State-of-the-art in the teaching of fine and applied arts in colleges of education in Nigeria

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ABSTRACT

The paper examined the state-of-the-art in teaching Fine and Applied Arts in the Colleges of Education in Nigeria. Views and studies by experts and cooperate bodies were analysed. The concepts of Fine and Applied Arts, e-technology use, impacts and influence of technology as well as the state of the art in the instructions of Fine and Applied Arts were also analyzed. The study revealed that the enrolment rate in the department of Fine and Applied Arts in the Colleges of Education in Nigeria continues to dwindle unabated due to the persistence on the conventional method of instructions and lack of interest in the path of the students as a result of uninteresting instructional approach. The paper concludes that the use of an e-technology (state-of-the-art) instructional model can enhance the teaching and learning of Fine and Applied Arts and ultimately improve the performance and interest of the students. It was recommended among others, the provision of e-technology devices to the department and also inculcates the principles of implementation, monitoring and evaluation in order to ensure the success of the initiative.

Keywords: State-of-the-art, teaching, fine and applied arts, Colleges of Education, Nigeria.

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INTRODUCTION

Any system that is resistant to change is heading to extinction. Change in this context also includes periodic evaluation of the state of performance and growth of the system. The system is dynamic. A dynamic system is a living system. A living system is such, that is, constantly updated and is consistent with (state-of-the-art) that is, the merging technology and innovations in principles and practice of all affairs, including educational affairs. Contextually, state-of-the-art refers to the integration of emerging technology in the teaching and learning of fine and applied art in schools. This corroborates Bisong (2012) who asserts that: We live in a dynamic society where social, political and technological conditions are changing continuously, so education providers should be aware of the trend in order to key into the current instructional approaches and curricular methods that will make teaching and learning processes to be improved and attractive so as to prepare the learner for the real-life challenges in our global community.

Fine Arts is an important subject area in the school system which the teaching and learning of other subject areas depend on for their successful instructional processes (Bassey and Nya, 2019). The existence and growth of fine art in the primary and secondary school levels, which are the foundations of artistic development depends on the quality of Art teachers produced by the Colleges of Education. This implies that the quality of Art teachers produced by the Colleges of Education in Nigeria is sine-quo-non to the quality and growth of fine Art in the schools in Nigeria. Udosen (2007) opined that the quality of products is also a function of the method of teaching adopted in the teaching-learning process at the various levels of education. The author opined that assessment of instructional utilization strategies provides the standard for the types of education during the teaching-learning process.

At the College of Education level, the subject is studied as Fine and Applied Arts. There is no hard rule about the

definition of Fine and Applied Arts. It has dual operational contents. Fine Arts is viewed as those artworks, created primarily for aesthetic reasons, sometimes considered as arts-for-art-sake, rather than for commercial or functional use (Visual Art Encyclopedia, 2019). The document added that Fine Arts typically denotes such expressions as drawing, painting, printmaking and sculpture. It deals with aesthetics and the intellectual stimulation of the viewer while Applied Arts creates utilitarian works, these include architecture, digital art, photography, industrial design, fashion design, interior design as well as decorative arts. Fine or Applied Arts are both visual in nature. Fine and Applied Arts is important for the growth of the individual and the nation at large. Fine and Applied Arts enhance the process of learning, nourishes the system, which includes our integral sensory, attentional, cognitive, emotional capacities, which are in fact, the driving force behind all other learning (Jensen, 2011). The author emphasized that the arts promote the understanding and sharing of culture and social skills, enhance the awareness and respect of other as well as perceptual and cognitive skills. According to the studies by Arts Education Partnership Working Group as cited in Encyclopedia of Education (2002), a strong art programme includes intensified student motivation to learn, better school attendance, and increased graduation rates, improved multicultural understanding and the development of higher thinking skills, creativity and problem-solving ability.

Also, Okonofua (2009) asserts that Fine and Applied Arts is technically related to industry because of the synergy of being a product and process, which endears it to manufacturing. In spite of the numerous benefits of Fine and Applied Arts to the educational system, technology, industry and the socio-economic advantages, students' interests and the societal impression about the subject continue to dwindle by the day, as reflected in the low enrolment rate of students in the department of Fine and Applied Arts in the Colleges of Education in Nigeria (Joint Admission and Matriculation Board, 2017, 2018, 2019). The dwindling effect impacts negatively on the growth of the visual art industry in Nigeria. There is no doubt that over the years, lecturers and instructors in the Fine and Applied Arts in the Colleges of Education have been depending on the conventional" Traditional" classroom synchronous methodology and approaches of teaching the subject, in which the entire classroom activities depended on the teacher. The traditional method is an approach in which the teaching and learning of fine and applied art by teachers dependent solely on the face-to-face, talk-chalk approach which was uninteresting and lacks participation, unlike the technology integration approach which is participatory in nature.

