INCORPORATING E-TECHNOLOGY INTO GENERAL ART AND APPLIED ART EDUCATION CLASSROOMS IN NIGERIA: BRIDGING THE ADDITIONAL GAP CREATED BY COVID -19

By

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Abstract

While early experiments in digital and technological art began in the 1960s, degree programs that focused on it did not emerge until the 1980s. Most digital art pioneers were self-taught and created their work at research centers and universities. Emerging digital artists were primarily fine art students who supplemented their education with courses in computer science, graphics and programming. The first Master of Fine Art {MFA} in Computer Arts was established at the School of Visual Arts New York, USA in 1986. The goal of the program was to provide an academic and studio environment in which artists would learn about the theory, history and practice of digital art. Several MFA degree programs followed and continue to be established. While museums were resistant to this type of art earlier on, international organizations and a small group of galleries embraced it. As digital artists began to redefine the contemporary art landscape, museums and galleries began to take an interest in exhibiting this creative work. The development of the World Wide Web in the mid-1990s radically changed both the museum and contemporary art world, and as well the education of artists, but the advent of the new Coronavirus disease has totally revolutionized the entire educational landscape including that of the art world from 2019. The Nigerian teacher educational programmes of the NCE, BA.ED and BSC.ED have huge digital gaps further widened by trending covid issues. This paper explores the parallel developments of digital art education; changes in how art is created, experienced and exhibited; new forms of contemporary art in the "new normal era." This paper recommends that e-technology be integrated as a matter of policy into general and applied art education in all levels of educations.

Keywords: Digital art, covid-19, studio art, fine art, digital studio, e- technology

Introduction

The innovations in science and technology have affected different areas including teaching and learning of Fine and Applied Arts in both tertiary and secondary schools. This was evidenced during the lockdown as a result of the COVID-19 pandemic, where only few schools with high ICT based instructional system could teach and evaluates their students. Art Teachers have been attending in-service training but not on the area of using technological tools (digital studio) to prepare and present instructions to the students. Research findings made by Nworji

(2019) showed that teachers' need to be provided with in-services training based on current needs and innovations in the society that influences the process of instruction. The lack of realistic in-service training that address the needs of the teachers have affected training of students, as teachers cannot give what they don't have. This condition needs to be addressed as it would affect the quality of education and achievement of sustainable development of Fine and Applied Arts teachers in the current information age/virtual era.

There is consequently, a critical need for a paradigm modification from the traditional classroom to the flipped classroom/ digital studio where the functionalities of electronic technologies are integrated into the instructions of fine and applied arts, in line with the up-to-date methods in the teaching profession, consistent with the trending global best practices in education. New realities like covid-19 and technologies bring central changes to the lives of 21st-century students, who are the most frequent user of emerging technology and online services (OECD, 2016). As stated in the National Policy on Education (FRN, 2013), teaching and learning should be activity-based, learner-centered, experimental as well as information and communication technology (ICT) supported. Using electronic technology in the teaching of Fine and Applied Arts is therefore consistent with the goals of the National Policy on Education, (2013) as regards the instructional processes in the contemporary education system. Electronic Technology learning refers to a broad educational concept primarily characterized by the usage of electronic media and other types of communication technologies. It encompasses a wide range of different types of educational technologies, because of this; the technologies old and new, such as radio, cassette tape, CD- discs, audio streams, downloadable packages, internet services, television, i-pad, laptops Android phones, interactive boards, etc. can be used for instructions. In addition to the internet backbone, some electronic media devices and facilities ensure e-learning. These are broadband, desktop, laptop, tablet, smartphones and other handheld devices (Okwo, 2019). Modern trends in art practices and learning call for the integration of electronic devices by the teachers for their instructions and guidance and the students on the other hand, for their individual as well as cooperative learning. However, the onus of this paradigm shift and the success of the electronic technology integration depends on the teachers who are expected to be versed with the interest and competency in the selection and utilization strategy of the myriads of instructional devices available in electronic technologies. Technology integration is defined as the use of technology to enhance and support the educational environment.The author asserts that curriculum integration with the use of technology involves the infusion of technology as a tool to enhance learning in a context

area or multidisciplinary setting. The use of e-Technology in the instructional processes in the school system, therefore, cannot be overemphasized.

