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Attitude of students towards teaching art and design using ICT tools in secondary schools in Akure, Ondo State, Nigeria

Öğrencilerin BİT araçlarını kullanarak sanat ve tasarım öğretimine yönelik tutumları Akure, Ondo State, Nijerya'daki ortaokullarda

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ABSTRACT

This study assessed the attitudes of secondary school students in Akure south local government, Ondo state towards learning Art using ICT tools. The study adopted survey research design. Two hundred (200) students were randomly selected from four schools in Akure south local government area of Ondo state. One objective and one research hypothesis were generated for the study. Students Attitude towards ICT (SATICT) questionnaire was used as the research instrument for the study. The study revealed that students, both male and female have a positive disposition towards learning Art using ICT tools. It was therefore recommended that the use ICT in the teaching of Art be engrafted in the curriculum of Art in secondary schools.

ÖZ

Bu çalışma, Ondo eyaletindeki Akure güney yerel yönetimindeki ortaokul öğrencilerinin BİT araçlarını kullanarak Sanat öğrenmeye yönelik tutumlarını değerlendirdi. Çalışma, anket araştırması tasarımını benimsemiştir. Ondo eyaletinin Akure güney yerel yönetim bölgesindeki dört okuldan iki yüz (200) öğrenci rastgele seçilmiştir. Çalışma için bir amaç ve bir araştırma hipotezi oluşturulmuştur. Çalışmada araştırma aracı olarak Öğrenci ICT'ye Yönelik Tutum (SATICT) anketi kullanılmıştır. Araştırma, hem erkek hem de kız öğrencilerin BİT araçlarını kullanarak Sanat öğrenmeye karşı olumlu bir eğilime sahip olduğunu ortaya koydu. Bu nedenle, Sanat öğretiminde BİT kullanımının ortaokullarda Sanat müfredatına yerleştirilmesi önerildi.

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INTRODUCTION

Teaching is one of the most challenging professions in our society today where knowledge is expanding so rapidly that modern technologies demand the use of Information and Communication Technology (ICT). ICT has become within a short time one of the basic building blocks of a modern society. Many countries now regard understanding ICT and mastering its basic concepts as part of the core of education (UNESCO, 2002). Idris (2016) defined Information and Communication Technology (ICT) as the use of computers to retrieve, transmit and manipulate data in education or other systems. One of the most vital contributions of ICT to education is easy access to learning and teaching process. ICT is an umbrella concept that includes any communication device, encompassing: radio, television, cellular phones, computer, network hardware and software, satellite systems as well as the various applications associated with them, such as video conferencing and learning applications. ICTs are generally accepted as modern tools that enable the teachers to modify teaching methods in order to increase students' learning and achievements. ICT can be used in various ways where it helps both teachers and students to learn about their respective subject areas.

Idris (2016) stated that although Art and Technology might be considered incompatible, they are deeply interwoven, even etymologically: techno-logy is literally the speech (logos) about Art (techni). They share an interactive and multidimensional relationship. From prehistoric times, up to today, Art has been using materials created by technology, as its basic structural means of expression, while at the same time, technology has often been the subject and the reference point for art, as artists depict their time's Technology, declaring their experimentation with new means, many decades before the digital revolution. However, this relationship is more prominent today, as ICT promotes the artistic character of multimedia and transmedia applications, creates new types of Art such as computer Art, animation, Internet Art and cyber Art among others (Grau 2003; Chesher, 2004).

The use of ICT in Art teaching leads to the creation of new learning environments that motivate the students in a positive way (Ames, 1992; Pintrich and Schunk, 2002). Digital Art activities are introduced in many curricula in order to attract students who might think they have no artistic talent and consequently show little interest in Arts (King 2001; Roland, 1994), and the natural and appealing familiarization of students with the use of PCs, while at the same time opening up their artistic ways of expression (Carpenter and Taylor, 2003; Tavin, 2002). However, the students' own views about their learning environment are more important factors than the educators' assessments, who tend to paint a more positive picture than their students for their practices (Fraser, 1998). Given the dearth of similar researches, in regard to the incorporation of ICT in the field of Art education, this research was designed to explore the students' views on the use of Technology in Art teaching.

