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EFFECTS OF PROMOTING THE USE OF DIGITAL TEACHING AND LEARNING RESOURCES FOR SKILLS ACQUISITION AMONG STUDENTS AND STAFF OF FINE AND APPLIED ARTS IN OSUN STATE

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ABSTRACT

Digital Tool has the capacity to provide higher interactive potential for users to develop their individual, intellectual and creative-ability. The main advantage of digital tool over other teaching aids includes the development of human mental resources which allows people to both successfully apply the existing knowledge and produce new knowledge Kaku (2016). The collective, rigid and passive nature of learning associated with use of radio, television and films do not contribute meaningfully, innovation changes traditional methods to digitalised teaching and learning resources in educational systems. This study was undertaken to investigate availability and competency of utilization of digital teaching and learning resources for effective teaching and learning of fine and applied arts skills in the selected secondary schools in Osun State. Specifically, the study determined the availability of digital teaching and learning resources for acquisition of skills in Fine and applied arts in Osun State; assessed the competence of fine and arts teachers in utilizing digital teaching resources; determined the extent of utilizing digital teaching resources by fine and applied arts skills teachers for skills acquisition; determined the extent of fine and applied arts skills students utilizing the available digital learning resources and identified the impediments to effective utilization of digital teaching and learning resources for fine and applied arts skills acquisition in Osun State. Data were collected validated questionnaire. Cronbach's Alpha method was used to determine the reliability of the instrument with reliability coefficient of 0.73. 600 and 300 copies of students and teachers' questionnaire were administered through the help of trained research assistants. Research results showed that digital teaching and learning resources were not adequate to students/teachers for utilization. The findings also showed that there are bottle necks to effective utilization of digitalised teaching and learning resources which are inadequate funds, inadequate trained personnel to handle digital learning resources, poor or epileptic power supply and inadequate supply of computer hardware. Based on these findings, it was recommended that efforts should be made by federal, state and local government to equip the existing schools with adequate digital

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teaching and learning resources with a view to ensuring efficient and effective teaching learning. In addition, provision of constant power supply and effective training of teaching staff through seminars, conferences (local and international) digitalised teaching and learning resources should be given its pride of place.

Keywords: Digital resources, availability, utilization, students and teachers

INTRODUCTION

In developed countries, digital tools (Information and communication technologies) are being used for instructional function which includes teaching and learning. Teachers and students will therefore need such knowledge if they must succeed in a technologically developed world Okwudishu (2016). The rapid growth and development in information and technology communication innovations and digital usage is steadily transforming work culture and teachers cannot escape the fact that today's teaching must provide technology-supported learning for better comprehension of the students. The National policy on Education (Federal Republic of Nigeria, 2012) in Nigeria reiterates that no education system can rise above the quality of its teachers. Hence, teachers are indispensable within the teaching learning process. Also trained and effective teachers are the principal assets of any educational system. Adako (2016) stated that if Nigeria must catch up with other developed countries at a very reasonable pace, the nation builders(teachers) must be abreast of all new development around the world more so that the world is now seen as a global village. Considering the impact of computers in the modern world as conceived by Obodo (2017), it means that education reform practices should focus on equal access and quality of education which should highlight the importance of change in the educational sector through the use of digital tools and digital competence as well as equipping new generation teachers with enhanced skills to operate in this 21st century.

As a matter of fact, the educational sector in Nigeria over the past two decades has experienced a considerable shift in the way the digital tools have been used as tool for teaching and learning. We can infer from this that the trend appears to be towards the spread of global pandemic as well as towards integrating digital tool technology in other content areas across the curriculum. This significant experience has created a fresh perspective in the use of digital tools in teaching and learning during COVID-19. The rapid growth and development in information and technology communication innovations and digital usage is steadily transforming work culture and teachers cannot escape the fact that today's teaching must provide technology-supported learning for better comprehension of the students. Researchers have suggested that digital tool and digital competence technology can overwrite education which will then serve as a solution or as a change agent to our educational challenges in the country. Gordin (2018) and Wellington (2016) posited that digital tools have potential to enhance teaching and learning and provide students with a learning experience in which other strategies cannot provide. Therefore, adopting the use of technology will support student learning and must become integral skills in every teacher's professional repertoire.

