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Enhancing The Use of Information Communication Technology (ICT) in Teaching And Learning of Clothing Construction in Vocational Education.

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Abstract: *Trade courses in vocational education in colleges demand vocational teachers to apply various teaching strategist for easy understanding in practical skills. The purpose of this paper is enhancing the use of Information Communication Technology (ICT) in teaching and learning of clothing and textiles was aimed at using modern technology to improve teaching and learning. Steps were set for easy delivering of teaching students through collection, identification of materials needed for construction of textiles clothing such as, the design of the material to be sewn, tools needed (needles, matching threads, type of opening, scissors, tape for body measurement),cutting of the material (fabric), sewing and displaying of the garment. The student's population for this study was one hundred and seventy three (173), there was no sampling because the population was manageable (NCE 1 students) divided into three groups and patterns were drafted on their various groups with teacher's guidance. Each step was snap using photographic camera so that subsequent set of students that will come will use the same steps projected with lecturer as a guide in teaching and learning. The result revealed that ICT such as computer and snap photographs were used in teaching and learning of clothing construction in F.C.E, (T) Gombe to improve learning in the area of the study. It was recommended that, there should be a computer projector in the clothing laboratory where students will be viewing the steps, starting from measurement up to construction stage with the help of the teacher to improve the formal way of teaching.*

Keywords: - Teaching, Learning, Information Communication Technology (ICT), clothing construction, Vocation Education.

Introduction:

Teaching is the act of transferring information and skills, ideas and knowledge to the learner. It is a way of inculcating or causing a learner to acquire the desire knowledge, skills, attitude and other acceptable value in the society (Odling and Braith Waite 2003). Teaching involves the setting up of activities using various methods and tools to enable somebody learn something which can improve the formal way of learning, therefore it requires special training, instrument and tools arrange in a systematic manner for learning to take place and meet stated objectives.

Teaching generally is a planned effort to bring about desirable changes in behavior. The changes cover the three major domains of blooms taxonomy of education, which comprises cognitive, affective and psychomotor abilities. (Yakubu & Babaji 2012).

Teaching influences the cognitive ability though enabling the learner in storing useful information and understanding of basic concept, principles and operation taught in a particular area, trade or courses. In the effective domain, teaching provides a change in the possession of desirable attitudes and ideas. It also develops the learner through increasing satisfaction about learning achievements.

Teaching in an area of psychomotor abilities, provide changes in the acquisition of practical skills abilities and habits on how to perform certain job activity efficiently changes mentioned above can only be achieved when highly motivated , knowledgeable and skilled vocational and technical trade teachers are involved competently in the implementation of the curriculum,

Teaching is much more than a mere process of transmitting knowledge to the learner. Salihu & Babaji (2012) in Uyanga (2005), stated that teaching is the act of using media to sensitize learner towards assimilation and retention of facts, concepts, theories and principles taught. Furthermore Salihu & Babaji (2012), in Eemali (2006) stressed that effective teaching is the teacher's impact upon learners learning. Therefore, teaching is rooted on the ordering, presentation, explanation and discussion of the elements to be learned reaches the optimum level of understanding of the individual learner.

Teaching trade courses in vocational and technical colleges' demands that vocational teacher should apply various teaching strategies. Lessons in vocational and technical trades are not always easy to understand. Vocational trade courses are job oriented lessons, which requires learner-centered approach where practical skills activities are fully involved.

Vocational and technical trade teacher represents the chief source of knowledge in the classroom, workshop and laboratory. As a scholar, he operates by analyzing, designing, implementing and evaluating teaching and learning activities. He focuses on clarifying issues; he establishes activities that are useful and helpful to his instruction. Teaching in occupational areas demands suitable instruction, which facilitates in the achievement of specific educational objectives.

Salihu, & Babaji, (2012) present that, when presenting information or skills to the learner, the teacher needs to adopt appropriate teaching approach and method. However, the situation of presenting lessons in trade courses in Nigeria is actually the opposite of what it should be, because of trades courses are taught as theory, using teaching-centered approach. Invariably, teachers teach the way they were taught. Salihu & Babaji, (2012) stated that the lecture method is practically what dominates the presentation of lesson in vocational and technical institutions. In order to overcome such a situation, there is the need to used information communication technology (ICT) to deliver an efficient lesson presentation, as most students learners of the day hardly comprehend some terms and definition use in vocational courses, especially in Home Economics Education and particularly in textiles and clothing construction.

The clothing and textiles is one of the domains of Home Economics programs which was originally intended to provide women with a means to clothe themselves and their families in an efficient and economical manner. Another objective was to provide the students with a more formal understanding of the textiles industry for the future career opportunities within that field. Early home economists helped to make positive contributions to this area by studying different fabrics and dyes, and the proper ways to care for the materials. Modern home economics programs continue to place importance on the clothing domain of the curriculum. Students are given instruction regarding aspects of clothing and textiles, including the history of fashion and its social implications, concerns for the consumer, as well as actual clothing construction. Ukwuoma & Ndam ,(2015).They further stated that clothing is a general term for various coverings design to protect or adorn the human body, textiles is the large umbrella that covers all things called fiber. On the other hand fiber refers to unit of matter characterized by flexibility and finess with high ratio off length to thickness and thus clothing and textiles education is a branch of Home Economics Education that is concerned with the acquisition and development of practical skills by beneficiaries.

