

USES OF INFORMATION AND COMMUNICATION TECHNOLOGY IN TEACHING AND LEARNING OF CLOTHING AND TEXTILES IN EBONYI STATE UNIVERSITY

Akubue Benedette N. and Chukwu Lilian N.

Ebonyi State University, Abakaliki, Ebonyi State, Nigeria.

ABSTRACT: *The purpose of this study was to investigate the uses of information and communication technology in teaching and learning. Clothing and textile in Ebonyi State University Abakiliki, Nigeria. Two specific objectives with two null hypotheses guided the study. Design of the study was a survey. The population consisted of 106(10 staffs and 96 students of Home Economics Education). There was no sampling because the population was manageable. Questionnaire was used for data collection while frequency and mean statistics were used to analyze the data. Result revealed that I.C.T such as computer and projectors are not used in the teaching and learning of clothing and textile in Ebonyi State University Abakiliki. There is no significant difference between mean level of staff and students of Home Economics education on the uses of computer and projector in teaching and learning of clothing and textile in the area of study. It was recommended among others, that there should be at least one computer and data projector in each classroom and the entire classrooms should be equipped with smart boards.*

KEYWORDS: Information, Communication, Technology, Clothing, Textiles

INTRODUCTION

Clothing is anything worn by human being to cover and beautify the body (Moriem, 2012) Anyakoha and Eluwa (2008) stated that clothing is any article placed on the body to protect, beautify or adorns it. Clothing include all types of dresses and their accessories such as hats, shoes, bangles, earrings, under wears, hair-dos and even make-ups. Clothing is therefore, derived from textiles.

Textiles according to Anyakoha (2015) are cloths used for making clothes and other household articles. Higard (1956) noted that textiles are any material formed by weaving, kitting, crocheting, pressing fibres together and even knotting. Textile is a flexible woven material consists of network of natural or synthetic fibres origin that have twisted into yarn and constructed into cloths. Clothing and textiles are an area of study in Home Economics.

Home Economics is a broad field of study that embraces many areas such as food and nutrition Home management clothing and textiles, tourism, child care and development and so on. Arubayi and Obunachike (2011) noted that the study of clothing and textiles is classified into garment construction, studying of fabrics, clothing care and maintenance, wardrobe planning and decorative processes. The teaching and learning of clothing and textiles thus involves various skills and techniques hence the need to apply information and communication technology to enhance effectiveness in the study. Moreover, lecturers and students in Ebonyi State University, Abakaliki encounter difficulties in the teaching and learning of clothing and textile because analogue tools are skill employed in the course

lecture which make it very strenuous. The teaching and learning of clothing and textiles consues a lot of time and boring to the students in the areas of study.

Teaching is the act of transferring information and skills, idea and knowledge to the learner. Teaching is a way of inculcating or causing a learner to learn and acquire the desired knowledge, skills, attitude and other acceptable values in a society (Odling and Braithwaite 2003). Teaching involves the setting up of activities using various method and tools to enable somebody learn something which can improve the person's way of life. Teaching therefore requires special training, instrument and tools arranged in a systematic manner for learning to take place and meet stated objectives.

Learning according to Mayer (2006) is the act of acquiring new thing, knowledge, idea and modifying and reinforcing existing knowledge, behaviour, skill and values. It involves synthesizing different types of information and good orientation. Learning may occur as part of personal development, training, school activities through various tool and technologies. Information and communication Technology (ICT) tools forms important channel of improving learning today.

Information and Communication Technology (ICT) encompasses a diverse set of technological tools to identify and organize data and information. It involves a wide range of technologies which include telecommunication, technologies such as telephone, television, video conferencing and computer-mediated conferencing (Kumer 2011). He also noted that digital technologies such as computer information network such as internet and would wide web and software application are parts of information and communication technology tools which can be applied in teaching and learning of clothing and textiles. World bank (2006) reported that ICT consists of hardware, software, network and media for the collection, storage, processing, transmission and presentation of information. Olayanju (2007) asserted that ICT is fast gaining prominence and becoming the most important element defining the basic skills of students. Information and communication technology tools are not applied in the teaching and learning of clothing and textile in the area of study. Teaching and learning of the course are skill based on analogy method and measure and cut with tapes, scissors, clipers, yard sticks among others. These traditional methods waste time, generate large quantity of fabric wastes and scraps are inaccurate sometime. The use of information and communication Technology fasten both practical and theoretical teaching and learning of clothing and textiles, for instance, 3D full body scanner takes full body measurement in twelve seconds, Iphone, Ipad, you-Tube and my fashion Review teach comprehensive sewing of clothes from novice to expert (Adenoga, 2012). Igbo and Iloeje (2013) also asserted that computers are use to design patterns and mix colours suitable for dyes. This study therefore was conducted to identify the use of ICT in teaching and learning of clothing and textiles in Ebonyi State University, specifically the study sought to;

- (a) determine the use of computer in the teaching and learning of clothing and textiles in Ebonyi State university.
- (b) Identify the use of projector in the teaching and learning of clothing and textiles in the area of study.

