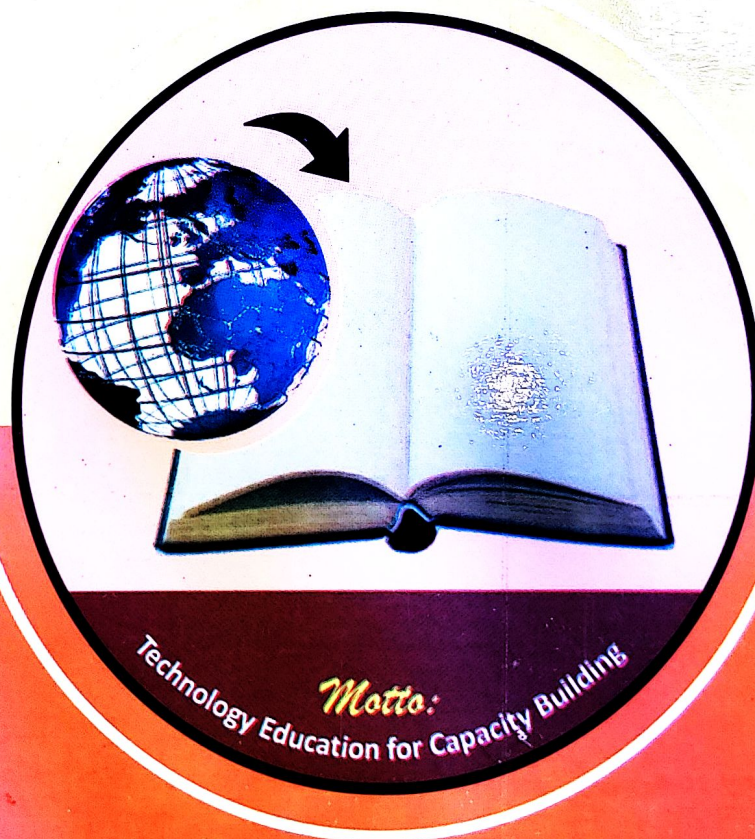


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Extent of Availability and Utilization of Photographic Instructional Materials in Colleges of Education in Niger State.

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Abstract

The study investigated the extent of utilization of photographic instructional materials in the teaching and learning of ceramics art in tertiary institutions. Descriptive survey research design was adopted. Three research questions and one hypothesis were formulated. Federal College of Education Kontagora and College of Education Minna were used as case study. The total population of 29 was used. This was because of the smallness of the population. The instrument used for data collection was structured questionnaire designed and constructed by the researchers. Three experts validated the instrument. The reliability co-efficient of the instrument of 0.67 was established, using Pearson product moment correlation co-efficient. Data collected were analysed using percentage and mean. The result of the analyses showed that the application of ceramics photographic instructional materials in the two tertiary institutions were at their lowest ebb. The researchers recommended that the photographic instructional materials like, video, slide film, film strips, multimedia projection, films etc should be improvised and utilized by both the ceramic lecturers and students in the classroom. The institutions' management should endeavour to organize seminars and workshops for the lecturers and students on how to improvise ceramics photographic instructional materials for effective teaching and learning.

Introduction

When one talks of art, one may in fact be considering the entire process of creative experiences of a child or an adult. Art can be seen as a process as well as a product. It deals with the creative impulses in man that enables him to think, create, produce, perform, appreciate and pass value judgment. Art, a name given to all skillful activities is broadly divided into two names, visual art and non visual art. Visual art are those aspect of art whose products are visible, while non-visual art are those whose products cannot be seen with naked eyes. Visual art can be divided into two, namely; Fine Art and Applied Art. Fine art includes drawing, painting, sculpture and architecture. Applied art involves graphics, textiles, ceramics, photography and industrial design. The major thing that distinguishes art from other subjects in the curriculum is its in to develop divergent thinking rather to convergent thinking (Lowenfield and Britain cited in Anulobi, 2010).