Ossaio (2001), state that one of the objectives of Nigeria Education is to produce skilled persons who are able to play affective roles in national economic and technological growth and development. Clothing and textile as a skilled-oriented course help to equip individuals with saleable skills needed for self-reliance. Anyakaoha (2002), stated that clothing and textile equips individual for enormous employment opportunities in occupations rating to clothing and textile namely: dressmaking or clothes construction, fashion merchandising and pattern illustration or drafting, designing, dry-cleaning and laundry services, tie and dye, beauty care, hairdressing, realization of the objectives depends largely, on the implementation strategies employed for students to be able to perform adequately in clothing and textiles and the rate of learning can be accelerated on the teacher, availability of teaching aid, equipped laboratories, and conducive atmosphere. Clothing and textile education is expected to provide students with requisite skills and techniques necessary to make them self-reliant and employable in labour market after graduation.

The concept of information communication technology.

1. Information communication and technology (ICT) encompasses a divers 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 (Kumer 2011). ICT is also form, that can be define as the science on activities of art, by collecting, processing, storing and dissemination of information through the use of computer (Dantamas, Babi & Yelwa, 2016), they further states that ICT is the technologies and techniques used to capture, store, produce and

communicate information. Also Butcher (2003), define ICT as electronic technology for collecting, storing, and processing communication of information. In Liverpool (2002), defines information communication technology as a general term referring to the technologies in various forms.

2. The Oxford Advance Learners Dictionary (2000) defines ICT as the study or use of electronic equipment, especially computer for storing, analyzing and sending information. Dantamas, Babi & Yelwa (2016) defines information technology as a computer telecommunication system for storing, retrieving and sending information. They further stated that the term ICT, therefore, includes any equipment or interconnected system or sub-system of equipment that is used in the automatic acquisition, storage, manipulating management, movement, control, displaying, switching, interchange, transmission or reception of data or information. Information and communication technology (ICT) encompasses all forms of technology deployed in information dissemination in contemporary societies. Several types of ICT products that can be found and having application to education, such as teleconferencing, audio conferencing-mails, video lessons(TVs), radio broadcasts, interactive radio counseling, interactive audio response system, audiocassettes ,whatsapps and CD ROMs, etc. are being used in education for many purposes.(Sani Yakubu Gombe 2016).
3. According to Sani Yakubu Gombe, et al, (2016). ICTs have turned out to be, within a short time, one of the necessary tools of modern fellowship. Many countries now consider knowledge of information and communication technology (ICT) as well as mastery of the essential sciences, technology including concepts of ICT as one of the critical basis of education, beside reading, writing and arithmetic. Even though, there seems to be a misconception with respect ICTs generally by referring it to 'computers and computing associated activities. This is fortunately not the right, although the use of computers and their applications is a significant component in the contemporary information management, other systems and/or technologies also form part of the phenomenon that is generally regarded as ICTs Sani Yakubu Gombe, et al, (2016).
4. ICT is fast gaining prominence and becoming the most important element defining the basic skills of students. ICT 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 still based on analogy method; that is measure and cut with tape, scissors, clippers, yard stick among others. This traditional method is time consuming and does not retained on student's memory. The use of ICT fastens both practical and theoretical teaching and learning of clothing and textile. For Igbo and Iloege (2013), asserted that computers are use to design patterns and mix colours suitable for tie and dye. This study therefore was conducted to identify the use of ICT in teaching and learning of clothing and textile in F.C.E. (T), Gombe.
5. The objective of this study is to deliver an efficient lesson, and specifically to achieve the following **Objectives:**

- To enhance the use of computer snap-shot or projector in the teaching and learner of clothing construction in FCE (T), Gombe.
- To provide practical acquisition of skills and abilities on clothing construction.

Research questions:

1- Can computer snap-shot or projector enhances teaching and learning in a class room?

2-Can you understand better in computer/ projector learning than normal class room teaching?

The result of the study might form a baseline data on the use of information and communication technolology in teaching and learning in FCE (T), Gombe. 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 institution can 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 direction.

METHOD AND MATERIALS

The method to be adopted is a survey where by a structured questionnaire will be set and distribute to one colleges of education in each zone of the federation among the 83 accredited colleges of education in Nigeria as the sample for the entire colleges in Nigeria, to seek for responses from teachers and students, also the materials to be use for this study are camera, chalkboard, and marker, pieces of fabrics, brown paper, scissors, and measurement tape, pins, threads, cutting tables, stools, sewing machines, discs and flash drives, source of power are most of the materials needed etc.

