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THE PEDAGOGICAL USE OF MULTIMEDIA INSTRUCTION FOR TEACHING OF VISUAL ARTS IN SENIOR SECONDARY SCHOOLS IN EKITI, NIGERIA

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Abstract:
The use of multimedia in teaching and learning leads to permanent learning. Multimedia refers to any interactive application that integrates text, color, graphical images, animation, audio sound, and full motion video in a single application. Multimedia learning systems offer a potentially venue for improving student understanding about arts. Teachers try to find the most effective way to create a better arts teaching and learning environment through multimedia technologies. In this paper, the researchers defines multimedia, relevance of multimedia in teaching, and the needs to make full use of multimedia to create an authentic visual arts teaching and learning environment where students can easily acquire natural skill and effectively.

Keywords: art, visual arts, multimedia

1. Introduction

Art is a universal medium of expression that provides the child with power to demonstrate aesthetic, awareness, emotional and usual development through perceptual and creative activities (Odewumi & Falade, 2015). It is divided into Visual and Non-visual. Visual art is visible products while non-visual art is unseen works of arts for entertainment and recreations. Visual art, is a subject for Nigeria Senior Secondary Schools art students (Usman, Odewumi, Obotuke, Apolola, & Ogunyinka, 2014; Odewumi, Okeke, Abdulhammed, Uzoma, Okuche, 2015). Visual Arts develops well-rounded visual arts practitioners and create problem solvers in individual throughout fine art, graphic design, with art and design history and theory. Students will engage in the fundamental relationships that exist between two dimensional media

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areas such as drawing, painting, printmaking and photography, and three and four-dimensional areas such as sculpture, video production and object design, as well as graphic design leading to webpage design and animation (Freedman, 2003; Ogunshina, 2010).

Education can be considered as experiences which teaching and learning provides in a school system. It involves the teacher who has the idea, knowledge, skills and values (instruction) that is being imparted to the learners. Education is mainly concerned with the ways and means of teaching and learning. The word learning, appears to be more vital as it is not only concerned with what the teacher does but also with what knowledge he or she transmits to the students and what the student does to assimilate the knowledge via many resources (Hede & Hede, 2002).

According to Azizollah, and Mohsen, (2012) technology helps to shape major trends in the evolution of quality of work and quality of life in the upcoming information society or knowledge society. Kim, and Kim, (2012) believed that ICT in education is a comprehensive approach to innovate education systems, methods, and management. Yusuf, (2005) stressed that the experience acquired through the introduction of ICT in educational setting all over the world and over the decade's shows that the educational benefits of ICT cannot be underestimated.

Multimedia is a term frequently heard and discussed among educational technologists today. It is a prudent mix of various mass media such as print, audio and video or it may mean the development of computer-based hardware and software packages produced on a mass scale and yet allow individualized use and learning. In essence, multimedia merges multiple levels of learning into an educational tool that allows for diversity in curricula presentation. Mandernach (2009) explained that Multimedia is the exciting combination of computer hardware and software that allows you to integrate video, animation, audio, graphics, and test resources to develop effective presentations on an affordable desktop computer.

2. Meaning and Concept of Multimedia

Zumbach, Kumpf, and Koch, (2004) submitted that Multimedia refers to content and the uses that combines different content forms. This contrasts with media that use only rudimentary computer displays such as text-only or traditional forms of printed or hand-produced material More so, multimedia includes a combination of text, audio, still images, animation, video, or interactive content forms. It can be recorded and played, displayed, dynamic, interacted with or accessed by information content processing devices, such as computerized and electronic devices, but can also be part of a live performance. The multimedia is distinguished from mixed media in fine art; by including audio**.**

2.1 Relevance of Multimedia in Teaching

With a multimedia approach, one can access the internet to get more vital information. The film clips (all may be from the same CD-ROM) and blend them into a report. Then by adding titles and credits, thus a new and originality way of communicating one own idea and perspective. Besides student use, teachers should find multimedia of great use in delivering their lessons (Nazir, Rizvi & Pujeri 2012). Similarly, the use a multimedia update information or to teach so as to enliven and also add insight to teaching, thereby improving the quality of the course. education encounters, in modern times, challenges in all aspects of social, economic & cultural life; the most important of which are over-population, over-knowledge, education philosophy development & the change of teacher's role, the spread of illiteracy, lack of staff & the technological development & mass media (Aloraini, 2012).

The use of the modern teaching technologies to solve teaching problems, (El-Halim, 2012) and also to improve the educational productivity, some of the teaching staff sought to mainstream technology within education, developing traditional techniques and using new educational methods (Nwanekezi & Kalu, (2012). Multimedia is one of the best educational techniques because it addresses and arouses more than one sense simultaneously, as it addresses the senses of sight and hearing although it provides different stimuli in their presentation (Aloraini, 2012).