Aim and Objectives of the Study

Aim

The aim of this study is to investigate the attitudes of students towards the teaching of art and design using ICT tools.

The specific objective is to:

1. determine the attitude of secondary school students to learning Art and Design using ICT

Research Hypothesis

The following hypothesis was formulated to guide the study:

1. There is no significant difference between male and female students' attitudes towards the use of ICT in teaching Art.

LITERATURE REVIEW

Technology-Based Teaching

A technology-based teaching and learning offers various interesting ways which includes educational videos, stimulation, storage of data, the usage of databases, mind-mapping, guided discovery, brainstorming, music, World Wide Web (www) that will make the learning process more fulfilling and meaningful (Rob, Mary & Graine, 2012). On the other hand, students will benefit from ICT integration where they are not bounded to the limited curriculum and resources, instead hands-on activities in a technology-based course is designed to help them to stimulate their understanding about the subject. It also helps teachers to design their lesson plans in an effective, creative and interesting approach that would result in students' active learning.

Previous researches proved that use of ICT in teaching will enhance the learning process and maximizes the students' abilities in active learning (Yalman & Tunga, 2014). Yalman & Tunga, (2014) identified three main stages for ICT to be highly valued and regarded by the teachers; integration, enhancement and complementary. Integration approach is about implementing right use of ICT in particular subject area that involved complex concepts and skills to improve student's achievement and attainment. Besides, the review of curriculum is also needed so that only related ICT resources and appropriate software will be installed for the main aims and objectives of curriculum to be achieved. Enhancement approach is about using ICT to give great emphasis on the topic introduced. For instance, Microsoft PowerPoint can be used to present the topic in a very innovative and creative way that will lead into discussion and exchanging ideas and thoughts. Finally, complementary approach is when the ICT is used to aid and support the student's learning. This approach allow students to be more

organized and efficient in which they can take obtain the notes from computer, submit their works by email from home as long as they meet the deadline and looking for information from various sources provided online to fulfil the task given to them (Hermans et al., 2008).

ICT in Art Education

In regard to the use of ICT in Art education, many teaching approaches have been proposed. Within most of those, internet can be used: as a source of educational material, as a means for the development of creativity and self-expression, in order to learn about new Art forms and also as a field of conversation and communication on the images of the digital world and the visual civilization (Sweeny, 2004). Digital Art activities are introduced in many curricula in order to attract students who might think they have no artistic talent and consequently show little interest in Arts (King 2001; Roland, 1994), and the natural and appealing familiarization of students with the use of PCs, while at the same time opening up their artistic ways of expression (Carpenter and Taylor, 2003; Tavin, 2002).

Sweeny (2004) stated that indisputably, ICT has provided opportunities for transforming and enriching different areas of art education. Apart from promoting student-centered learning approach, ICT integration into art classrooms also boosts students' creativity and critical thinking skills in expressing their artistic ideas (Albataineh & Anderson, 2015). In addition, ICT also enhances real problem solving and collaborative approach to learning. It offers a real world experience through simulation, manipulation and creative expression that cannot be expressed in a conventional art classroom (Aljabri, 2012). However, despite the many advantages of ICT to art education, researchers are of the opinion that ICT integration into art education is still far from reaching its target (Bartsch, 2011).

Students' Attitude towards ICT in Art Education

In recent years, progress has been made in increasing teachers' and students' positive attitude toward ICT by fostering an understanding of its value for learning through using and experiencing it more. Teachers are increasingly using ICT to prepare their work more efficiently and to save time. The ICT Impact Report benchmarking survey in 2006 showed that 90% of teachers in Europe already use ICT to prepare their lessons. Recent studies also show the benefits of ICT in increasing motivation and developing skills in students. The report also revealed that a very high percentage (86%) of teachers in Europe state that students are more motivated and attentive when computers and the Internet are used in class. ICT has a strong motivational and positive effect on behavior, communication and processing skills. Multimedia and interactive content on interactive whiteboards is engaging and motivating, particularly for primary students, and students pay more attention during lessons.