Technology use in Fine and Applied Arts Education

In recent times, there have been emerging technologies that can aid skill development, artistic production as well as teaching and learning of Fine and Applied Arts. "The truth is that technology has been providing artists with new ways to express themselves for a very long time" (Rieland, 2014).The author added that, over the past few decades, art and technology have been more intertwined than ever before, whether it is through providing new ways to mix different types of media, allowing more human interaction or simply making the process of creating it easier. The author highlighted seven newer technologies, termed "Digital Revolution" used in re-shaping arts and its production. Here are four of them namely:
i-Petting Zoo-and minima forms: hanging tubes that read people's movement, and futuristic robots or artificial pets that can read moods and reactions. ii -Vertiwalker: paint pen and software programme that could be instructed to follow a certain pattern. iii -Light Echoes: Laser is mounted on a moving train or automobile for the dark. The projection leaves visual "echoes" on tracks and around the moving object; which the artists captured through long exposure photography.
iv -"Treachery of the Sanctuary" An art installation developed by video artists meant to explore the creative process through interactions with digital birds.

Other soft wares according to *https://justcreative.com/best-software-for-digital-artists* are:

i. Adobe Fresco — A digital art application for iOS and Windows

ii. Corel Painter 2022 — A great software for capturing different art mediums digitally

iii. Adobe Illustrator — The best software for illustrations and vectors

iv. Affinity Photo — One of the best affordable digital art software

v. Rebelle 4 — A great software for replicating painting techniques

vi. Krita — The best free software to use with drawing pads

vii. CorelDRAW — The affordable Photoshop alternative for vectors

viii. GIMP — The best free Photoshop alternative

ix. Clip Studio Paint Pro — the best affordable software for concept art and illustrations

x. MediBang Paint Pro — A great free software for digital painting and manga

 Paintstorm Studio — A multi-platform digital art software

xi. IbisPaint — A free art software for Android and IOS tablets

Additional captivating technology device is called drawing Tablets. According to Arora (2019), "In today's tech-savvy world, a drawing tablet is a graphic designer's best friend". The author analyzed that with thousands of features and functionality, a drawing tablet grants a vast spectrum of flexibility to designer, different artists performs differently with different kinds of drawing tablets, which includes; Graphic Tablets, Pen displays and Tablet computer. Other emerging devices include Digital and 3D printers, Bluetooth and cloud storage use by graphic designers, digital painters and illustrators and cutters for sculptors.

The State of Fine Art and Applied Arts in Colleges

It is unfitting and humiliating to say that, Fine and Applied Arts graduates from the Colleges of Education in Nigeria may not fit into the contemporary workplaces and art practices because they were not taught using the latest state-of-the-art instructional facilities (e-technology) to move with the time. Some of the graduate artists have to go through another computer-based training after graduation to meet up with the anticipations of today's clients (Bassey & Nya, 2019). For example, a graphic artist who depends on the manual production process of graphic work such as banners and other adverts cannot match up with the speed and precision of the high-tech machineries for the production of flex banners and other digital items. This assertion is in line with, Lehman (2001) who asserts that "evidence of the effectiveness of arts for instance, in embracing student's creativity and producing more prepared citizens (artists) for the workplace for tomorrow, can be found documented in studies held in many varied settings from school campuses to the corporate world. If the school system lag behind in its instructional approaches the future of the nation's educational system will also lag, thus, retarding progress and development. The integration of electronic technology into the instruction of Fine and Applied Arts is apt and timely in the face of the prevailing circumstances confronting the growth of art in the school system and the secular world. Integrating electronic technology into the instructions of Fine and Applied Arts may enhance the quality of teaching and learning in

the school system, and ultimately improve the performance and skills of learners in various learning experiences including specializations in Fine and Applied Arts.

