



Telling it like it is: Practical implication of digital technology for fine-arts instruction in Nigeria Universities

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General Note

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ABSTRACT

Practical implication of Digital Technology for Fine-Arts Instruction in Nigeria Universities was examined. The survey research type was employed for the study. Researchers' designed questionnaire was used to gather information. Population for the study were lecturers of fine and Applied Arts in six Universities, one from each geopolitical zone. Purposive random sampling techniques is utilised to select 300 lecturers of 150 male and 150 female. The study was guided with three research questions and two hypotheses. Mean and simple percentages were used to answer the research questions. The two hypotheses were tested with ANOVA and t-test at 0.05 level of significant. The findings revealed that the lecturers' roles in using digital tools for instruction were positive. Therefore,

it is usually recommended that, government should provide more of the digital devices for lecturers' usage and that they should make use of them accordingly.

Keywords: Art Lecturer, Computers, Digital Technology, Fine arts, Gender

1. INTRODUCTION

The offshoot and creativity of computer towards education at all levels has brought positive changes to learning system, this 21st century Digital Technology has increase the rate at which individual exposed to learning. Weller and Anderson (2013) explicated that digital technologies promote learning acquisition and competencies through the teacher's instructions. Studies have demonstrated the effectiveness of digital technology towards instruction the further confirmed through different studies which suggested that digital technology simulates and have positive influence on cultural acquisition and initiative (Ruth, 2006). A good number of researchers have also established the digital technology as having key support and impact in art instruction in higher learning globally. The study of Beaudoin (2013) accentuated that digital Technology exhibited very important role in the delivery and processing of instructions towards learning of arts. Also, Lu, Lu, Yu and Yao (2014) described instructor as helpful hand in this field because of their role in delivery of critical instructions via the digital technologies for integrating and utilisation for learners. Beetham and Sharpe (2013) agreed that digital technology has rotated the lecturers' active action from teachers centred to collaborative, learner-centred, and constructivist that are yielding positively. The digital technology has revolutionised teaching and learning and exposed scholars in higher institution to opportunities which increases their skills and knowledge for researches. It's an avenue for widens the lecturers' scope to resolve divers' challenges in researching and scholarships. It influenced the level of adoption of drive toward individual effort (Maldonado, Khan, Moon & Rho, 2011; Weller & Anderson, 2013).

1.1. Digital in Learning Arts

Studies have confirmed digital as imperative in learning of arts. For example the study of Shirky (2008) succumbed that the digital technology enhances learning in Arts, promotes individual uniqueness and develops creativities in learners. It also broadened their socio-political landscape. Jenkins, Purushotma, Clinton, Weigel and Robison (2009) explicated that digital technology created in scholar s in the field of Arts skills, values, and potentials of perception towards creative in learning. In addition, Freedman, Heinjnin, Kallio-Tavin, Karpati, and Papp (2012) expressed that digital technology, simplify media artefacts, imaginative art and creates opportunity for scholars to exhibits their talents of creativity globally.

The study of Odora and Matoti, (2015) submitted that the teachers constant manoeuvre of digital technology to commune vital information to the learners and instructors efforts provided laudable and solution to the learners academic pursuit. Gerber and Guay (2006) expressed that Art instructors teaches with digital technology in accordance with students personalities, individual differences and background promotes active learning. Peppler (2010) explained that digital technology has modified the changes in educational tools, materials and equipment, of teaching arts. The involvement has reoriented the scope of both Arts lecturers and students practice, and their end product. Gauntlett (2011) reaffirmed that digital technologies assists artist to connects within the world of creativity and create in sequence creativity for others to utilises. The creativities has been transformed creativity learning to higher ground. According to Peppler and Kafai (2010) artistic creations from abstract to realisms is also the product of digital technology.

Roles of Art Lecturers in Development of Digital Technology

Arts lecturers have been playing the role of developing digital technology in learning this has been of increasingly the students networking connections on internet through different devices. Lemley, Schumacher and Vesey (2014) expressed those Arts lecturers has shifted from conservative way of delivery instruction to a modern mode employing digital technologies. This bring about interactive, meaningful and interesting between the scholars and instructors. The lecturers and students now engaging in sharing of educational content collaboratively, vital information are well echoed through digital technology to boosts education morale of the scholar. Thiele, Mai, and Post (2014) posited that the advent of digital technology has influence the performances of student in positive way and increasing the mutual relationship of lecturer-student. The lecturers were able to link with students any time and in any place (Richardson, 2012).