New technology opens up new possibilities for differentiated learning and a more student-centered approach to education. With virtual learning environments, the student can be given alternative routes to learning based on his or her personal needs. It also gives teachers more possibilities to modify their teaching and focus more on the learning process than the learning outcome. The question is whether or not educational institutions will learn to adapt these new tools into their framework in a way that enhances learning.

Given and Willson (2010) stated that art teachers are reluctant to embrace ICT into art classrooms due to the concern that it will decrease students' creativity, artistic expression and understanding of art forms. This misconception towards ICT integration among art teachers has reflected their negative attitude and thus become a major issue that requires an extensive concern among researchers.

The levels of ICT integration in education (promotion of active learning, research of complex problems, demonstration of practical implementation of Computer Technology and assessing the students' interest) have been studied in the context of various researches, which were mainly conducted in America and Europe (in Greece, too, during the last decade). Through the experience of applying ICT in the field of education, so far, one can notice a more positive attitude of students towards knowledge and a "motivation" which eventually contributes to the improvement of their performances. The assessment of relevant learning environments by those who participate in the education practice has also been extensively used in educational research. Thus, the teachers' views have been studied, in regard to: a) their role in the education practice, b) their success in using Technology, and c) the role of Technology in education (Honey and Moeler, 1990; Chen, 2001).

RESEARCH METHODOLOGY

The study adopted survey research design. The population of the study comprised of all secondary school students in Akure south local government area of Ondo state. This comprises of all secondary students from public secondary schools in Akure south local government. A sample size of two hundred (200) students was drawn from four (4) secondary schools in Akure south local government using random sampling technique. Fifty (50) students each were randomly selected from the four schools making the total of 200 participants.

Students Attitude towards ICT (SATICT) questionnaire was used as the data collection instrument. To ensure face and content validity of the instrument, the questionnaire was given to two (2) seasoned secondary school Art teachers for necessary correction. Based on their comments, some questions were modified while some were completely eliminated. The reliability of the instruments were obtained using Kuder-Richardson 21 (KR 21). The reliability coefficient 0.87 was obtained which was considered to be high enough for the instrument to be used.

Table 1. Table showing attitude of students towards learning Art using ICT tools

Variables	Mean score ($\overline{X}$)	SD	Remarks
I like using ICT tools for my Fine Art home works	3.60	0.666	Sig
I have a generally favourable disposition towards learning Art using ICT tools	3.65	0.609	Sig
Learning Art using ICT tools is very enjoyable	3.76	0.514	Sig
Learning Art using ICT tools facilitates easy understanding	3.59	0.545	Sig
Learning Art using ICT tools enhances better performance	3.69	0.667	Sig
I dislike learning Art using ICT tools because it wastes time	1.40	0.642	Not Sig
Learning Art using ICT tools causes a lot of distractions	1.71	0.793	Not Sig
Learning Art using ICT tools can be very boring	1.49	0.750	Not Sig
Learning Art using ICT tools has more disadvantages than advantages	1.50	0.602	Not Sig
Learning Art using ICT tools negatively affects academic achievement	1.55	0.514	Not Sig

Mean score rating Key: 1.00–1.75 (SD); 1.76–2.50 (D); 2.51–3.25 (A); 3.26–4.00 (SA).

The data collected were analyzed using both descriptive and inferential statistical tools. Descriptive statistical tools such as mean and standard deviation were used to address the research Objective while t-test was used for the inferential statistics to test the research hypothesis.

RESEARCH FINDINGS AND DISCUSSION

Objective: Determine the attitude of secondary school students to learning Art and Design using ICT

Variable 1 addressed the extent to which students like using ICT tools for their Art home works. The mean score for this variable is 3.60 ($\overline{X}$=3.60). This suggest that most of the respondents strongly agree that they like the idea of practicing art using ICT tools. Variable 2 addressed the disposition of students towards learning Art using ICT tools. Table 1 shows the mean score for this variable is 3.65 ($\overline{X}$=3.65). This suggests that most of the respondents strongly agreed to have a favourable disposition towards learning Art using ICT tools.