There is, therefore, an urgent need for a paradigm shift from the traditional classroom to the flipped classroom where the functionalities of electronic technologies are integrated into the instructions of fine and applied arts, in line with the state-of-the-art in the teaching, consistent with the global best practices in education. New technologies bring fundamental changes to the lives of 21st-century learners, who are the most frequent user of emerging technology and online services (OECD, 2016). As stated in the Nigeria 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. Utilizing electronic technology in the teaching of Fine and Applied Arts is 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 include 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 (Timothy, 2015). 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.

CONCEPT OF FINE AND APPLIED ARTS

Fine and Applied Arts is traceable to the prehistoric era, where the Stone Age men began to record on the walls of the caves their encounters with the wild creatures during their hunting expeditions (Bassey, 2009). The cavemen carefully illustrated their activities during the day, on the walls of the caves. This marks the beginning of drawing and illustrations which are the core of Fine Arts. As their activities progress, there came the unconscious

discovery of implements and weaponry through the shaping of stones, woods, animal bones, etc. which brought to bear the activities of craft-men which is an aspect of Applied Arts. A work of art is simply a creation made by human hands, not by nature (Okonofua, 2009). The author added that it is part of man's inner nature to create, to communicate to use symbols and to seek approval for these activities while first satisfying the inner need to "make" something out of inanimate materials.

Fine and Applied Arts encompasses all forms of creative endeavors in visual forms which give utilitarian and aesthetic functions, these include drawing, painting, sculpture, graphic designs, ceramics, textile designs, architecture, furniture making, welding, decorative arts, printmaking, glassblowing, etc.

According to Goshi (2014), Fine and Applied Arts education is an aspect among other areas introduced by the Federal Government of Nigeria to achieve its numerous goals in Education. According to the author, among the expectations of the National Policy on Education is exposing the students to the trade which will provide the skills that can make them highly productive, competent and therefore become employable themselves or by others.

Findings reported in Champion of Change as cited by Fiske (1999) that the impacts of the arts on learning worthy of note are:

- Arts teach students not normally reached in ways and methods not normally used.
- It changes the learning environment to one of discovery
- Students connect with each other better
- The arts provide challenges to students of all levels
- Student learn to become a sustained and self-directed learner
- The study of arts positively impacts the learning of students of lower socioeconomic status as much or more than those of a higher socioeconomic status.

The study of Fine and Applied Arts is beneficial not just to the artists, but to other spheres of endeavors. According to Encyclopedia of Education (2002), drawing continued to be a basic component of the core curriculum throughout the eighteenth and nineteenth centuries, when educators saw drawing as important in teaching handwork, nature study, geography and other subjects. Arts education later expanded to include painting, design, graphic arts (literature and arts/art and architecture, art general/graphic arts) as well as sculpture and ceramics; although art continued to be seen primarily as utilitarian. Also, National Art Education Association (NAEA, 1999), State that the standard for specialist Art teacher preparation at the beginning of the twenty-first century includes, changes of approaches to determining the art content (Art History criticism activities and production, and pedagogical knowledge-base for teachers) the administration of programme of teacher preparation and

conceptions of quality in teacher education in the visual arts. The changes of approaches to determine the contents of the arts may include the integrations of Fine and Applied Arts in the College of Education in Nigeria. The state-of-the-art in the teaching of Fine and Applied Arts is in congruence with the flipped classroom situation which demands art teachers and instructors who are prepared and willing to take advantage of the devices available in electronic technology for their teaching processes. The use of electronic technology in the education system is trending, therefore Fine and Applied Arts cannot be an exception.

TECHNOLOGY USE

Nwoko (2005) observed that Fine and Applied artists use a vast number of processes and delivery systems to turn their personal visions and ideas into tangible, copyrightable, and marketable creations that others can view share and buy. These include digital printing, reproduction, technologies, computer manipulations, among others.