Significance of Digital Technology in Learning

The value of digital technology is established in research literature. For example the study of Maiers and Sandvold (2010) explained that the digital technology as adding to the resourcefulness of curriculum implementation of fine art content. It also provokes

learners in discovering long life learning. Also, Couros (2010) stressed that the digital technology has the collaborative pedagogy that move the functional education forward. In the same vein, the digital technology develops collaboration and knowledge creation (Shittu, Gambari, Bello, & Abdulrhman 2016). The digital technology tools support dynamic learning, and offer new ways of utilized and illustrating instructions (Olive, Makar, Hoyos, Kor,, & Straesser, 2010).

Gender and Digital Technology

Gender has been playing a crucial role in digital technological utilisation. For example, Fallows (2005) mentioned that women are associated and more echoed with digital technology than men especially in utilising the technology for official works. Whereas Hilbert (2011) stressed that women are on the ground to solve educational problem through utilisation of technology devices especially in higher institution of learning; it is the prove of authenticate that gender affected utilization of digital technology.

In another development, the study of Hargittai and Shafer (2006) described women as underused in their proficiency and self-efficacy in handle technology, although men horizon on utilisation of internet and other digital technology were broadened and their experience are incomparable with that of women. Faulkner (2001) submitted that technology devices like cell phone and Camera are classified as common toy used by boys. Whereas, Fakomogbon, Olanrewaju and Soetan (2015) explained that women manoeuvre digital technology to suit entrepreneurship. Hafkin and Huyer (2007) argued that the challenges of motherhood given women more disadvantage in technology over men. In essence, Bimber (2000) described digital technologies as not gender bias but a specific design and produce for absolutely premeditated for both women and men desired for learning.

Conceptual Frame Work on Digital Technology

Researcher propounded different theories on knowledge acquiring. For example the push theory of Brown and Adler (2008) explained the educational approach to student's instruction in relating to social learning. It also provides prolific solution to learning problems. Another theory has been projected in the incorporation of technology to instruction. The prominent one is the technology acceptance model that was put to limelight by Davis in 1998. It gives detail of how persons take a decision to admit and utilises a specific technology. It is further emphasised learning as occurrence which occurs when knowledge and skills that are relatively new were experienced through interaction.

Mazer (2009) stated that social learning ideas are alike with social constructivism, the view were that scholars acquire knowledge from constantly employing careful selection and collaborate in problem-solving issues with others. The researchers recommended the connectionism ideas, where learning is incorporated within the scope of technology (Downes, 2007). The philosophy of connectionism is based on the power which provided impulse to learning and having more critical worth to what one currently known. The teacher imbibes in learners' relative learning ways that makes links with the existing knowledge. Social learning theories, particularly "connectionism", offer clues to roles of educators in this social environment (Siemens, 2004; Anderson & Dron, 2011). In essence, psychologist and believe that learning involves a procedure that put together emotional, cognitive and environmental influence for acquiring, changes within the world (Odewumi, 2017).

The study of Behrend, Wiebe, London and Johnson (2011) expressed that many people have influenced and brought opportunity and dynamic learning in diverse way to technology in learning of Arts. Although, studies revealed digital technology are very prominent in university education. For example Salter and Lam, (2010) stressed that university education embraced digital technology for various instructions in the campuses. The study of Lam and Tong, (2012) expressed that learning of fine arts with digital technology in higher institutions proved academic positive, effective and relevant for learners' education. They concluded that it also increases students and lecturers collaboration which foster permanent learning.

It is clearly stated that digital technologies increases active learning. It is a medium of effective interactions between scholars and instructors. Art instructors are of paramount imperative in roles and achieving the stated educational goal that brings students to totality discovery of creativities in individual and judiciously use. However, the extent to which the lecturers use digital technology for fine Arts instruction in Nigeria is still unknown. The study, therefore, provided the cues to the gaps created by studies, in finding out the Practical Implications of Lecturers' access and lecturers frequently use of Digital Technology for Fine-Arts Instruction in Nigeria Universities.

1.2. Research Questions

These questions are presented to guide the study:

- i. What are the digital technologies use for Fine-Arts instruction?
- ii. Is there any difference in digital technologies used by lecturers in fine arts instruction based on Fine-Arts based on institutional practice?

- iii. Is there any difference in Fine-Arts lecturers' roles in digital technology in Nigeria universities based on gender?