2.2 Theoretical Basis of Multimedia

Constructivism was introduced in the early 1990's. It placed emphasis on the learner's active engagement during studying. It is often discussed from two perspectives, cognitive constructivism and social constructivism. The cognitive constructivism, knowledge refers to restructuring and reorganizing the experience. Knowledge cannot be simply transmitted to the students but should be acquired through students' experience and discovery. Social constructivism holds that learning is the process of interacting and collaborating either among the students or between the students and the teachers (Fosnot, 1996).

The function of the education system is to create an environment in which students can reconstruct their knowledge through relating their existing input with the new knowledge. Constructivism encourages students to learn through personal experiences rather than being fed by teachers (Nunan, 1999). Knowledge building is inherently a social-dialogistic process (Fosnot, 1996). Knowledge is not obtained only by teaching but by others' help and suitable learning material from constructivism way under a certain social cultural backgrounds and teachers should put new and effective modes, ways, and designing thoughts into multimedia teaching practice (Zhou, 2004).

3. Statement of the Problem

Many educationists have wondered why the study of visual arts is not as easy and not easily engaged with its practical's as it should be. However, in developing countries like

Nigeria, e-learning is challenged with the problem of material devices such as computer, computer laboratories, internet and e-mail facilities, videophone systems and teleconferencing devices, fax and wireless applications, digital library, digital classrooms, multimedia systems and the problem of multimedia courseware development among others (Mia, 2006). Other studies like Ortaçtepe (2006) indicated that there is dearth of infrastructures and equipment of trained teachers for e-learning, lack of facilities. The people's beliefs in their efficacy influence them in various ways, such as the actions they take, the choices they make, how much effort they put in their struggles, how long they will persist against obstacles and failures, their flexibility for adversity, how much stress and depression they experience in coping with environmental demands, and the level of accomplishments they ultimately achieve addressed, individual self-efficacy beliefs contribute significantly to the level of their motivation and performance as well. Therefore, self-efficacy beliefs need to be investigated as a key determinant in education (Bandura 2003)

Sloana, Stratfordb and Gregora (2006) posited that, information and communication technology in the process of using ICT. Due to challenges with student/teacher interactions during traditional in teaching methods, students have difficulties learning about visual art when teachers use traditional in teaching methods and common pedagogical strategies. This research seeks the remedy of multimedia for teaching visual arts through the pedagogical use of multimedia mediated instruction in senior secondary schools in Ekiti, Nigeria.

3.1 Purpose of the Study

The main purpose of this study is to examine the influence, usefulness and impact of multimedia for teaching visual arts. To achieve this, the following objectives were pursued.

1. Investigate the availability of multimedia devices in senior secondary schools in Ekiti.
2. Investigate if Visual arts teachers use multimedia for teaching Visual arts.
3. Investigate the impact of multimedia in teaching of Visual arts in senior secondary schools

3.2 Research Questions

1. To what extent are multimedia devices available for teaching Visual arts in senior secondary schools in Ekiti?
2. Do Visual arts teachers use multimedia tools?
3. How effective has multimedia been since it has been introduced in teaching Visual arts?

4. Methodology

4.1 Research Type

The research type is a descriptive type. This design was considered appropriate for this investigation because it is a survey type designed to view the respondents (teachers and students) through the use of a structured questionnaire. It was aimed at determining the relevance and effectiveness of using multimedia instruction to teach visual in senior secondary schools thus, questionnaire was designed to elicit the views from the respondents.

4.2 Sample and Sampling Technique

The population for the study consisted of all secondary school teachers in Ekiti. The target population for this study was all visual arts teachers in Ekiti. 193 visual art teachers and students were involved from 15 randomly selected senior secondary schools offering visual arts from the three local governments area in Ekiti. A purposive sampling technique was used to select visual arts teachers in the selected senior secondary schools because there are limited Visual arts teachers in senior secondary schools in Ekiti.

4.3 Research Instrument

Instrumentation is the process of making selection of appropriate measuring devices and method to a given research problem. The researcher designed questionnaire were the instrument used. The questionnaire consists of 4 sections. Section A consists of Demography data of respondents, it consists name of school, gender, age, educational background, and so on. Section B is designed to enquire from the teachers the reliability of the use of multimedia tools to examine the performance of the pupils being taught. Section C is designed to investigate the effectiveness of the use of multimedia in teaching and learning of Visual arts and section D is to investigate the challenges of using multimedia devices. The response modes for sections B, C and D are; Strongly agree (SA), Agree (A), Disagree (D) and Strongly disagree (SD).

