technologies can be described as a complex varied set of goods, applications and services used for producing, distributing,

processing, transforming information including telecoms, TV and radio broadcasting, hardware and software, computer services and electronic media" (Marcelle, 2000).

Information and Communication Technologies represent a cluster of associated technologies defined by their functional usage in information access and communication, of which one embodiment is the Internet. Hargittai (1999) defines the Internet technically and functionally as follows: "the Internet is a worldwide network of computers, but sociologically it is also important to consider it as a network of people using computers that make vast amounts of information available. Given the two basic services of the system communication and information retrieval, the multitude of services allowed is unprecedented. Information and Communication Technologies, represented by the Internet, deliver at once a worldwide broadcasting capacity, a mechanism for information dissemination, a medium for interaction between individuals and a marketplace for goods and services (Kiiski&Pohjole, 2000).

Previous studies into teacher utilization of ICTs have identified staff development as one of the contributing factors in utilizing ICT effectively in the classroom. McCarney (2004) gave a report on an investigation into effective staff development in ICT for teachers. A sample of Scottish primary school teachers have been surveyed to investigate the impact of different models of staff development in ICT on the teacher and to explore the knowledge and skills gained by teachers from staff development: technical; academic/content-related; pedagogy. The results indicate the need for a much greater emphasis to be placed on the pedagogy of ICT. This should be of interest to all involved in teacher education and the continuing professional development of teachers.

UNESCO (2004), in a study of primary school teachers known to be achieving either average or above average gains on measures of relative attainment by pupils that focused on pedagogy utilizing ICT. Observations showed that the most successful teachers were those who used examples and counter-examples and involved students in explaining and modeling in the class. Teachers who favoured ICT were likely to have well-developed ICT skills and to see ICT as an important tool for learning and instruction. They were also likely to value collaborative working, enquiry and decision making by students. Teachers' pedagogical approaches are in turn affected by a number of key factors. First, they are affected by knowledge about their own subject. There is a clear distinction between teachers who choose ICT resources to fit within a particular topic and those who choose resources merely to present

Purpose of the Study

This study investigated Undergraduates' Attitude toward the use of ICTs in University of Ilorin, Ilorin, Nigeria. Specifically, the study found out:

1. Attitudes of undergraduates of university of Ilorin toward ICT.
2. Difference between attitude of male and female undergraduates of University of Ilorin toward ICT?

Research Questions

Answers were sought to the following research questions:

1. What is the attitude of undergraduates of University of Ilorin towards ICT?
2. Is there any difference between the attitude of male and female undergraduates attitude toward ICTs?

Sample and Sampling Techniques

The target population was all the faculties in university of Ilorin. The purposive sampling was employed to select five faculties in the University of Ilorin. Also the same purposive sampling was used to select 100 undergraduates across the selected faculties. However, the

random sampling technique was used to select one hundred students from the sampled faculties; twenty students were selected from each faculty.

Table 1: list of faculties and number of students selected.

S/N	Name of faculty	No of student
1.	Faculty of Agriculture	20
2.	Faculty of Arts	20
3.	Faculty Of Business and Social Sciences.	20
4.	Faculty of Education	20
5.	Faculty of Law	20
	Total	100

Research instrument

The research instrument used for this study was adapted from Anaza (2011). The questionnaire comprised a list of questions relating to the objectives of the study.

Data analysis technique

Simple percentage was used to answer the research questions.

Table 2: Distribution of Respondents by academic level

Level	Frequency	Percentage (%)
100	0	0
200	2	2
300	25	25
400	37	37
500	36	36
Total	100	100

Table 2 revealed that the questionnaire was not given to 100 level students because as at the time of administration they were still new on campus. While two were administered on 200 level students (2%),

25(25%) to 300 level, 37 copies of the questionnaire was also administered on 400 level students making 37% and 36 were administered on 500 level students which made 36%.

Research question 1: what is the attitude of undergraduates of University of Ilorin toward ICT?

Table 3: Item by item analysis of respondents' attitude toward information and communication technologies.