Hypothesis: Ho₁ There was no significant difference between the mean responses of lecturers and students on the uses of computer in the teaching and learning of clothing and textiles.

Ho₂: There was no significant difference between the mean responses of lecturers and students in the uses of projector in the teaching and learning of clothing and textiles.

The result of the study might form a baseline data on the use of information and communication technology in teaching and learning in Ebonyi State University. The management, lecturers and students will now deem the use of ICT in teaching and learning worthwhile, easy teaching and learning of clothing and textiles in the university and attract more students to the course. Information and communication technologies do not only encourage staff and students in term of education but also motivate them especially students in a positive directions.

METHODS

Survey design was used in carrying out the study. No sample was used rather the entire population of 106 respondents (10 staff and 96 students on Home economic education) were used.

Instrument

The researcher used self-developed questionnaire titled: Information and Communication Technology in Teaching and Learning Clothing and Textiles Questionnaire) (ICTTLCTQ) which made up of 20 items arrangement in two tables. Table one consisted of ten items and table two consisted of 10 items on the uses of computer and video projector respectively in the teaching and learning of clothing and textiles in Ebonyi State University. Items with mean some value of 2.5 and above are regarded agreed while items with mean scores below 2.5 are regarded not agreed. Four Home Economics experts, two from university of Nigeria Nsukka (UNN) and two from Ebonyi State University validated the instrument (ICTTLCTQ). Twenty students and ten lecturers in UNN were used for test reliability: The data yielded a reliability coefficient of 0.78. This coefficient was considered adequate for the study.

Procedure

A note containing the main and specific purposes of the study was attached to each copy of ICTTLTQ The researchers distributed the ICTTCTQ and collected them the next day. All the ICTTLTQ were correctly filled and completely collected, that is, 106 ICTTLTQ were collected by the researchers. Frequency and mean statistics were used to analysis the collected data. t-test statistics was used to test hypotheses at 0.05 level of significance.

RESULT

Table 1: Uses of Computer

S/N	Items statements, uses of computer in teaching and learning clothing and textiles	$F \bar{X}$	\bar{X}	t-cal	t-crit	Decision Rule
1.	Computer are used to connect large realm of information on fashion and design.	188	1.88	0.401	1.96	NA
2.	Computer digital library are used in clothing and textile library.	195	1.95	0.011	1.96	NA
3.	Computer software like computer Aided Design (CAD) are used to design curves and figures in two dimensional (2D) space or in three dimensional (3-D).	200	2.00	1.011	1.96	NA
4.	Computers are used to last moisture content of fibers.	1.95	1.95	1.171	1.96	NA
5.	Computer software like spread sheet are used to plot graph of studies.	1.95	1.95	1.171	1.96	NA
6.	Computers are used for curriculum development.	199	1.99	1.170	1.96	NA
7.	Computers are used to organize complex information, recognize pattern and draw inferences.	199	1.99	1.170	1.96	NA
8.	Computers are used to improve creativity and development in sewing clothing.	198	1.98	1.171	1.96	NA
9.	Computers are used to study e-textiles or electronic fabrics.	188	1.88	0.401	1.96	NA
10.	Computers are used pattern generation and fabric cutting	195	1.95	0.171	1.96	NA
A = Agreed				1t-crit		
NA = Not agreed				= t		
				critical		
				t-		
				cal=t-		
				calcula		
				ted		
\bar{X} = Mean				$F \bar{X}$ =		
				Freque		
				ncy		

Table 1 reveals that none of the ten identified uses of computer in the teaching and learning clothing and textiles obtains mean scores of 2.5 cut-off point set for the study. This implies that computer software are not used in the teaching and learning of clothing and textiles in Ebonyi State University. Table 1 also reveals that there is no significant difference between the mean responses of lecturers and students in Ebonyi State University on the uses of computer software in the teaching and learning clothing and textiles.