Akpan and Otu (1998) confirmed that computer-mediated instruction is user-friendly to all humans irrespective of sex for purpose of knowledge and skill transmission. One of the essences of integrating computer-mediated instructions into teaching and learning of Fine and Applied Art is for the virtual field trip which provides teachers and students with the experiences that extend learning beyond the four-walled classroom through the virtual field trip. Students look outside themselves, adopting a less egocentric focus and become better informed about local, national and international interests; and are thus better able to understand issues and concerns that may arise about an area they have "visited" (Beal and Mason, 1999)

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 technology, termed "Digital Revolution" used in re-shaping arts and its production, namely:

- "Petting Zoo" and minimaforms: hanging tubes that read people's movement, and futuristic robots or artificial pets that can read moods and reactions.
- Vertiwalker; paint pen and software programme that could be instructed to follow a certain pattern.

- The Beauty of Dirty Air: using the scientific method to trap polluted air and transforms it into a movie of pollution using an artificial plastic nose (censor).
- Paper Cuts: using paper cuts from laser to create stained-glass window design.
- Light Echoes: Laser is mounted on a moving train or automobile for the dark. The projection left visual "echoes" on tracks and around the moving object; which the artists captured through long exposure photography.
- "Treachery of the Sanctuary" An art installation developed by video artists meant to explore the creative process through interactions with digital birds. Another fascinating 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.

STATE-OF-THE-ART TEACHING OF FINE AND APPLIED ARTS

The state-of-the-art in the teaching is expressed through the integration of electronic technologies as an instructional mode in the school system.

The conventional method of teaching of Fine and Applied Arts had been such that depended solely on the teacher and the analogue method which was boring because the teacher only depended on what they knew, as such references and interactivity which are important in teaching and learning of fine and Applied Arts, especially at the budding stage of artistic development, was limited and sometimes non-existent. It is unbecoming and embarrassing to say that, Fine and Applied Arts graduates from the Colleges of Education in Nigeria may not fit into the modern workplaces and art practices because they were not taught using the 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 expectations of today's clientele (Bassey and Nya, 2019). For instance, 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 computerized machines 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 circular 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 is 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, IDTL 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 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 mode in fine and applied arts is multifarious and its benefits to skill development, improvement and advancement of art practice are undoubtedly 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

learning of Fine and Applied Arts in the Colleges of Education interesting, compelling and impactful. Through the internet and other electronic devices, students can embark on virtual field trips to museums, galleries, studios, important arts locations and activities which can also be reached through live–streaming, for their personal references, studies and practice. Rosen and Beck–Hill (2012) asserts that the use of technology in the classroom can enhance observational skills by students. The researchers observe that technology usage in teaching increases higher teacher-learner interaction, a greater number and type of teaching methods per class, more collaboration, and significantly higher learner engagement. Teaching pedagogy through technology differs significantly from the traditional classroom and using digital resources made planning and implementing differentiation more feasible.

Other benefits of E-technology to the students of Fine and Applied Arts include, but not limited to; the E-technology instructional mode will enhance collaborative learning amongst learners which helps the learner to share academic ideas and also discover solutions to common instructional tasks:

- E-technology helps students to break communication gaps, enhance inter-campuses as well as interpersonal connectivity and interactivity.
- E-Technology instructions will help expose learners to new styles, methods, materials and achievements by other professionals in the field of Fine and Applied Arts.
- The state-of-the-arts packages for creating the works of arts today also includes, imitating visual expressions such as the illusion of three dimensionalities, creating imaginary imagery, or constructing the past and projected the future (virtual modeling) turning of screen images into interactive objects (digitalized video images, animated objects and films).
- Collective internet artifacts example virtual graffiti. The most interesting and original self-developing projects of artificial life-form can be created. Through e-technology it is easy to draw and modify images directly on the interactive screen.

According to the Institute for Information Technologies IITE (2003) concepts and skills, a student can learn while accomplishing a creative projective assignment with multimedia educational projects include students becomes aware of basic concepts of artistic creativity as one of the main forms of cognition, students directly experience artistic self-expression, students familiarizes with the aesthetic characteristic of various civilizations artifacts, students masters graphical means of expression (two-dimensional) method of graphical organization and presentation of information communicative opportunity of color- coding, students learns spiral means of expression (three dimensional) means of simulating 3D objects that represent integrated informational entities designing

details and fragments, and finally integrating subsystems into a holistic composition among others.

However, electronic technologies are currently used at relatively low levels and in some instances completely non-existent in the classroom to support basic teaching processes in the colleges of education in Nigeria.

There is an urgent need therefore for this situation to change, so as to accommodate the state- of the arts in teaching brought by the integration of e-technology.