In many developing countries like Nigeria where digital tool is recently introduced in the educational system, researches have mainly focused on the first two stages, that is, o knowledge of an innovation and attitudes about it. The use of computers in education during COVID-19 pandemic in Nigerian schools has not been guided by research. This has always been the case in most countries in the world. Rogers (2016), the initiation stage, demands

information gathering and planning seems to be missing in this headlong process of technology implementation.

In particular, both researcher and the digital tool technology implementation plans seem to be lacking consideration of the manner and variation in digital tool use by teachers in teaching-learning process. With apparent interest and initiative, do teachers continue to engage in meaningful interaction with the digital tools and digital competence? Such questions if are not answered may have unforeseen representations for digital tool integration in schools which can eventually hinder development. As a result, fostering technology usage among individual teachers remains a critical challenge for school administrations, technology advocates and policy markers.

Education is an instrument for societal growth, poverty eradication and employment opportunity in the labour market. Any form of education that does not equip its beneficiaries with skills to be self-reliant is a faulty system of education. However, no nation can have economic advancement, technological development and manpower development without utilizing its resources towards its Fine and applied arts. 21st century is the age of globalization and is important to grasp on various foreign Fine and applied arts and Fine and applied arts comes first. Fine and applied arts teaching has been with us for many years and its significance continues to grow, fuelled, partially by the Internet.

The same study indicates that over 80% of information stored on the internet is in Business. For the first time there are more Non-Native than Native users of the Fine and applied arts and diversity of context in terms of learners, age, nationality, learning background etcetera has become a defining characteristic. With the rapid development of science and technology, the emerging and developing of multimedia technology and its application to teaching, featuring audio, visual, animation effects comes into full play in business class teaching and sets a favourable platform for reform and exploration on Business teaching model in the new era. It has been opined that multimedia technology plays a positive role in promoting activities and initiatives of student and teaching effect in Fine and applied arts class.

It is fair to assert that the growth of the internet has facilitated the growth of the Fine and applied arts and that this has occurred at a time when computers are no longer the exclusive domains of the dedicated few, but rather available to many. With this there has been a very significant proliferation of literature regarding the use of technology in teaching Fine and applied arts. Mostly these writings unequivocally accept technology as the most essential part in teaching. In a sense, a tendency to emphasize on inevitable role of technology in pedagogy to the extent of obliterating human part of teacher by technology part has been very dominant. And as a result if we neglect or ignore technological developments they will continue and perhaps we will never be able to catch up, irrespective of our discipline or branch. For this reason, it is important for Fine and applied arts teachers to be aware of the latest and best equipment and to have a full knowledge of what is available in any given situation. Teachers can use Multimedia Technology to give more colourful, stimulating lectures. There are many techniques applicable in various degrees to Fine and applied arts learning situation. Some are useful for testing and distance education, and some for teaching business skills

The teaching principle should be to appreciate new technologies in the areas and functions where they provide something decisively new useful and never let machines takeover the role of the teacher or limit functions where more traditional ways are superior.

There are various reasons why all Fine and applied arts learners and teachers must know how to make use of the new technology. It is needful to emphasize that the new technologies develop and disseminate so quickly that we cannot avoid their attraction and influence in any form.

Alliance for Excellent Education (2015) sees Digitized learning as any instructional practice that effectively uses technology to strengthen students learning experience. Digitization has been acknowledged globally as one of the greatest techniques incorporated into teaching-learning process that brings effective and efficient teaching and learning. For fine and applied arts students to meet up with the 21st century job skills, digitalized learning and its technological resources has to be implemented fully.