4.4 Validation of Research instrument

To ensure the validity of the instrument, it was subjected to face and content validity by the two experts namely the educational technologist and an experience visual art teacher for scrutiny and comments. Corrections and suggestions were made where and when necessary by the researchers.

4.5 Procedure for Data Collection

Permission was sought from the principals of the selected schools before administering questionnaire. The instrument was administered by the researcher as instructions were given to the student and teachers on how to complete the questionnaire.

4.6 Data Analysis Techniques

Analysis of the data collected was done using frequency count and mean average values.

5. Data Analysis and Results

Research Question one: *To want extent are multi-media devices available for teaching Visual arts?*

Table 1: Availability of Multi-Media for Teaching Visual arts

S/N	Items	Mean ($\bar{X}$)
1.	There are multimedia devices for teaching visual arts in senior junior secondary schools.	3.78
2.	The multimedia devices available for teaching visual arts in senior junior secondary schools are sufficient.	1.75
3.	Most public schools do not have multimedia devices for teaching visual arts in senior junior secondary schools as in private school.	1.88
4.	Visual arts teachers use multimedia devices in teaching arts.	2.13
5.	Most teachers are not competent in the use of multimedia in the teaching of visual arts.	2.50
6.	There is training in place to improve the handling/usage of multimedia devices in the teaching of visual arts.	2.63
7.	Visual arts teachers are interested in government sponsored programme/training towards the improvement on the use of multimedia devices	2.75
8.	Teacher's proficiency in the use of multimedia devices is based on self-development Grand means	3.22 240

Close examination of Table 1 reveals that items 3and 4 which states that multimedia devices available for teaching visual arts in senior junior secondary schools as in private school and most public schools not have multimedia devices for teaching visual arts in senior junior secondary schools as in private school had a means score of 1.75 and 1.88 respectively. However, the grand mean scores for item 3 and 4 was 1.8. By using 2.0 as the benchmark, it can then be inferred that multi media are not available for visual arts senior secondary schools.

Research Question 2: *Do basic Visual arts teachers use multimedia tools?*

Table 2: Visual arts Teachers Use of Multimedia Tools

S/N	Items	Mean ($\bar{X}$)
1.	There are multimedia devices for teaching visual arts in senior junior secondary schools.	3.78
2.	The multimedia devices available for teaching visual arts in senior junior secondary schools are sufficient.	1.75
3.	Most public schools do not have multimedia devices for teaching visual arts in senior secondary schools as in private school.	1.88
4.	Visual arts teachers use multimedia devices in teaching visual arts.	2.13
5.	Most teachers are not competent in the use of multimedia in the teaching of visual arts.	2.50
6.	There is training in place to improve the handling/usage of multimedia devices in the teaching of visual arts.	2.63

7.	Visual arts teachers are interested in government sponsored programme/training towards the improvement on the use of multimedia devices	2.75
8.	Teacher's proficiency in the use of multimedia devices is based on self-development	3.22
	Grand mean ($\overline{X}$)	2.40

Table 2 reveals that use of multimedia ranked highest having the mean score 3.75. This was followed by the Teachers proficiency in the use of multimedia devices based on self-development, that Visual arts teachers are interested in government sponsored programme/training towards the improvement on the use of multimedia devices, there is training in place to improve the handling/usage of multimedia devices in the teaching of visual arts having the means of 3.22, 2.75 and2.63 respectively. The lowest mean score was 1.75 with the multimedia devices available for teaching basic visual arts in senior secondary schools are sufficient.

However, the grand mean score for visual arts teachers' use of multimedia was found to be 2.40. By using 2.0 as the average benchmark, it can then be inferred that visual arts teacher use of multimedia in teaching is positive.

Research Question 3: *How effective has multimedia being since it has been introduced in teaching visual arts?*

Table 3: Effectiveness of The Use of Multimedia in Teaching visual arts.

S/N	Item	Mean ($\overline{X}$)
1.	Multimedia devices encourage students to attend visual arts classes.	3.05
2.	Multimedia enhances retention of topics taught in class.	2.88
3.	Multimedia has assisted in the mastery of skills acquired.	3.10
4.	Multimedia has improved students' academic performance since its introduction.	3.00
5.	Female teachers/students develop phobia when operating electronic appliances/ multimedia devices.	2.58
6.	Male teachers/ students are more skillful in the use of multimedia devices.	2.90
7.	Males are capable in class management compared to female teachers.	2.35
	Grand mean ($\overline{X}$)	2.84

Table 3 reveals clearly that item 4 has the highest mean value of 3.10, meaning that the effective use of multi-media in teaching helps the respondents to acquired mastery of skills. This was noted to be followed by mean score of 3.05 against the statement that Multimedia devices encourage students to attend visual arts classes. The respondents also believed that Multimedia has improved students' academic performance since its introduction.