Table 2: Uses of Video Projectors

S/N	Items Statements,	F \bar{X}	\bar{X}	t-cal	t-crit	Decision Rule
1.	Projector are used to present lesions	205	2.05	1.011	1.96	NA
2.	Projectors are used to demonstrate various pattern drafting methods.	204	2.04	1.011	1.96	NA
3.	Projectors are used to point out parts of the body to be measured for a particular dress construction.	223	2.23	1.121	1.96	NA
4.	Projector are used in step by step instruction in flat pattern construction	188	1.88	0.401	1.96	NA
5.	Power point projectors are used to magnify the images from clothing and textiles unit being studies.	195	1.95	0.011	1.96	NA
6.	Projectors are used as audio visual resources.	200	2.00	1.011	1.96	NA
7.	Projectors are used to show visual experiment in tie and dye.	190	1.90	1.170	1.96	NA
8.	Time for assignment is displayed with projectors	150	1.50	0.007	1.96	NA
9.	Projectors are used to label equipment such as textile manufacturing machine, sewing machines etc.	156	1.56	0.007	1.96	NA
10.	Projectors are used to display students' work.	149	1.49	0.005	1.96	NA

A = Agreed
NA = Not Agreed

\bar{X} = Mean

t-crit = t-critical
t-cal=t-calculated
 $\bar{f x}$
frequency

$$\bar{X} = \text{Mean}$$

Table 2 reveals that none of the ten identified uses video projectors in teaching and learning of clothing and textiles obtains mean scores of 2.5 cut-off point set for the study. The implication is that video projectors are not used in teaching clothing and textile in the area of study. The table also reveals that there is no significant difference between the mean responses of lecturers and students on the uses of video projectors in teaching learning clothing and textiles.

Finding: The following findings were made;

- (1) Computer software are not used in the teaching and learning of clothing and textiles in Ebonyi State university. Ten identified items in the uses of computer in the teaching and learning of clothing and textiles scored mean values below 2.5 bench mark set for the study.
- (2) Projectors are not used in the teaching and learning of clothing and textile in the area of study. None of the ten items on the uses of projector in teaching and learning of clothing and textiles scored mean value of 2.5 bench mark set for the study.
- (3) There is no significant difference between the mean responses of staff and students of Home Economics Education on the uses of computer and projector in teaching and learning of clothing and textiles in Ebonyi State University.

DISCUSSION

The present study determined the use of information and communication technology in the teaching and learning of clothing and textile in Ebonyi State University. The study revealed that neither computer nor projector is used in the teaching and learning of clothing and textiles in the area of study. The finding in table I revealed that computer are not used in the teaching and learning of clothing and textile. Computers are not used to collect information on fashion and design, not used to design curves and figures in two and three dimensional (2D and 3D) spaces, not to improve creativity, for curriculum development and that clothing and textiles library is not digital. Cynthia (2013), noted that most universities in Nigeria are not computerized due to inadequate fund and poor electricity supply in the country. There is lack of an integrated system of computer software in making of clothing to enable efficient teaching and learning of clothing and textiles in universities. Jun-Ming and Mao-Jiun (2011) stated that computer-aided production system which involves body dimension collection, pattern generation and fabric cutting has not been employed in fashion and design industries. Computer-aided production system can improve not only customers' satisfaction and manufacturers' profit but also improve teaching and learning of clothing and textile in universities. The finding is also in with Helaludin (2010) that the major obstacle in the use of university libraries in developing countries is that information and communication technology is not effectively adopted. Lu et al also maintained that both students and lecturers lack skills and knowledge in ICT to increase creativity and productivity specially in practical oriented courses. Computer software used for the preparation of education document and curriculum development are rare in colleges and higher institutions of learning (Nicola 2014).

Table 2 revealed that projectors are not used for the presentation of lessons and note taking in the teaching and learning of clothing and textiles in the area of study. Biney and Antiayel (2013) opined that multimedia projectors which are becoming centre piece of classroom are not yet employed in the teaching of clothing and textiles in some schools. The study also reveals that projectors are not used to magnify the image, explain step-by-step instruction in pattern construction and to show visual experiment in the study if ties and dye. Olayanju (2010) asserted that ICT has not been used in most high institution in Nigeria. Many lecturers and students are still bound to chalkboards for lecturer and note taking in clothing and textiles lessons. Lecturers deliver lectures and write notes across a board and erasing information as soon as the board is filled up. Consequently, both lecturers and students find the teaching and learning very boring and tedious. The finding revealed that projectors are not used to assign time for students' assignment and class work. Arubayi (2010) also maintained that use of projector, power point and other electronic medium in allocation of time for students' activities are not yet applicable in most higher institutions in Nigeria. The implication of this present study underscores the need for the installation of functioning ICT in Home Economics Education to facilitate the teaching and learning of clothing and textiles in the area of study.