Digital learning is a learning facilitated by technology that gives students some element of control over time, place, path and/or space. Time here refers to learning that is no longer restricted to the school day or the school year. The internet access devices have given the students the ability to learn anytime. Digital learning gives access to students to learn in their own style, making learning personal and engaging. Digital learning also makes education more accessible and affordable to students on campus and also worldwide. On 21st century jobs, digital learning enables today's youth to learn technology eagerly and acquire those skills forecasted to remain in the future job spotlight. Furthermore, digital learning helps students to learn more efficiently, learn more fully and learn with mastery (Sam, 2020).

For digital learning to accomplish its effectiveness, digital learning resources has to be fully implemented into school program. Digitized Learning Resources (DLR) are diverse set of electronic technologies, technological tools and resources utilized to communicate, disseminate, store and manage information in the course of teaching and learning. Digitized learning technologies are used to bring about effective and efficient teaching and learning.

Digital learning resources involve the utilization of computer and other electronic devices to pass information to learners. Some of Digital Learning Resources include computer, internet facilities, e-mail services, satellite, telephone, wireless technology, motion picture, overhead projector, interactive board, public address system, printer, scanner, projection screen, television, Local Area Network (LAN), Wide Area Network (WAN), radio, maintenance workshop, spare parts and accessories rooms (Nwgu, 2014).

Internet as a digital tool of DLR has strengthened teaching and learning as it provides powerful resources and services for students, thereby enabling them meet their educational needs. It also allows for networking among students and teachers to facilitate exchange of ideas and improve opportunities for connecting schools to the world as learning is expanding beyond the classroom so real life context can be established (Dotimi & Hamilton-Ekeke, 2019). The internet is the inter connection of system of subsystems of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data or information. Instructionally, it helps students to learn ahead of content or topic to be covered in the next class. The internet also assists teachers and students to get more meaning about the concept learnt or taught in lesson. The internet also helps the teachers to get more learning resources (teaching resources) beyond the teachers' provision. It also plays a vital role in making research about the topic allocated to students. Through the internet, students are taught electronic commerce which involves buying and selling and making of money. Also, the internet exposes the students to electronic learning. The internet has some functions in education which are: (i) Storehouse of information, (ii) Communication without boundaries, (iii) Online interactive

learning, (iv) Electronic/Online research, (v)Innovation in the new world, (vi) Improving interest in learning, (vii) Global education and information categories (Park, 2018).

Apart from the internet, in this digital age, the importance of computer cannot be over emphasized for teaching and learning. Computer can be seen as any electronic device that allows students to access the internet to research, create and complete work. This means that a laptop or tablet can be categorized as a classroom computer. Before computers were common in the classroom, teachers would stand in front of class and talk endlessly about a subject. Now computers are used with projectors to show students videos, images and text that are interesting and relevant to what is being taught. Computer helps to replace writing on the chalkboard. Instead of writing on the board, instructor or student takes note on the computer and projects this into the screen so that the whole class can see this. Computer enables the students to read what has been written more easily than instructor's handwriting. With the help of the computer, academic work learnt can then be saved as a record of class them e-mailed to the whole class or posted on the course Web page.

Another technological tool that is useful in teaching and learning is the electronic mail (e-mail). With the help of the e-mail, the instructor can provide an updates and reminder to students. Assignments to be carried out by the students can be sent to their e-mails and submitted through the e-mail of the lecturer. Also, vital information and messages can be communicated through the e-mails. New ideas, suggestions and academic progress can be communicated through the e-mails.

Apart from the e-mails, interactive whiteboards (smart boards) have exceptionally grown in popularity over the past few years. Schools are discovering that these interactive whiteboards are effective tools for improving learning, communication and collaboration. They offer several advantages over traditional whiteboards which have been used in classrooms for decades to share information and ideas with group members. The interactive whiteboards operate in the connection between a computer, a projector and a touch screen electronic whiteboard. At the heart of the interactive whiteboards, lies a touch screen smart board which students can used the touch screen whiteboard to experiment, solve, write and erase applications such as visual experiments, visuals, animations and graphics. Electronic microscopes, multimedia materials, videos, data tables, CR-ROM or the internet may be used depending on the software programs used by those whiteboards (Miller, Glower & Averi's, 2005). Today, Education ministries in many countries are now encouraging the use of interactive whiteboards in classroom.