Ceramics art involves the production of every ware made of clay material and making them a fine and finished, beautiful utilitarian pieces like pots, cups, jugs, plates, sanitary wares, bricks, tiles, electric insulators and laboratory facilities (Banjoko, 2000). Another name for ceramics art is pottery. Ceramics serves many functions and has many values to the society. Some of which according to Banjoko (2000) are summarized as follows:

- i. As Universal language
- ii. Means of communication/illustration
- iii. Means of identification-as in culture
- iv. Means of beautification/decoration



- v. Means of livelihood, i.e. provides vocation/employment opportunities, career, foreign exchange.
- vi. Means of entertainment/aesthetic satisfaction.

Ceramics art is taught at professional level in tertiary institutions. Ceramics are found nor work in ceramic institutions, industries, private studios and in government establishments. They make pots, cups, plates, jugs floor tiles and other breakable wares like sockets, vases, switches and other industrial appliances with clay materials (Madu, 2010). Most ceramics wares and utensils used in our homes today are produced locally and these items are cheaper than the imported ones (Ojie, 2001). Different traditional methods/techniques such as coil, slab, press mold and pinch are employed to achieve the desired objectives. Different tools like fingers, spatulas, scraper, saw blade, etc are used for good finishing. Pottery making can also involve mechanical devices such as wheel throwing or potter's wheel, pug mill for processing clay, kiln for firing green wares and others like water glazes, oxides among others (Madu, 2010). The question asked is could photographic materials be used as supplement or alternative to the traditional methods of teaching and learning ceramics art? The answer is yes.

Photography is the art of creating image with light by focusing and shooting such image through the lens of a camera and turning such image into picture after undergoing some processes. examples of photographic materials include still pictures and motion pictures (Video). Photographic materials (still and motion pictures) refer to a broad range of resources which can be used to facilitate effective and efficient classroom communication. Such communication materials include Information and Communication Technologies (ICTs) such as Video and still pictures; others include films, slide films, filmstrips, television and projections. Communication technologies communicate information between the various kinds of technologies such as television, video, and computers among others. Still picture is a photograph taken and printed on single fixed frame. It is achieved through the use of still camera. Motion pictures are achieved through the use of a video camera or shooting camera, which results to motion or animated picture. Banjoko (2000) states that sounds coming from such pictures and the surroundings are equally recorded.

(Audio-Visual). According to Dike (1999), motion pictures refer generally to those media that have the attribute of presenting images. The term is often used for films but also includes at least for our purpose, television and video because they also present moving images that appeal to both the audio and visual senses. Slide refers to a frame of photographic transparencies bound by card mounts and designed for use with a slide project for or slide viewer. The "2 by 2" slides are most commonly used. Slides may be commercially or locally produced. The teacher or student can make his own slides by taking pictures of the required concepts using the 35mm film camera. The exposed film is processed, cut and mounted on frames. Filmstrip is a roll of transparent film usually 16mm or 35mm in size, containing images designed to be viewed frame by frame with a filmstrip projector. Like slides, filmstrips can be commercially made or locally produced.

These days, filmstrips are being accompanied with recorder sound tracks or audio cassettes of narration. Overhead projectors are used to project transparencies. Transparencies may be composed of photographic type film for use in the classroom.

Films are motion pictures. A film is simply a long strip of film that consists of a sequence of still photographs each of which is called a frame. A film is therefore a very powerful instructional medium, (teaching of ceramics inclusive). It is capable of holding the attention of learners, providing realistic experiences and creating in learners the emotional impact that facilitate learning (NTI, 2006). Television is like the film except that it is electronically operated. The home video has taken the television to schools, workplaces, commercial houses etc (NTI, 2006). Television has become a reach resource for instruction and training. Availability of video tapes and video recorders made it possible for teachers and the students to have control of the time when a programme of interest is used or viewed, when it can be stopped and repeated. Video can be used to tape ceramics instructional television programmes and put away for use during any teaching and learning situation. Learners have control over the machine as they can pause, rewind, fast forward and replay. Video can be used as mode for delivery of ceramics instruction. Onyejemezi (1996.450) citing Vernon, reveals that when there is direct relationship between pictures and facts presented in text, the facts were more clearly remembered, thus;

Pictures stimulate and help further studies and also help children to take active interest in the topic presented. Pictures have emotional impact on the children. Picture impressed the children and they admitted they found that pictures gave them clear ideas of the topic.