S/N	ITEMS	A(%)	D(%)
1.	Using ICT enhances my effectiveness on my studies.	88	12
2.	I enjoy working with ICT facilities	88	12
3.	Using ICT gives me greater control over my studies.	76	24
4.	Using ICT requires mental effort.	71	29
5.	I don't have time for ICT training programmes.	27	73
6.	I would never take a research where I have to work with ICT.	27	73
7.	ICT literacy is necessary for my study.	89	11
8.	I feel at ease when I am working with ICT	91	9
9.	Knowledge of ICT will help me study effectively.	86	14
10.	ICTs are not really useful in my discipline.	21	79
11.	ICT is only useful for research.	32	68
12.	I would like to learn more about ICT.	91	9
13.	My lack of knowledge of ICT can hinder my professional development.	81	19
14.	During my spare time, I often visit the cyber café.	81	19
15.	My lack of knowledge of ICT will have adverse effect on me in the labour market.	81	19

16.	Surfing the internet for information provides the most current resources.	87	13
17.	Working with ICT devices makes me feel tensed and uncomfortable.	19	81
18.	Learning about ICT is boring to me.	19	81
19.	It is easy to access and store data using ICT devices.	89	11
20.	ICT based software will be of no relevance to me because of its limited memory capacity.	19	81

Based on the research question for item 1, 88% respondents indicated that ICT enhanced their effectiveness on their studies since they agreed on the issue. Answering item 2, 88% respondents agreed that they enjoyed working with information and communication technologies while 12% respondents disagreed on the issue. For item3, 76% respondents agreed that using ICT gave them greater control over their studies while 24% respondents disagreed. For item 4, 91% respondents agreed that using ICTs require mental effort. From the results of these items, it boils down to the fact that information and communication technologies enhanced their studies and make learning effective and that if one lacks that information, one's scope and orientation might not be effective as expected.

From item 5-10 on the questionnaire, it was concluded that ICT is useful in all discipline and relevant because 73% respondents disagreed with the statement which says: "I don't have time for ICT training programmes" and minority of the respondents i.e. 27% agreed with the statement. Item 11-15 were related to knowledge of ICT and it was noted that in item 12, 91% respondents agreed to the statement that they would like to learn more about ICTs so as to improve their professional development and to be able to compete with others in the labour market. Answering item 16, 87% respondents agreed or felt that surfing the internet for information provides the most current resources, while 13% respondents disagreed. Items 17 and 18 also dealt with whether learning about ICT was boring or not. 81% respondents disagreed with the item that ICT was boring and made one feel uncomfortable while 19% respondents agreed with the statement. Answering items 19 and 20 ,89%agreed that it was easy to access ICT devices while 81% disagreed that ICT based software will be of no relevance to them because of its limited memory capacity

Research question 2: is there any difference between male and female undergraduates attitude toward ICT.

Table 4: Analysis of Result on Undergraduates' Attitude Based on Gender.

Source of variation	No of respondents	Rated responses	Mean (x)
Male	58	5744	191.5
Female	42	4082	136.06

Source: Researchers Field work, 2011

From table 4, it can be inferred that more male respondents had positive attitude toward information and communication technology than the females. A mean total of 191.5 for male undergraduates and 136.06 for female undergraduates supported this fact that more males were positively inclined than females.

Conclusion

1) It was discovered that the introduction and knowledge of ICT enhances an effective learning.
2) Inadequate knowledge of ICT can hinder effective learning and professional development of undergraduates.

This study also showed that male undergraduates had positive attitude toward ICT than the females and the males often made use of it than the females. One of the findings of this research revealed that ICT aided students learning in university of Ilorin.

3) Finally, ICT facilities made lesson realistic and practical, they also aid students 'memory and gives access to world of resources especially in electronic form. Independent study and individualized instructions are facilitated by ICT especially on the open-distance learning programme. Also attitudes of undergraduates toward ICT was impressing.

Recommendations

Based on the findings of this study, the following are hereby recommended for the development of more positive attitude towards ICT in University of Ilorin.

1) All faculties in the University should be given free hand to purchase more computers in order to create more incentives for staff and improve their on-the-job performance.
2) Lecturers should endeavor to make use of ICT tools in the classroom. Doing this will increase their positive attitude.

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