Wireless technology tool is another DLR which has great impact on teaching and learning. With the introduction of wireless technologies in education system, it has become easier for teachers to impact knowledge and for students to acquire the knowledge. The use of Wireless technology has made the process of teaching and learning enjoyable. Wireless technology also gives access to digital library system which made it easier to store information and it has become a substitute for chalk, board, books and notebooks. Wireless technology has enhanced easy access of information. The internet is a huge information base that can be used as an effective tool for acquiring knowledge through wireless technology.

Despite the fact that digital learning resources has significant roles to play in skills acquisition, there are impediments which may have hindered their use for acquisition of skills by undergraduate fine and applied arts students in Colleges of Education in Delta State. These includes inadequate digital learning resources, inadequate education curriculum to meet up with the current technological development, poor funding of the institutions by

government, inadequate trained personnel, inadequate physical resources and epileptic power supply (Udoh, 2015). These issues as they affect digital learning resources are what this research is set out to investigate.

Against this background the researchers will assess the availability and utilization of digitalised teaching and learning resources in Osun State. Also, the study will cover the influence of curriculum innovation, teacher in-service training, school supervision and inspection, adequate government funding and school adequate infrastructural facilities on management of secondary schools in Osun State.

The Nigerian education system has been facing complex problems and various governments have initiated programs of reforms that have achieved less than attaining the desired goals, thus crippling the system instead of enhancing it. These reforms have been inconsistent, mismanaged and mostly ineffective. The implementation of the National Policy on Education is a typical example of such attempts. Lack or insufficient provision of digitised teaching and learning resources and poor management of resources by government and school administrators seem to be responsible for the failure.

Considering the increase in students enrolment in senior secondary schools, that makes it a necessity for the state government to provide adequate fund for the provision and maintenance of digitalised school facilities. In view of the significance attached to funding for the provision and maintenance of digitalised school facilities for the attainment of educational aims and objectives, It is noted that, education is an expensive service that requires adequate funding from all three tier of government for a successful implementation of educational programme. Inadequate funding of education has been a fundamental problem facing educational sector in Nigerian Osun State inclusive. Adamu (2018), Bako (2018) and Okeem (2020) are of the opinion that the level of funding of educational system has never been adequate in Nigeria considering the UNESCO recommendations of 26% National Domestic Product (NDP) to education. .

However, schools cannot survive without adequate provision and maintenance of its facilities. These school facilities refer to those fixed and movable materials. They are materials that facilitate teaching and learning process, these include multimedia, classrooms, libraries, workshops, laboratories, assembly halls and teaching aids such as films etc.. Fine and applied arts students need to acquire modern and employability skills to be learnt with modern digital technologies to overcome the challenges in the labour market. Despite the provision made by the government on digital resources, students appear to still be engaged with traditional learning instead of modern digital resources which may lead to low levels of availability and utilization of digital resources by Fine and applied arts students which results to unemployment which consequently denied them self-employment.

Although, government at all levels appears to be allocating fund via budget to the educational sectors for facilities provision, the problem of effective skill acquisition still persist. These are important to find out their extent of availability and utilization of digital resources. In order to know the causes and make recommendations, the study investigated the extent of availability and utilization of Digitalized Teaching and Learning resources for Fine and applied arts skills acquisition in selected secondary schools.

Research Questions

For this research work, the following research questions were raised:

1. What are the digital teaching and learning resources available for the acquisition of skills in Fine and applied arts in Osun State?
2. To what extent do Fine and applied arts teachers have competence in utilizing digital teaching resources in Osun State?
3. To what extent do Fine and applied arts teachers utilise digital teaching resources for skills acquisition?
4. To what extent do Fine and applied arts students utilize the available digital learning resources for learning purposes in Osun State?

Research Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance.

1. There is no significant difference between the mean responses of teachers and students as regards to digital teaching and learning resources available in the teaching of fine and applied arts skills**.**

2. There is no significant difference between the mean responses of the teachers and students of fine and applied arts on the extent of utilization of digital teaching and learning resources.