The use of photographic materials in the teaching and learning of ceramics will aim at maximizing the employment of the senses of seeing and hearing that will supplement the traditional approach of teaching and learning ceramic art in the classroom. Photographic materials will enable the teacher to teach less and the learner to learn more. For instance, words can describe a cup, but it is very hard to tell anyone exactly what a cup looks like without a picture of a cup (Akude and Anulobi, 2010).

Photographic technologies as highlighted in (NTI, 2006) module can serve the following educational functions;

- To deliver all or part of the learning content to learners.
- To supplement and extend content provided in a different form, e.g. print, video.
- Support conventional classroom work by using its facilities in school work.
- Electronic teaching materials such as pictures/videos can be exchanged.
- Through video, information can be accessed, stored, retrieved and analyzed.
- Motion pictures are useful in research as it give access to a world of resources, especially in electronic form.
- Independent study and individualized instruction are facilitated through video and photographs.
- Pictures make learning more vivid and engaging in a new world of globalization. This is made possible by new technologies such as telecommunication, computers and electronics.

The role of these new and old ICT's especially in education can never be jettisoned therein especially in the teaching and learning of ceramics art in tertiary institutions.



Good performance can be achieved through effective utilization of photographic instructional materials in the classroom teaching and learning of ceramics. Eze (2011) stressed that teachers should see themselves as people on voyage and therefore always ask the following questions; thus;

- i. Where am I going? (Content/Topic)
- ii. How will I get there? (Method/Technique)
- iii. Why am I embarking on this voyage? (Objectives)
- iv. What means will I use to get there fast? (Instructional Materials)
- v. How will I know that I have arrived at my desired destination and achieved my purpose (Evaluation).

Learning habits and culture among our students in schools is very poor (Etim, 2010). Obibuaku (2011) submitted that many education researcher have argued that the causes of the decline in the quality of education in Nigeria include poor funding, poor teacher quality and motivation, and poor instructional facilities. Central to the above ugly situation is the misappropriation of funds allocated to education at various levels of government and the consequent non-payment of teachers' salaries, especially in state government owned institutions. It should be noted that education is the most effective antidote to poverty, and poverty itself is a common constraint to accessing education (Obibuaku, 2011). The trends according to Madu (2010) have shown that the quality of ceramics art education is declining and also is the number of students offering the course. The much talked about poor quality in education might not be unconnected with the poor traditional teaching methods of teachers and poor habits exhibited by students for learning. These traditional methods do not prepare our students very well for this information age and globalization. The implication of the above situation is that in the future, we are likely to have no skilled ceramists in the labour force. Could there be total lack of awareness and literacy in the use of photographic instructional materials as veritable tools for instruction? Could the use of motion and still pictures in teaching of ceramics art encourage students to study ceramics? It is the wish of the researchers to ascertain the extent to which these materials are utilized, effective use of these photographic materials in the teaching and learning of ceramics art in the institutions.

Purpose of the study

1. To find out the available photographic instructional materials in the institutions.
2. To find out the extent to which these photographic materials are utilized in the classroom.
3. To find out the factors militating against the utilization of photographic instructional materials in the classroom.

Methodology

The research design employed is descriptive survey study of two tertiary institutions. The study was purposively out in Federal College of Education, Kontagora and College of Education Minna. These are the only two tertiary institutions in the state that offer ceramics art in their curriculum. The population of the study comprised all the ceramics art in 200, and 300 levels of the two institutions. There are 2 ceramics lecturers and 15 students Federal College of Education Kontagora, 2 lecturers and 10 students from College of Education Minna, given a total population of 29. The whole population was used for the study, because they are very few. Instrument used for the study were Ceramics Students Questionnaire (CSO) and Ceramics Teachers Questionnaire (CTQ), constructed by the researchers. The validation of the Instruments were established by three expert lecturers. One is an educational technologist, while the rest two are experts

in Measurement and Evaluation, from Federal College of Education Kontagora and National Examination Council Minna respectively. The instruments possessed face and content validity. The instruments were subjected to a test-retest technique. A calculation of 0.67 correlation coefficient index, using Pearson product moment correlation coefficient statistical tool was established. Data collected were analysed using percentage and mean.