FUNCTIONS OF THE TOOLS AND EQUIPMENT IN THIS STUDY

Camera-- this device will be use in snapping each steps during delivery of lesson.
Chalkboard and marker- - As all lesson in classroom, laboratory, workshops requires the use of illustrations, proper explanation and possibly diagrams or designs using marker and chalkboard.
Pieces of fabrics and brown paper--- these are use for the construction of the model or figure.
Measuring tape----- This is a long graduated with numbers in inches, millimeters and is flat flexible plastic, use for body measurement.
Threads/pins---- thread composed of fibers bounded together by a twist either left or right and are use for stitching while pins are sharp thin metals for holding two ends of fabrics or paper temporary or permanent.
Cutting tables and stools---- this could be metallic or preferably a wooden one use for laying the brown paper or fabrics in a flat manner and sit on in order to ease proper cutting of the intended pattern design.
Sewing machine---- this is a device or machine as the name suggested, is use stitching two ends of either fabrics or the brown paper according the desired design.
Discs/ Flash drive ------ This is a portable storage device that can be fix to a computer to retrieved information at any time.
Power source----- this can be either in form of generator, batteries, or Power holding company in order to supply power energy to the camera, computer etc.

Step 3. 1 The lecturer is explaining at each tools and its uses one after another

Step 3.2 The steps to be followed for the operations of the tools to form a pattern.

Taking body measurement by standing straight, no wearing of bulky or heavy dress on top.

Step 3.3

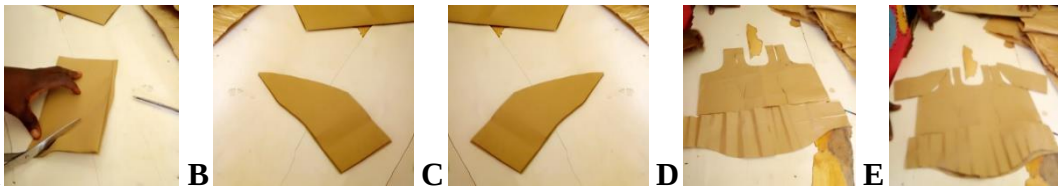
A  **B**  **C**  **D**  **E**  **F** 

Under this step fig. A& B, is the application of the measured sizes and cutting out the bodices shape onto the paper, while fig. C.D.E & F is making the fold to get front and back of the garment design.

Step 3. 4

The front and back bodices are cut-out forming the top shape and the bust of the garment

Step 3.5



The arms are being cut out in fig. A.B &C, and completed design is out D & E to be transferred on to the selected fabric.

Analysis of the study.

The tables below shows how data collected from respondents were analyzed in percentage

Table 1: To determine the extent to which computer snap-shot or projector enhances teaching and learning in a class room?

S/N	Item questions	Yes	%	No	%
a	Computer snap shot can be use for teaching and learning of practical lesson? Yes or No.	53	64	3	4
b	Projector is efficient in teaching and learning clothing construction lesson? Yes or No.	49	59	-----	-----
c	The use of computer and projector can be more efficient in teaching and learning clothing construction? Yes or No.	44	53	9	11
d	Steps in clothing construction can be use for teaching and learning via computer and a projector? Yes or No.	39	47	13	
e	Camera can be use for snapping the procedure of clothing construction? Yes or No.	49	59	3	4

f	Projector is good for teaching and learning of clothing construction? Yes or No.	46	55	2	3
g	Computer and projector can be use for better delivery of teaching and learning clothing construction? Yes or No.	45	54	6	7

In table 1, the respondents have positively accepted the issue on the item/question (a) showing higher percentage followed by (b) while (d) has the lowest of acceptance and (d) and (c) have the highest rejection on the two item/question of 16% and 11% respectively. It can be observed that computer snap-shot or projector can enhances teaching and learning.

Table 2: To determine the extent to which understanding practical will be better in computer/projector than normal classroom teaching and learning?

S/N	Items	**Yes**	**%**	**No**	**%**
a	Practical acquired in clothing construction give the learner easier skill capabilities? Yes or No.	47	57	5	6
b	Delivering normal practical lesson in clothing construction give easier skills to the learners in the class room? Yes or No.	39	47	3	4
c	The use of computer camera is easier in acquiring better practical skills in clothing construction? Yes or No.	41	49	8	10
d	The provision of projector to teach clothing construction practical is better in skills acquiring?	26	31	4	5
e	Computer/ Projector use in teaching and learning clothing construction makes the learner to understand better Yes or No.	50	60	2	3
f	Computer camera snap shot can be used for practical procedure for teaching and learning of clothing construction Yes or No	47	57	4	5
g	Computer/ Projector is better in understanding the procedure in clothing construction. Yes or No	39	47	12	15

In table 2, the respondents in item (e), has the highest positive response of 60%, followed by item (a) and (f) ,57%, then (c) 49% and (g), (b) having the percentages of 47% respectively, with the lowest from item (d) having 31% .This whole items/questions from the respondents responses, therefore, can be observed that the research question 2, is acceptable that practical in clothing construction can be better understood than normal classroom teaching.

Conclusion and Recommendation

The study revealed that to deliver practical lessons in Colleges of Education like ours, needed technology especially in Textiles and particularly in clothing construction, therefore, there is the need for the management, government at all level to provide adequate facility, clothing and textiles laboratories, such camera, computers or projector, since most of the class population in growing high now and the period to deliver practical for such a number of students is limited.

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