RESEARCH METHODOLOGY

Area of study

This research was carried out in the selected secondary schools in Osun State. Osun State is an inland state in Southwest, Nigeria with enormous human and material resources. It has a land mass of about 9,251 km^2. It is currently made of 30 Local Government Areas spread across six main zones namely Osogbo, Ede, Iwo, Ikirun, Ilesha and Ile-Ife. There are 1090 public secondary schools in Osun State.

Research Design

This study used descriptive and inferential survey design. Descriptive Survey is one in which a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group (Nworgu, 2016). The descriptive and inferential survey design is therefore considered suitable for this study since relevant information is collected through the use of questionnaire in describing and interpreting availability and utilization of digital teaching and learning resources for Fine and applied arts skills acquisition in Osun State.

Sample and Sampling Technique

The researcher used a multi-stage sampling technique. In the first stage, two local government areas (LGAs) were randomly selected per zone to give a total number of 12 LGAs. In the second stage, ten secondary schools were randomly selected per LGA totalling 120 schools. Finally, 20 students and five teachers were randomly selected per school to give total number of 2400 students and 600 teachers respectively.

Research Instrument

The instrument for the adopted a questionnaire titled: Availability and Utilization of Digital teaching and learning resources for Fine and applied arts skills acquisition in secondary schools in Osun State. The questionnaire items were generated based on the five research questions raised for the study. The instrument is divided into two main parts, A and B. Part A of the questionnaire elicited personal information of the respondents. Part B dealt with five sections (I-V) in line with the research questions raised to collect data on Availability and

Utilization of Digital teaching and learning resources for Fine and applied arts skills acquisition in secondary schools.

Section (1) contained 50 items on digital teaching and learning resources available for the acquisition of Fine and applied arts skills in secondary schools. It is a checklist to collect data on availability of digital learning resources.

Section (II) has 50 items raised to determine the competence of Fine and applied arts teachers in utilizing digital teaching resources in secondary schools. The respondents are to tick from the four options VHE = Very High Extent (4), HE = High Extent (3), VLE = Very Low Extent (2), LE = Low Extent (1).

Section (III) has 50 items raised to measure the extent teachers of Fine and applied arts utilizing digital teaching resources for teaching skills acquisition. The options are VHE = Very High Extent (4), HE = High Extent (3), VLE = Very Low Extent (2), LE = Low Extent (1).

Section (IV) has 50 items raised to measure the extent Home-Economics students utilizing the available digital learning resources for learning purposes in secondary school. It had four options which were VHE = Very High Extent (4), HE = High Extent (3), VLE = Very Low Extent (2), LE = Low Extent (1).

Section (V) has 50 items that dealt on impediments to effective utilization of digital teaching and learning resources for acquisition of Fine and applied arts skills in secondary schools. It has four options which were SA = Strongly Agree (4), A = Agree (3), D = Disagree (2), SD = Strongly Disagree (1).

Validity of Research Instrument

In order to establish the validity of the instrument for the study, the researcher presented the instrument to three experts for face validity which included two other experts. This was done to ensure that the items effectively and adequately addressed the research questions raised for the research.

Reliability of the Instrument

The test method was adopted to test the reliability of the instrument. The researcher administered twenty (100) questionnaires once to twenty fine and applied arts teachers in other secondary schools that were not part of the population in this study. The internal consistency of the instrument was determined using Cronbach's alpha method. The result of the administration was obtained using Cronbach's alpha method. The reliability coefficient obtained which revealed that the instrument is reliable opined by Nunnaly (2008) indicated that 0.7 is an accepted reliability coefficient for study.

Method of Data Collection

The instrument adopted was administered to the respondents with the help of three trained research assistants to help in the distribution and retrieving the instrument. This was carried out by giving the research assistants detailed instructions on how to elicit information from the respondents. The questionnaires was distributed and retrieved immediately to ensure a high return rate.