Table 1a: Lecturer's response on the available photographic instructional materials used in the teaching of ceramics art in the classroom.

S/N	Item	Available	%	Not available	%
1	Photographs (Still Picture)	3	75	1	25
2	Posters	3	75	1	25
3	Video (motion pictures)	-	-	4	100
4	Computers/PowerPoint Presentation	1	25	3	75
5	Slide films	-	-	4	100
6	Film strips	-	-	4	100
7	Overhead projector	-	-	4	100
8	Television	-	-	4	100
9	Films	-	-	4	100
10	Computer	1	25	3	75

In the table, only item 1 and 2 were available for teaching of ceramics art while the rest items were not available. This showed that the majority of photographic instructional materials were not used in teaching and learning ceramics art in the two institutions.

Table 1b: FCE Kontagora students response on the available photographic instructional materials in learning ceramics art.

S/N	Item	Available	%	Not available	%
1	Photographs (Still Picture)	8	53.33	7	46.67
2	Posters	7	46.67	8	53.33
3	Video (motion pictures)	6	40	9	60
4	Computers/PowerPoint Presentation	-	-	15	100
5	Slide films	-	-	15	100
6	Film strips	-	-	15	100
7	Overhead projector	-	-	15	100
8	Television	-	-	15	100
9	Films	-	-	15	100
10	Computer	6	40	9	60

Table 1b: College of Education Minna students response on the available photographic instructional materials for learning ceramics art in the classroom

S/N	Item	Available	%	Not available	%
1	Photographs (Still Picture)	3	75	1	25
2	Posters	3	75	1	25
3	Video (motion pictures)	-	-	4	100
4	Computers/PowerPoint Presentation	1	25	3	75
5	Slide films	-	-	4	100
6	Film strips	-	-	4	100
7	Overhead projector	-	-	4	100
8	Television	-	-	4	100
9	Films	-	-	4	100
10	Computer	1	25	3	75

In the above table, only items 1,2,and 4 were available for use, while the rest items are not available. This has shown that the majority of the photographic instructional materials were not widely used for learning of ceramics art.

Table 2a: Lecturers response on how regularly lecturers in both institutions utilize photographic instructional materials in the classroom

S/N	Item	Always	Not always	Sparingly	Not at all	\bar{X}
1	Photographs (Still picture)	-	3	1	-	2.5
2	Posters	-	3	1	-	2.5
3	Video (motion pictures)	-	-	-	4	1
4	Computers/PowerPoint Presentation	-	1	3	-	2.25
5	Slide films	-	-	-	4	1
6	Film strips	-	-	-	4	1
7	Overhead projector	-	-	-	4	1
8	Television	-	-	-	4	1
9	Films	-	-	-	4	1
10	Computer	-	1	3	-	2.25

In the table above, response of teachers from FCE Kontagora and College of Education Minna showed a mean score of 1.53. This showed that the use of photographic instructional materials in the two institutions were at their lowest ebb. However, only the materials on item 1 and 2 were utilized in the two institutions.

Table 2b: FCE Kontagora student's response on how regularly they learn with photographic instructional materials in the classroom

S/N	Item	Always	Not always	Sparingly	Not at all	\bar{X}
1	Photographs (Still picture)	4	6	-	5	2.6
2	Posters	-	3	5	7	1.73
3	Video (motion pictures)	-	-	-	15	1
4	Computers/PowerPoint Presentation	-	4	4	7	1.80
5	Slide films	-	-	-	15	1
6	Film strips	-	-	-	15	1
7	Overhead projector	-	-	-	15	1
8	Television	-	-	-	15	1
9	Films	-	-	-	15	1
10	Computer	-	6	4	5	2.06
Total						1.68

In the table above, only item one was utilized while the remaining nine items were not utilized. This means that photographic instructional materials were not regularly used in their classroom. The mean score was 1.42.

Table 2c: College of Education Minna student's response on how regularly they learn with photographic instructional materials in ceramics art.