The United Nations Educational Scientific and Cultural Organization (UNESCO) during its expert conference on Education, Art and ICT integration for the Development of Arts Education of one its Personality, concluded that ICT potentials and objectives of arts education can be used differently depending on the type of activity. According to the document, in the area of arts education and aesthetics development, ICTs, besides general technological opportunities, can offer such important features as means of creativity, self-actualization, means of creating visual communication objects, modeling of a virtual environment and informational objects, means for integrating visual, aural and moving images in one's communication object (UNESCO, 2004). More so, its review (2015) revealed that the more effective use of digital teaching to raise attainment includes the ability of the teacher to identify how digital tools and resources can be used to achieve learning outcomes and adapting their approach, as well as having knowledge and understanding of the technology. The successful integration of ICT into the art classroom depends on the ability of teachers to structure their learning environments in some non-traditional ways, merging technology with new pedagogies to develop active classrooms that encourage cooperative, interactive, collaborative learning and group work.

Encyclopedia of Education (2002), affirmed that the rapid advancement of computer technology has transformed arts at all levels. It further added that, art-making, whether in the professional world or schools often are aided by computer programmes that allow artists to create and manipulate images electronically. The state-of-the-art instructional method in fine and applied arts is manifold and its benefits to skill development, improvement and advancement of art practice are undeniably huge and the value chain limitless. These include images for classroom studies which are routinely available in electronic formats such as CD-ROM making it easy for a school to maintain an extensive collection of virtual references. Virtual field trips, through the internet also make the teaching and for the workplace for tomorrow, can be found documented in studies held in many varied settings from school campuses to the corporate world. If the school system lag behind in its instructional approaches the future of the nation's educational system will also lag, thus, retarding progress and development. The integration of electronic technology into the instruction of Fine and Applied

Arts is apt and timely in the face of the prevailing social distancing/ covid -19 circumstances confronting art education, general learning in the school system and the circular world. Integrating electronic technology into the instructions of Fine and Applied Arts will enhance the quality of teaching and learning in the school system, and ultimately improve the performance and skills of learners in various learning experiences including specializations in Fine and Applied Arts.

Conclusion

It is apparent that the Fine and Applied Arts teaching and learning condition has been heavily bastardized by persistence in the traditional teaching and learning methodology by teachers. The enrolment rates in the department of Fine and Applied Arts in the Colleges of Education in Nigeria continue to dwindle unabated which may be as a result of this mundane approach. Studies have shown that the incorporation of e-technology into instructions of various specialization contents in fine and applied art has brought tremendous improvement. The functionalities of ICT used in creating various artistic expressions are seen to be successful and impressive. In spite of the numerous benefits, frequent dependence on technology has equally influenced the field of Fine and Applied Arts negatively, in terms of originality, origination, independence and creativity. Today, technologies do the greater part of thinking and exploration for the artists. The spirits of creativity, charisma, independence, cognition and psychomotor have been played down because of the "ever-readiness" of technological devices to carry out commands. Where the students are not exposed to the use of these emerging technologies in their learning process, it is bound to influence them negatively in the labour market and in life as the use of technology in the production processes is now the order of the day- especially in the current covid-19 era. The labour market seems to need more technological artists and less (real-time) creative artists. Therefore, it is hoped that incorporating e-technology into the instructions of Fine and Applied Arts education may bring the desired impact in the various art schools and the secular world

Recommendations

Government at different levels should take proactive steps in providing e-technology devices to the department of Fine and Applied Arts in the Colleges of Education in general and Technical colleges in particular in recognition of the fact that this category of teachers would teach our future generations of digital kids. The government should also ensure the access and utilization of those facilities through implementation, monitoring and evaluation system.

Individuals, corporate bodies and donor agencies should also be involved in supporting the Department of Fine and Applied Arts through donations of e-technologies facilities, training and retraining of staff and students of the department on the effective utilization of the facilities.

Foreign or experienced art teachers, who act as art education consultants should be invited and paid to set –up or transform our local manual art classrooms into digital art studios, to match up with global teaching/learning trends in the new normal incited by Covid.

Maintenance: Proper Culture of Maintenance Should be put in place by school managers to Keep the Facilities, Computers, Etc. in Good Condition Continuously.

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