Method of Data Analysis

The data collected from the respondents analyzed using mean, standard deviation and t-test. The mean and the standard deviation were used to answer research questions while the t-test was adopted to test the hypotheses at 0.05 level of significance. Decision rule were based on any calculated mean equal to or greater than 2.50 was regarded as High Extent and Agreed while any mean less than 2.50 was regarded as Low Extent and Disagreed. On the basis of the hypotheses, the probability value (P) was used. Where P-value is less than or equal to 0.05, the null hypothesis was not retained but where P-value is greater than 0.05, the null hypothesis was retained.

RESULTS AND DISCUSSION

Research Question 1: Which of the digital learning resources were available in the teaching and learning of Fine and applied arts skills?

Table 1: Difference Analyses of Availability of Digitalised Learning Resources

S/N	Digital Resources	Average QN	Average QA	Difference	Remark
1.	Computer Laboratory	1	0.7	-0.30	LR
2.	Internet Facilities	1	0.27	-0.73	LR
3.	Overhead Projectors	1	0.6	-0.4	LR
4.	Interactive board	1	-0.21	-1.21	LR
5.	Public Address System	1	1.28	0.28	SMR
6.	Standing generator	1	0.85	-0.15	LR
7.	Scanner	1	0.5	-0.5	LR
8.	Printer	1	0.5	-0.5	LR
9.	Local Area Network (LAN)	1	-0.65	-1.35	LR
10.	Digital Camera	1	0	-1	LR
11.	Power Point Projection	1	0.39	-0.61	LR
12.	Telephone/GSM	1	9.5	0.5	MR
13.	Wireless Technology	1	1	0	AR
14.	Electronic mail (E-mails)	1	-0.5	-1.5	LR
15.	Laptop/Desktop Computers	21.15	-5	-21.65	LR
16.	Television	1	4.65	3.65	MR
17.	Photocopying machine	1	1.25	0.25	SMR
18.	Satellite	1	-1	-2	LR
19.	Maintenance Workshop	1	-0.75	-1.75	LR
20.	CD-ROM	1	8	7	MR

LR = Less than Recommended, MR = More than Recommended, AR = As Recommended, SMR = Slightly More than Recommended.
Source: Computed from fieldwork (2025)

Table 1 reveals the extent of availability of digital learning resources in the secondary schools. The table reveals that 14 items of digital resources are available less than the recommendations by NCCE. However, five items of the digital are more than the quantity recommended by NCCE. Finally, the table reveals that only one digital resource is available as recommended. These results reveal that there are many of the digital resources that are available below the quantity recommended.

Research Question 2: To what extent do Fine and applied arts teachers have competence in utilizing digital teaching resources in the secondary schools?

Table 2: Means and Standard Deviation on Competence in Utilizing Digital Teaching Resources

S/N	Item Statement	Mean	SD	Remark
21	Interactive board usage for lesson delivery	3.01	1.134	HE
22	Ability to connect and use public address system during instructional delivery	2.75	1.044	HE
23	Ability to connect and use video/audio conferencing	2.59	1.089	HE
24	Store and retrieve documents in the computer	2.63	1.012	HE
25	Ability to photocopy, scan and print documents from the internet	2.83	0.961	HE
26	Ability to use projectors/television during instructional delivery	2.71	1.097	HE
27	Ability to provide students assignment, communicate with students and send feedbacks via e-mail	2.67	1.099	HE
28	Ability to provide course materials online for students	2.53	1.114	HE
29	Ability to use wireless technology foe effective instructional delivery	2.67	1.112	HE
30	Ability to download books and educational materials via the internet	2.52	0.973	HE
	Cluster	2.69	0.838	HE

Key: Mean = $\bar{x}$, SD = Standard Deviation, HE = High Extent, LE = Low Extent.
Source: Computed from fieldwork (2025).

Table 2 depicts that the mean responses range from 2.52 to 3.01, while the standards deviation range 0.961 to 1.134. The table shows that all the 10 items on the utilization of resources correspond to high extent. The cluster (2.69), thus explains that the available digital resources are utilized to a high extent.