1.3. Research Hypotheses

These research hypotheses were tested in this study.

H0₁ There is no significant difference in fine arts lecturers use of digital technology in Nigeria universities.

H0₂ There is no significant difference in fine arts lecturers use of digital technology based on gender.

2. RESEARCH METHODOLOGY

The study used a descriptive research type survey method. The study population composed of the fine arts lecturers in Nigeria six geopolitical zones. The population for study included the fine arts lecturers in Federal and State owned universities in Nigeria. Twelve Universities were visited and purposively sampled but National Open University of Nigeria (NOUN) was not inclusive in the study because of the mode of operation as distance learning and without fine art courses. The universities were preferred based on these criteria; equivalence in materials (a standard, well equipped arts studio and availability of human resources). School proprietorship (federal and state owned). Mixed composition of the lectures (male and female). Accredited for teaching fine arts courses by the past five years by Nigeria University Commission.

Stratified sampling technique was used to select 300 out of 600 copies of the questionnaires that were randomly distributed to the fine arts lecturers were retrieved for analysis. The research instrument was designed by the researcher on digital technology. The face and content validity of the instrument were done by two lecturers in the Department of Educational Technology and Library Studies in Obafemi Awolowo University, Ile Ife. Two lecturers from the Department of Test, Measurement and Evaluation, University of Ilorin, Ilorin, Nigeria. Moreover, for reliability, the instrument was administered on fine arts lecturers of a private University in Nigeria, situated at Akure Township in Ondo State, which was not inclusive in the study. The split half method was adopted and computed with the Cronbach's alpha in SPSS packages and was used to run the data collected for the reliability, the values were 0.72.

The researcher and researchers' assistance visited the universities that were sampled. The collected data were analyzed using descriptive and inferential statistics. The frequencies were converted to mean and simple percentage, that were used in answering the research questions. Hypothesis one was tested using Analysis of covariance statistics tools while Hypotheses two were tested using t-test statistics.

3. RESULTS PRESENTATION DATA ANALYSIS AND DISCUSSION

Research Question 1: What are the digital technologies used by the fine arts lecturers for instruction?

Table 1 Types of digital technology often used by fine Arts lecturers

S/N	ITEMS	SA%	A%	D%	SD%	MEAN VALUE
1	Broad internet,	52.50	29.00	13.00	05.50	03.40
2	Camera,	46.50	37.00	10.00	06.50	03.24
3	Laptop,	65.00	25.50	05.00	04.50	03.50
4	Mobile Phone,	43.50	29.50	18.50	08.50	03.08
5	Others	45.00	34.00	10.00	11.00	03.08
6	Scanner,	42.00	31.50	19.00	07.50	02.89
7	Wireless internet,	42.50	34.00	10.00	11.00	03.08
	Grand mean					3.21

Table 1 showed the digital devices used by fine Arts lecturers for instructions. The first item with the mean score of 3.40 shows that lecturers use broad internet. Second item with the mean value of 3.24 shows that lecturers used Camera. Item 3 having the mean value of 3.50 shows those lecturers used laptop computers. Item 4 had the mean value of 3.08 on the use Mobile Phone. Item 5 with the mean value of 3.08 reveals that lecturers used others digital technology. Item 6 had the mean score of 02.89 reveals that lecturers used Scanner. Item 7 had the mean value of 3.08 showed that lecturers used other digital wireless. From the table we deduced that majority of the lecturers used digital technology for learning therefore the grand mean value of 3.21 translating to 80.25%.