S/N	Item	Always	Not always	Sparingly	Not at all	\bar{X}
1	Photographs (Still picture)	3	3	2	2	2.7
2	Posters	1	2	3	4	2.5
3	Video (motion pictures)	-	-	4	6	1.4
4	Computers/PowerPoint Presentation	2	2	4	2	2.4
5	Slide films	-	1	6	3	1.9
6	Film strips	-	-	4	6	1
7	Overhead projector	-	1	1	8	1.3
8	Television	-	2	2	4	2
9	Films	-	-	2	8	1.2
10	Computer	-	1	5	4	1.2
Total						1.68

In the table above, only items 1 and 3 are often used by student in learning ceramics art, whereas, the rest 8 items were either sparingly or not used at all. The mean score of 1.68 calculated.



Table 3a: Lecturers' response on the factors militating against the utilization of photographic instructional materials in the classroom

S/N	Item	SA	A	D	SD	\bar{X}
1	Lack of skills in the teachers to produce photographic materials for ceramic instruction	1	1	-	2	2.25
2	Ignorance of the teachers on the ICT ceramics innovative materials	-	2	-	2	2
3	Lack of adequate technologies for the production of the photographic materials	2	1	1	-	3
4	Lack of qualified ICT compliant lecturers	-	2	2	-	2.5
5	Lack of Government motivation	2	2	-	-	3.5
6	Lack of support facilities	3	1	-	-	3.75
7	Lack of power supply	2	2	-	-	3.5
8	Lack of seminars workshops for the lecturers and students	2	1	1	-	3
9	Lack of interest by students on the ceramic art	-	1	1	2	1.75
Total						2.53

In the table above, responses of lecturers from both institutions showed a mean score of 2.53. This showed that the factors on items 3,4,5,6,7 and 8, except items 1,2 and 9 affect effective use of photographic materials in the classroom in the two institutions.

Table 3b: FCE Kontagora Students response on the factors militating against effective use of photographic instructional materials in learning ceramics

S/N	Item	SA	A	D	SD	\bar{X}
1	Ignorance of the teachers on the ICT ceramics innovative materials	5	4	4	2	2.6
2	Lack of skills in the teachers to produce photographic materials for ceramic instruction	2	5	2	6	2.2
3	Lack of adequate technologies for the production of the photographic materials	11	2	1	1	3.53
4	Lack of qualified ICT compliant lecturers	8	2	2	3	3.6
5	Lack of Government motivation	6	3	1	5	3.7
6	Lack of support facilities	5	2	4	4	3.3
7	Lack of power supply	5	2	4	4	2.53
8	Lack of seminars workshops for the lecturers and students	5	4	4	2	2.6
9	Lack of interest by students on the ceramic art	-	2	7	6	1.73
Total						2.65

In the table above, item 2 and 9 do not militate against the utilization of photographic instructional material in the class. While, the rest 7 items posed problems in learning ceramics art. Mean score of 2.65 was calculated.

Table 3c: College of Education Minna students response on the factors militating against effective use of photographic instrument to

S/N	Item	SA	A	D	SD	\bar{X}
1	Ignorance of the teachers on the ICT ceramics innovative materials	3	3	2	2	2.7
2	Lack of adequate technologies for the production of the photographic materials	1	3	3	3	2.2
3	Lack of qualified ICT compliant lecturers	3	3	2	2	2.7
4	Lack of qualified ICT compliant lecturers	3	3	1	2	2.5
5	Lack of Government motivation	3	3	3	1	2.8
6	Lack of support facilities	3	4	1	2	2.8
7	Lack of power supply	3	3	1	2	2.5
8	Lack of seminars workshops for the lecturers and students	2	4	2	2	2.6
9	Lack of interest by students on the ceramic art	-	2	4	4	2.5
Total						2.51

In the above, the mean score was 2.51. Items 2 and 9 posed no problem in studying ceramics art. Whereas, item 1,3 to 8 were obstacles in learning the course in the class. However these factors were responsible for the studying of ceramics art at its lowest ebb.

Hypothesis: There is no significant difference between the factors militating against FCE Kontagora students effective learning of ceramics art with photographic Instructional materials and AIFCE students ($p < 0.05$).