This having a mean score of 3.00. Furthermore, it was revealed that Male teachers/ students are more skillful in the use of multimedia devices with mean score of 2.90. This was closely followed by a mean score of 2.88 against the statement Multimedia enhances retention of topics taught in class. However, item 5 which

revealed Female teachers/students develop phobia when operating electronic appliances/ multimedia devices had a mean score. On the general note, the grand mean score for the effectiveness of the use of multimedia in teaching visual arts was 2.84. By using 2.0 as the benchmark, it could be deduced that the respondents generally believed that the use of multi-media in teaching visual arts was highly effective.

Research Question Three3b: *How effective has multimedia being since it has been introduced in visual arts?*

Table 5: Effectiveness of the Use of Multimedia In Teaching visual arts

S/N	Item	Mean ($\overline{X}$)
1.	Multimedia devices encourage students to attend visual arts classes.	3.35
2.	Multimedia enhances retention of topics taught in class.	3.18
3.	Multimedia has assisted in the mastery of skills acquired.	3.22
4.	Multimedia has improved students' academic performance since its introduction.	3.24
5.	Female teachers/students develop phobia when operating electronic appliances/ multimedia devices.	2.53
6.	Male teachers/ students are more skillful in the use of multimedia devices.	2.95
7.	Males are capable in class management compared to female teachers.	2.80
	Grand mean ($\overline{X}$)	3.03

Table 5 reveals clearly that item 1 has the highest mean value of 3.35, meaning that Multimedia devices encourage students to attend visual arts classes. This was noted to be followed by mean score of 3.24 against the statement that multimedia has improved students' academic performance since its introduction. The students are of the opinion that Multimedia has assisted in the mastery of skills acquired. This having a mean score of 3.22.

Furthermore, it was revealed that Male teachers/ students are more skillful in the use of multimedia devices with mean score of 2.95. This was closely followed by a mean score of 2.80 against the statement Males are capable in class management compared to female teachers. However, item 5 which revealed Female teachers/students develop phobia when operating electronic appliances/ multimedia devices had a mean score 2.53. On the general note, the grand mean score for the effectiveness of the use of multimedia in teaching visual arts was 3.03. By using 2.0 as the bench mark, it could be deduced that the respondents (students) generally believed that the use of multi-media in teaching basic visual arts was highly effective.

6. Summary of Findings

From the data analysis and the results obtained from this research, the findings were recorded and summarized as follows:

1. Multimedia are not available for teaching visual arts in senior secondary schools.

2. That visual arts teacher use of multimedia in teaching is positive.
3. The use of multi-media in teaching visual arts is highly effective
4. Gender has influence on visual arts teachers' self-efficacy in the use of social media for teaching visual arts.
5. There are a lot of challenges facing the use of multi- Media for teaching visual arts.
6. Secondary school students believe that multi media are not available for teaching visual arts in senior secondary schools.
7. They are of the opinion that visual arts teacher use of multimedia in teaching is positive.
8. They also believe that Gender has influence on visual arts teachers' self-efficacy in the use of social media for teaching visual arts.
9. Students see the use of multi-media in teaching visual arts is highly effective
10. There are a lot of challenges facing the use of multi- Media for teaching visual arts.

7. Conclusions

The result obtained from the data gathered and analyzed in this study indicated that the use of multimedia has positive influence on teaching and learning visual arts. The study also revealed that multimedia facilities are not readily available for teaching visual arts in most of the secondary school in Ekiti.

The findings in the research established that gender have positive influence on the use of multimedia for teaching visual arts this means that male and female teachers were able to use the available multimedia to enhance better performance in the class room. This finding is not without challenges: for example, insufficient fund for the procurement of multimedia facilities, electric power failure, unwillingness of the visual arts teachers to use multimedia for teaching visual arts and so on.

Multimedia, therefore, brings about effective learning and teaching of visual arts and positive improvement in the performance of students. This is an indication that it is an interesting and engaging alternative to supplement teaching and learning. The use of conventional instruction is gradually losing its acceptability, and teachings with antiquated materials are no more encouraged. It is hoped that the utilization of multimedia for learning and teaching visual arts for senior secondary school students will allow better understanding of the subject and improve students' performance in general.

8. Recommendations

Based on the findings of the study; the following recommendations are made:

1. Government should make efforts to provide relevant multimedia facilities to school;

2. The provided facilities should be maintained and made use of adequately.
3. visual arts teachers should change their attitudes towards the use of multi-media facilities
4. Teachers should be trained and re-train in the use of the facilities.

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