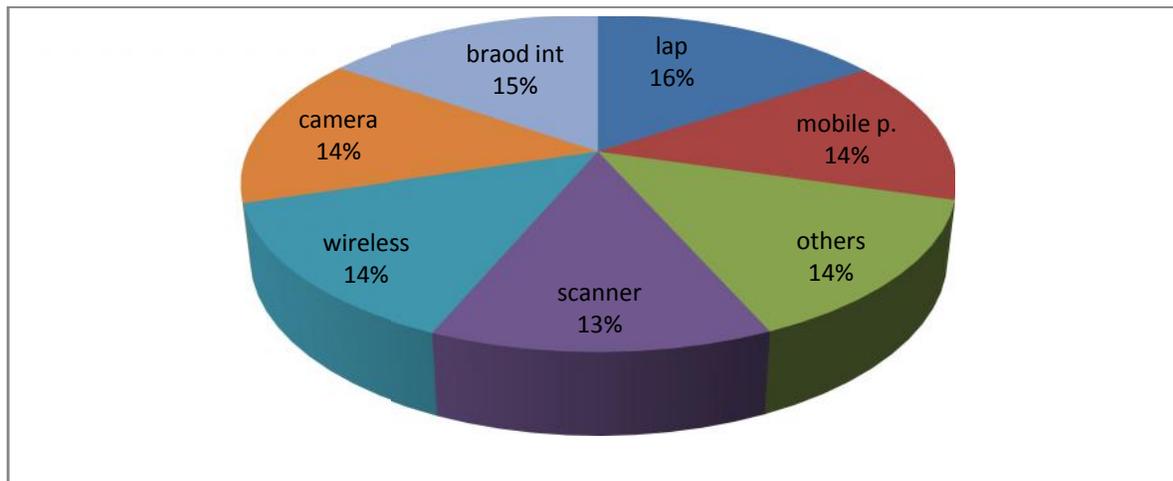


Figure 1 The digital technology devices used by the fine arts lecturers in pie chart

Testing of Hypothesis

Hypothesis 1: There is no significant difference in fine arts lecturers' use of digital technology in Nigeria universities. This hypothesis was tested using ANOVA statistics to compare the lecturers use of digital technology for instructional purposes. The hypothesis was tested at 0.05 level of significance as specify in Table 1.

Table 2 The ANOVA statistic on lecturers use of digital technology for instruction

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2597.987 ^a	5	519.597	6.690	.000
Intercept	265578.253	1	265578.253	3419.498	.000
Factor	2597.987	5	519.597	6.690	.000
Error	22833.760	294	77.666		
Total	291010.000	300			
Corrected Total	25431.747	299			

Table 2 shows that the calculated F value of 6.690 is significant because the significant value of .000 is not bigger than 0.05 alpha levels. The result implies that there is significant difference on the lecturers use of digital technology for learning. Therefore, the null hypothesis is not accepted. This study established that the lecturers use digital technology for instructional purposes.

Hypothesis 2. There is no significant difference in fine arts lecturers use of digital technology based on gender.

Table 3 t-test result of male and female fine arts lecturers on the use of digital technology for instructional purposes

Variables	No	Mean	Sd	df	t-value	(2-tailed)Sig.
Male	150	34.93	87.40	48	11.8	.000
Female	150	24.60	6.34			

Table 3 shows that the calculated F value of 11.8 is significant because the significant value of 0.000 is lesser than 0.05 alpha levels. The result implies that there is significant difference on the use of digital technology by both male and female lecturers for instruction. Therefore, the null hypothesis is rejected. This established that both male and female lecturers use digital technology for instructional purposes.

4. DISCUSSIONS OF FINDINGS

The study examined the types of digital technology used by the fine arts lecturers and specifies on the different categories of digital technologies often used by the fine arts lecturers. It also revealed that fine arts lecturers have access and utilised different digital technology device for instructions these are mobile phones, laptops, scanners, digital camera flash disc.

The null hypotheses tested were not accepted but rejected; therefore this study established that the lecturers use digital technology for instructional delivery. Also, it was reported that both male and female lecturers utilized digital technology judiciously for instructions. The findings of this study agree with the previous studies of Odora and Matoti (2015), Lam and Tong (2012) and Beetham and Sharpe (2013) through their reviewed which revealed and indicated that using digital technology were positive for learning. Lecturers often used digital technology for lessons. Therefore if the lecturers can continually utilise the digital technology it will expand and wider their horizon in term of acquisition of knowledge.

The findings on the gender and digital technology it was established that gender has no different in the use of digital technology among the lecturers therefore the study of Ruth (2006) buttressed and up held the result through the confirmation that women invented private learning with digital. Also Isabel (2005) supported the result by given detailed of ladies that access digital technology with different digital technology devices for learning and instruction. In essence studies revealed that gender evidences could still be exposed and proved in respect of the use of digital technology.

In conclusion, it was revealed through the results from the study lecturers used different digital technology for teaching and learning of Fine and applied Arts. The usage was significantly different in institutions and it was not gender prejudice. The digital technology devices in Fine and Applied Arts instruction utilised by lecturers promotes collaboration in the instruction and improves learning.

5. RECOMMENDATIONS

By implication, it was recommended that; the school should endow with alternative to electricity constant of power. Internet should be put in place for lecturers and students access. Workshops and seminars should be put in place periodically for Fine and applied Arts lecturers on digital technology access and use for instructional practice.

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