Group	N	X	SD	T-cal	T.Value	DF	Decision
IMSU	15	4.75	2.53				
AIFCE	10	4.81	2.47	0.029	1.71	23	Accepted

From the above result t-calculated value of 0.029 is less than the table value of 1.71 at significance level of 0.05. Therefore the null hypothesis was accepted that no significance difference existed between the factors that militate against the use of photographic instructional material in teaching and learning of ceramics art in the two tertiary institutions in the state.

The result of the study reveals that photographic instructional materials are not utilized in the classroom in the two institutions, except still pictures. This is reflected in table I as a result of non-availability of other photographic materials such as video, film, television, slide film, overhead projectors that are not available in the institutions. This is contrary to Dike (1999) that videos present moving images that appeal to both the audio and visual sense.

With the availability and integration of photographic instructional materials, students can have access to ceramics information and communicate with one another, even

without the teacher. The use of photographic instructional materials can promote the interest and motivate learners to develop positive attitude towards ceramics art education. Vernon in Onyejemezi (1996) confirmed that when there is direct relationship between pictures and facts were more clearly remembered; pictures stimulate and help further studies, and also help children to take active interest in the topic presented.

Table 2 above revealed that the use of photographic materials (motion pictures) is at its lowest ebb. This is contrary to the view that the use of photographic materials in the teaching/learning of ceramics art will maximize the employment of the senses of seeing and hearing that will supplement the traditional approach of teaching/learning ceramics in the classroom. Teachers and students should be encouraged to use this indispensable source of knowledge and skills that can enhance learning competencies among students and lecturers.

It was also revealed that many factors such as lack of adequate technologies for the production of photographic instructional materials, lack off seminars and workshops for lecturers and students on the production and utilization of photographic instructional materials and lack of qualified hands in the photographic materials production among others. This was revealed in tables 3a, b and c mean scores of 2.53, 2.63 and 2.51, respectively. This is in agreement with the views of Obibuaku (2011) that the causes of the decline in the quality of education in Nigeria include poor funding, poor teacher quality and motivation, poor instructional facilities, and irregular payment of teachers salaries, especially in the state government owned institutions. Teaching and learning of ceramics art would therefore become more efficient and more productive when ICT photographic materials were utilized as supplement to traditional teaching and learning of ceramics art education in tertiary institutions in the state. This statement was supported by the study carried out by Anulobi (2009) that video compact disc can be used as a supplement and an alternative to the traditional teaching and learning of fine art in the junior secondary schools in Owerri.

Conclusion

Ceramics art involves the production of wares made of clay materials which include pots, cups, plates, jugs, floortiles, vases and other breakable wares. Another name for ceramics is pottery. It is taught at professional level in tertiary institutions, industries, private studios and in government establishment. Photographic materials include video, still pictures, slide film, film, television, computer projections, etc. Recognizing the potentials of photographic materials in the ceramics art education, it becomes obvious that tertiary institutions in Imo State and beyond have not been able to benefit much from the technologies, because of the non-availability of adequate facilities. The teachers need to posses necessary skills that will enable them to produce and to integrate the photographic materials into their classroom practices to improve the quality of teaching and learning, and properly, prepare the youths for job opportunities and other life challenges, thereabout. Therefore, the deficiency in the leaning of ceramics can be remedied by the application of photographic materials in the classroom. Finally, photographic instructional materials should be used as supplement/alternative to the study of ceramics art in our tertiary institutions, the researchers concluded.

Recommendation

The following recommendations were made by the researchers

- To improve the quality of education, the stakeholders must improve the conditions for the two key people in the classroom-the teacher and the student in the tertiary institutions.
- Leakages in the system that consume education resources such as corruption must be addressed to ensure that appropriated funding actually gets to the target student and teacher.
- Lecturers should receive better and regular pay, as motivation
- They should be provided with periodic professional training through workshops, and seminars to upgrade and enhance their skills.
- Lecturers should be motivated and made proud, to bring the best out of the students under their care.
- Education in Imo State and indeed in the whole of Nigeria should be globalised to enable our students to compete with those from other nations of the world through photographic instructional materials.
- Existing infrastructural facilities should be refurbished and more ceramics lecturers should be employed without delay.

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