CONCLUSION

The use of information and communication Technologies is one of the most essential parameters in the improvement of teaching and learning. Nilin and Fatih (2011) opined that informations and communication Technologies are significant catalyst in the restoration and development of education. The finding of this present study concluded that Information and Communication Technologies are not used in teaching and learning of clothing and textiles in Ebonyi State University. There were no statistical significant differences in the use of computers and projectors in teaching and learning of clothing and textiles between staff and students in the area of study.

RECOMMENDATION

For the active interpretation of ICT with education in universities, particularly in Ebonyi State University, purchasing of computer hardwires, software's and video projectors must be preferable and adopted. There should be at least one computer and data projector in each classroom and the entire classroom equipped with smart boards. Lecturers and students should be given laptop computers for individual uses. The university administrator/management should be well focused and persist in the support on the uses of ICT in teaching and learning so that students will show positive attitudes towards using computer program on learning clothing and textiles skills.

REFERENCES

- Aderogba, A.A. (2012). The use of information and Communication Technology for qualitative science Education in Nigeria secondary schools. *Ikene Journal of Education*, 2(2) 8-15.

- Anyakaha, E.U. & Eluwa, M. (2008). Homa Management for secondary schools and colleges, African first publishers Ltd.
- Anyakoha, E.U. (2015). Home management schools and colleges. Revised Edition 2015. Onitsha: African first publishers PLC.
- Arubayi, D.O. (2010). Teaching clothing and textiles in Tertiary institutions: An Appraisal of course objective contexts. *Journal of Educational Research and Extension* 22(1) 48-57.
- Biney-Aidw, V. & Antiaye, E. (2013). Assessing the production capacity of the government industry in Ghana in relation to AGOA conditions *Journal of interdisciplinary studies* vol. 6 (1) 2013.
- Cynthia, A. (2013), Body measurement; sem Blue Enterprise pvt. Ltd.
- Helaluddin, H. (2010) Application of information and Communication Technology in Engineering College Libraries, A study of Engineering college. libraries in Faridabad District. Haryana India. Conference of India Library Association.
- Higard, E.R. (1956) *Theories of learning*. New York. Culture, crofta <http://users.ipfu.edu/abbott/314/non-associativelearning.pdf>.
- Jun – Ming, L.U. & Mao-Jiun, J. (2011). A computer-aided production system for mass customization in fashion. *Scientific Journal of Riga Technical University* Vol. 46 (104-109).
- Killie; M. (2008). Possibilities of using ICT for school improvement, European centra for the development of vocational Training. Kottla-Dave, Estomia.
- Kumar, P. (2011). Information and communication technology in textile Engineering: Information and knowledge management. www.iiste.org. ISSN2224-5758 (paper) ISSN 2224-896x (online) vol. 1 (3) 2011.
- Mariam, R.O., (2012) concept of textiles Farlex Inc.
- Mayer, R.E. (2006). Multimedia learning. New York Cambridge University Press.
- Nicola, D.A. (2014) Body scanning Technology with application to the fashion and apparel industry. <http://www.fibre-fashion.com> industry-article/technology.
- Nilgin, T. & Fatih, B.M. (2011). Using Information and communication Technologies in school improvement TOJET: The Turkish online Journal of Educational Technology. Vol 10 (1), 223-231.
- Odling-Smee, L. & Braithwaite, V.A. (2003), the role of learning in fish orientation.
- Okpara, F.O. (2004). Modern Information Technology and the Reengineering business organization in Nigeria. *Knowledge Review*, 119-122.
- Olayanju, A. (2010). Information and com. Tech in vocational Education. A challenge to Nigeria Association of technology. Federal Ministry of Education printing Division.
- Olayanju, T. (2007) Vocational Technical and Communication Technology. A challenge to the Nigeria Association of teachers of vocational technology in the 25th Annual National conference Kaduna.
- World Bank (2006). Analysis the integration of information and communication technologies into teaching-learning process. *The Turkish Online Journal on Educational Technology*.