Research Question 3: To what extent do the Fine and applied arts teachers utilize digital teaching resources for teaching skills acquisition?

Table 3: Mean and Standard Deviation on Competence in Utilizing Digital Resources for Teaching

S/N	Item Statements	Mean	SD	Remark
31	Computer used for computer appreciation skills	3.02	1.080	HE
32	Database management software used for data processing skills	2.76	0.968	HE
33	Microsoft word for word processing and typing skills	2.66	0.935	HE
34	Internet for downloading, accessing website page skills	2.41	1.025	LE
35	Sending and accessing electronic mails through the internet	2.68	0.996	HE
36	Photocopier for photocopying/cyclostyling skills	2.69	0.893	HE
37	Electronic Fine and applied arts skills	2.57	1.101	HE
38	Microsoft excel for spreadsheet and statistical analysis skill	2.70	1.091	HE
39	Desktop publishing and graphic program skills	2.68	1.053	HE
40	Ability to use interactive board and video conferencing for instructional delivery	2.62	1.094	HE
	Cluster	2.68	0.796	HE

Key: HE = High Extent, LE = Low Extent
Source: Computed for fieldwork (2025)

Data presented in table 3 shows that the mean responses range from 2.41 to 3.02, while the standard deviation range from 0.893 to 1.101. The mean responses reveals that nine items of utilization of the digital resources correspond to high extent, while one item corresponds to low extent of utilization of available resources for teaching. The cluster mean of 2.68 reveals that the teachers utilize the available digital recourses for teaching to a high extent.

Research Question 4: To what extent do the Fine and applied arts students utilize the available digital learning resources for learning purposes in the selected secondary schools?

Table 4: Mean and Standard Deviation on Competence in Utilizing Digital Resources for Learning

S/N	Item Statements	Mean	SD	Remark
41	Processing assignments with the computer	2.84	0.997	HE
42	Ability to use internet for sources of information, do assignments and research work	2.86	0.920	HE
43	Ability to use teleconferencing with classmates for group work	2.59	1.059	HE
44	Ability to use scanner and printer to print out work	2.55	0.940	HE
45	Ability to use the internet to take a course with interactive board	2.59	1.100	HE
46	Ability to use CD-ROM and other multimedia materials	2.62	0.957	HE
47	Ability to send assignments and feedbacks to teachers via e-mail	2.66	1.034	HE
48	Ability to chat on-line with classmates and teachers using wireless technology	2.66	1.134	HE
49	Ability to use Microsoft excel package in analyzing data/statistical analysis	2.79	1.067	HE
50	Store and retrieve data in a CD-ROM, DVD-ROM, magnetic disk and floppy disk for suitable storage	2.64	0.938	HE
	Cluster	2.68	0.768	HE

Key: Mean = $\bar{x}$, SD = Standard Deviation, HE = High Extent.
Source: Computed from fieldwork (2023).

Results presented in Table 4 reveals that the responses range from 2.55 to 2.86, while the standard deviation range from 0.920 to 1.134. The mean values show that the utilization of the 10 items of digital resources for learning corresponds to high extent. The cluster of 2.68 depicts that the students utilized the available digital resources to a high extent for learning.

Conclusion and Recommendations

The relevance of digital learning resources cannot be over-emphasized as teachers needed it to bring efficient and effective teaching during instructional delivery. It can be concluded that impediments such as inadequate funds, inadequate trained personnel, epileptic power supply, inadequate computer hard wares, insufficient knowledge of digital learning resources hinder the effective acquisition of Fine and applied arts skills in the selected secondary schools.

Recommendations

Based on the findings of the research, the study recommends that: modern adequate digital learning resources should be made adequately available in the teaching and learning of Fine and applied arts skills in secondary schools, teachers of Fine and applied arts should be given update training through seminars, conferences on modern digital technologies so that they would be competent in utilizing digital teaching resources in secondary schools, .Fine and applied arts teachers should be encouraged to utilize digital teaching resources for teaching skills acquisition, students in the selected secondary schools and others should be encouraged to utilize digital learning resources for learning purposes by providing the digital resource to each teacher, There should be adequate trained personnel on the usage of digital learning resources in the secondary schools, there should be steady power supply for effective utilization of any available digital learning resources in secondary schools and sufficient funds should be provided to purchase modern digital learning resources in teaching of Fine and applied arts in secondary schools.