TECHNOLOGY INFLUENCES ART TODAY

Artistic activities today are influenced by the new trend propelled by emerging technologies. Researches have shown that new technologies have led to artistic innovations either by increasingly altering the content of artistic media or by evolving the creation of new media. "As the technological medium progress, new art forms emerge" (Samdanis, 2016). The researcher cited databases art, internet art, satellite art, or big data, as some examples of emerging art forms as artists incorporate digital technologies within their artistic practices. The following examples are considered as a niche of contemporary Arts, which to some extent are seen more as scientific rather than artistic.

The use of photography by artists through various camera effects has also influenced the conventional art practice. The use of computers has given birth to new art genres such as digital Art, kinetic Art, etc. Sculptors began to use 3 DI scanners and a printer to alternate the sculptural pieces. Painters use Photoshop and illustration programs as tools to aid in the creation of art forms. Before the advent of new technologies, artists engaged their cognitive, affective and psychomotor domains effectively to conceptualize and render designs or pieces of art, but today greater part of the artistic practice is technology-engaging. This has played down on the originality of Artworks. Through the internet and other technological devices and platforms, individual styles, material manipulations, artistic renditions have been watered down by the frequent dependence on technology to create artworks. These, therefore, weakened the spirit of creativity, originality, charisma, independence and individuality in the field of fine and applied arts.

However, the benefits of technology to the arts and artists cannot be overemphasized. The new technologies have helped in the production process; in terms of precision, timeliness, the volume of production, man-hour economy as well as financial values. Although emerging technologies are ubiquitous, educational institutions, especially Colleges of Education in Nigeria, have not effectively integrated the technologies for the teaching-learning process. In most cases, the technology devices are either unavailable, inaccessible or, incompetency, phobia, or lukewarm attitude poses a huge challenge to its use amongst teachers and students in the

department of Fine and Applied Arts in the Colleges of Education in Nigeria.

TECHNOLOGY IMPACTS TODAY'S ART

The impacts of emerging technology on the field of Fine and Applied Arts need no emphasis in our technology-ridden world. New technologies have left no field untouched, and the arts are no exception; Information and Communication Technology (ICT) have accelerated consumption in art markets, as internet technologies facilitate global operations and new business models reinforce or complement the established art ecosystem (Samdanis, 2016).

Emerging technologies have invaded the "Life" of Art in all directions ranging from conceptualization, rendition, exhibition, marketing, consumption and even conservation as a result of new trend collaborations. In line with this assertion, Samdanis (2016) again, infers that technologies facilitate operations and collaboration in the art world, and art business provides fertile ground for the development and application of technologies. In other words, technologies, business and culture converge in order to promote art and provide richer experiences for the buyers and audience. Online platforms have provided limitless outlets for the exposition of Artists and their works. Before now, Artists depended on themselves for the production of their works and intermediaries for the exposition and marketing of their productions. The story is no longer the same with the emerging technologies. The technologies platforms have helped to expose and connect the artists to their professional colleagues, art markets, collectors, galleries, museums, auction houses and other pedestals and outlets. These new trends have increased transparency regarding the origin and the originality of artworks, purchase and auctions negotiations, and ultimately stimulate the art ecosystem. These have actively intensified the globalization of art.

With the globalization of Artworld through technology, it may not matter anymore, who local or international artists are. The Internet has provided a common world for every artist who wishes to move with time. "This new dimension has triggered entrepreneurship in the artistic field, via online business models.

Social media, such as social networks and blogs have stepped up digital narratives, visibility and audibility of art and artists, cultural branding, identity construction and interaction with the fans and audience.

"Deluge" of information generation, gathering and consumption through social media have fuelled new dynamics in art. According to Jenkins (2007) in the artistic field collective intelligence influences the production and consumption of art in terms of crowd funding and democratization of selection in art institutions which develop service based on vision-generated data in terms of online art galleries that allows user's behaviour

and preferences to shape trends and popularity of artists in terms of mobile applications through which users upload and share information about artworks, exhibitions and urban experiences, also in terms of art critiques which take place as users interact erratically on social media.

CONCLUSION

It is obvious that the Fine and Applied Arts teaching and learning situation has been characterized 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 the mundane approach. Studies have shown that the integration 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 as 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 as the use of technology in the production processes is the order of the day- the labour market seems to be flooded with more technological artists and less (real-time) creative artists. Therefore, it is hoped that integrating e-technology (state-of-the-arts) into the instructions of Fine and Applied Arts may bring the desired impact in the school system 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 and 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.

- There should be regular maintenance, updating and upgrading of the facilities in the department of Fine and Applied Arts.

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