Variable 3 addressed the students' take about how enjoyable learning Art using ICT tools is. The mean score for this variable is 3.76 ($\overline{X}$=3.76). This also suggests that most of the respondents strongly agreed that learning Art using ICT tools is very enjoyable. Variable 4 addressed students' perception about how learning Art using ICT tools facilitates easy understanding. The mean score for this variable is 3.59 ($\overline{X}$=3.59). This suggests that most of the respondents strongly agreed that learning Art using ICT tools facilitates easy understanding. Variable 5 addressed the students' perception about how learning Art using ICT tools influence better performance in Art. The mean score for this variable is 3.69 ($\overline{X}$=3.69). This suggests that most of the respondents strongly agreed that learning using ICT tools enhances better performance.

Variable 6 addressed the level of students' dislike for learning Art using ICT tools because of time wastage. The mean score for this variable is 1.40 ($\overline{X}$=1.40). This suggests that most of the respondents strongly disagreed that teaching Art using ICT wastes time. Variable 7 addressed the perception of students about how learning Art using ICT causes distractions. The mean score for this variable is 1.71 ($\overline{X}$=1.71). This suggests that most of the respondents strongly disagreed that learning Art using ICT tools causes a lot of distractions.

Table 2. T-test result on the attitudes of male and female students towards learning Art using ICT tools

Status	N	Mean	SD	SE	T-value	DF	P
Male	107	2.5921	0.6086	0.059	0.2004	198	0.05
Female	93	2.6151	0.6664	0.069	–	–	–

SD: Standard deviation; SE: Standard error.

Variable 8 addressed the students' perception about learning using ICT tools being boring. The mean score for this variable is 1.49 ($\overline{X}$=1.49). This suggests that most of the respondents strongly disagreed that learning using ICT tools causes a lot of distractions. Variable 9 addressed the respondents' perception about learning Art using ICT having more disadvantages than advantages. The mean score for this variable is 1.50 ($\overline{X}$=1.50). This suggests that most respondents are of the opinion that learning Art using ICT tools has more advantages than disadvantages. Variable 10 addressed the students' perception about learning using ICT tools having negative effect on academic performance. The mean score for this variable is 1.55 ($\overline{X}$=1.55). This suggests most of the respondents are of the opinion that learning Art using ICT tools positively influences academic performance.

The above analysis shows that secondary school students in Akure south local government welcome the idea of learning Art using ICT tools because they have a positive perception about the influence of ICT on academic performance /achievement in Art. The analysis also revealed that they have a generally favourable attitude towards learning Art using ICT tools.

Research Hypothesis: There is no significant difference between male and female students' attitudes towards the use of ICT in teaching Art.

Table 2 shows that the male students have a mean score of 2.5921 ($\overline{X}$=2.5921) while female students have a mean score of 2.6151 ($\overline{X}$=2.6151). The difference in the mean scores of the male and female students shows that there is no significant difference in the attitude of male and female students towards the use of ICT. Therefore, the research hypothesis which states that there is no significant difference between male and female students' attitudes towards the use of ICT in teaching Art is hereby not rejected. The implication is that the attitude of students towards learning using ICT tools is not gender biased.

The result revealed that both male and female students have a generally positive attitude towards learning Art using ICT tools without gender bias. This suggests that both male and female students equally appreciate the use of ICT in teaching and learning processes. This corroborates the submission of Torruam and Abur (2013) that ICT appeals to the senses of students regardless of the gender.

SUMMARY AND CONCLUSION

The paper has made it clear that Information Communication Technology (ICT) has an important role to play in the teaching and learning of Art in secondary schools. The study emphasized the that secondary school students in Akure south local government generally have a positive attitude towards learning art using ICT tools without gender bias. The researchers are of the opinion that the use of ICT in teaching Art be incorporated into the secondary school curriculum. Consequently, schools supplied with computer systems by government and other non-governmental agencies require the need for Computer Assisted Instructional packages in Art to be installed on them for use. This will help teachers to develop their skills and competency in instructional delivery.

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