REFERENCES

Adejumobi, T. (2017). Applied Linguistics An Introductory Handbook Lagos Flag Publications.

Akinjobi, A. A., (2014). "Non-enculturation sources of standard spoken Business for Non-native speakers: the Nigerian Examples" Lagos Review of Business Studies LARITE vol. 17.2

Adamu, T.A. (2018). An assessment of secondary school Teachers uses of ICTs: implications for secondary schools. Nigeria. *International Journal of Instruction*, 5 (2), 1308-1470

Bako, M. (2018) Funding and management of primary education as the joint responsibility of the three tier of government. Implication for Nigerian primary school teachers on retirement. Seminar paper presented at Kebbi state College of education, August.

Banjo, H.D. (2018*). Teaching by principles: An interactive approach to Fine and applied arts pedagogy.* Beijing: Foreign Fine and applied arts Teaching and Research Press.

Crystal, D. (2017). Business as a global fine and applied arts. Cambridge: Cambridge University Press.

Einstein F. J. (2020) *(The development tendency of the modern foreign fine and applied arts teaching and the computer assisted instruction. Computer- Assisted Foreign Business Education 3.*

Flemming, R. (2016). In Karen Milligan Karen@linguistlist.orgwww.Ling udel Edu/cush/wooheok dissertation pdf Linguist list 10-19 access 12/3/17

Fitzgenrald and Warner Ehiamlor (2016). Who gains from "Brain and Body Drain" Business -Developing/developed world or individuals: A comparative study between skilled and semi/unskilled emigrants. Afr. J. Bus. Manag., 4(4): 534-548

Graddol: (2016) The Future of Business? A guide to forecasting the popularity of the Fine and applied arts in the 21th Century. London: the British Council.

Holec, H.(2016*). Autonomy and Foreign Fine and applied arts learning.* Oxford: Pergamon.

Udoh K.O (2015). Quest for a better operation system in Education: Privatization, Teacher Educationalization or Voucherilization: glimpsing from consumer and product perspectives. Afr. J. Bus. Manag., 4(6): 1202-1214

Nworgu N. (2016). Who gains from EFA –State Business of Education or Private Higher Education Business in Developing Nation: A study to understand the policy impact in Bangladesh? Afr. J. Bus. Manag., 4(5): 770 – 789

Nunnalyu, A. (2008) secondary school administration in Nigeria. London mark and Balton Book Company

Okeem G.M (2020). The role of science and technology education at network age population for sustainable development of Bangladesh through human resource advancement. Sci. Res. Essays, 4(11): 1260-1270.

Osisanwo, A. (2020). Fundamentals of Business Phonetics and Phonology Lagos Famolous Fetop publishers.

Park, M.M (2018). Return from education system in Bangladesh: an investigation on comparative flashback scenario. Afr. J. Bus. Manag., 3(10): 567-575

Sam. A (2020) Administrative Perspective: A Case Study of Osun Central Senatorial district Local Government Area

Tolstoy, L., & CAO, Y. (2018). *Childhood, boyhood, and youth.* Shanghai: Shanghai literature and Art Publishing House.

Vanghan, T. (2014). *Multimrdia: Making it work* (8th ed.). Beijing: QingHua University Publishing House.

WANG, A. S. (2018). *Cognitive psychology*. Beijing: Pecking University Press.

Wright, A. (2019). *Picture forFine and applied arts learning*. Tianjin: Nan Kai University Publishing House. www.ccsenet.org/journal.html , vol.1, No 4, November 2008.

Zhang, Q. Q. (2015). *Modern curriculum theory*. Shanghai: Shanghai Educational Publishing House.