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Utilization of Smart Board Technology in Textile Design Instruction for Enhancement of Performance in Junior Secondary School in Central Senatorial District, Bayelsa State.

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ABSTRACT: *This study, titled Utilization of Smart Board Technology In Textile Design Instruction For Enhancement Of Performance In Junior Secondary School In Central Senatorial District, Bayelsa State will be carried out to investigate the factors responsible the unavailability of smart boards to teach students in secondary schools in Bayelsa State, Nigeria. Smart board is also known as interactive white board or is a large interactive board display board in the form of a white board. The interesting aspect of the board is that it is electronically operated and pictorial images are usually presented through it. Unfortunately, despite the commendable services smart board renders, it is observed that it is not available especially the teaching of textile in most secondary schools in Bayelsa State. This situation is grossly hampering on students' academic performance. Thus, in a bid to remedy the situation this study will outlines six objectives, research questions and hypothesis to guide the study. The study will review some cognate literatures in course of the study. Stimulus-response and master learning theories will form the theoretical framework for the study. The study will adopt correlational research design. To test the reliability of the instrument, the Spearman Browns Prophetic Formula will be used to test the result. Mean scores ranked order and standard deviation will be used to analyse the research questions. Pearson's product moment correlation coefficient will be used as statistical tool to analyse the hypothesis. The four hypotheses postulated will be tested using t-test at 0.05 level of significance. The analysis carried out was discussed. Findings obtained from the study were discussed. The study concludes that the use of smart board to teach textile in secondary is effective and when it is not available it affects students' performance. Thus, the study recommends that smart board should be provided in schools to encourage effective teaching and learning of textile. This research is believed to have contributed to knowledge because it helped to widen scope of knowledge in the use of smart board in teaching textile.*

KEYWORDS: Smart Board, Smart Board Technology, Textile Industry, Educational Enhancement, Technology Integration.

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INTRODUCTION

In our society today teaching and learning activity has become a little easier than it used to be in the past with the use of a more sophisticated technological teaching materials or aids which has helped to enhance teaching and learning. One such technological advancement that has being made or achieved is the production of Smart Board which is also known as interactive white board. Technology this day has to play a major role in facilitating teaching process (Oigara and Wallace, 2012). The need for teachers to use the Smart Boards for teaching and learning activities is to enhance lessons so that students will become active learners in the classroom Interestingly, when smart board is effectively utilize as an instructional aid for teaching, it makes the teaching process simple by creating a better opportunity for the teacher to present visuals to students which gives them better understanding of what they being taught.

This study will be basically carried out in Bayelsa state and experimental student will be taken from three Local Government Areas of Bayelsa which includes Yenegoa Local Government Area, Kolokuma/Opokuma Local Government Area and Southern Ijaw Local Government Area.It is important to note that interactive whiteboard compliance allows the teacher becoming a facilitator, rather than reinforcing teacher-centered style of teaching. Studies conducted on the effects of technology on students performance, concluded that students in compliance to computer simulations and applications scored higher on national Standardized tests than those students who did not integrate to digital base learning (Wenglinsky, 2000, Billig, 2003). Wenglinsky also observed that the students with higher performance on the test when their teacher is inclined to professional technological development training and support. (Wenglinsky 2000; Billig, 2003).

Statement of the Problem

A continual improvement of academic performance and teacher-student real-life classroom engagement is a critical goal in the educational sector of government. Therefore, disintegration of contemporary inclusiveness among students in assimilation are expression of the same subject material of fine art from diverse Secondary Schools in Bayelsa State using the same curriculum concurrently indicates a devastating inequality among students from various schools in Bayelsa state that opted for the same test or examination. The underlying factor to these differences are critical and are driven by the compliance to the use of interactive whiteboard in real-life teaching and learning in the context of comparative global advantages ahead of uncharted real-life classroom experiences and reflect students' academic performance.

The mastery learning theory is founded on the grounds that all children can learn; if given the proper environmental (Bloom, 1981) in the model emphasis of Bloom, requires that students need feedbacks, correctives, and enrichment development structure. Whereby under favourable learning environment, some students will learn more especially those involved in participatory activities (Bloom,1981). Therefore, identifying relevant and individual differences among students and

varying teacher engagement to meet better and diverse learning needs is expedient for student's performance. Hitherto, interactive whiteboard aids and place knowledge in the hands of the student, while support the teacher in the act of teaching (Synder, 2006).

It is quite known that many digital solutions, which include interactive Smart Board are designed and offered to enhance and ease challenges of teaching in today's classrooms. However, improvements are observed in students' academic performance, but there has not been any instructional strategy that shows to be proficient in increasing all students learning (Marzano. 2009b). The study conducted by Marzano using interactive Smart Board results that this new innovation of technology will challenge the face of teaching. And that this new innovation of technology will add a whole new set of instructional strategies that were never available before in conjunction with how teachers interact with students (Marzano, 2010).

In accordance to Marzano's findings, the researcher carried out experimental studies in four Local Government Areas of Bayelsa State, namely: Yenegoa Local Government Area, Sagbama Local Government Area, Kolokuma-Opokuma Local Government Area with selected secondary schools and implemented digital learning (interactive Smart Board) project as experimental test designed to terminate in mock examination pattern. The instrument used was Promethean for the digital instructions in fine art ActivClassroom and compared to a similar classroom without such technology in the collection of results when reviewed, there was a significant increase in the academic performance in the classrooms with the use of Promethean's ActivClassroom interactive Smart Board. Thus, the study is carried out to ascertain the effectiveness of the use of Smart Board technology to teach textile and academic performance of secondary school students in Yenegoa Metropolis of Bayelsa State.

Objectives of the Study

The aim of the study was to investigate theAdaptation of Smart Board Technology in Textile Instruction for Enhancement of Academic Performance of Students in Junior Secondary Schools in Central Senatorial District, Bayelsa State**.** While the objectives of the study were to:

1. Ascertain the availability of smart board technology in textile instruction to enhance students' academic performance in juniorsecondary schools in Central Senatorial District ofBayelsa State.
2. Identify teachers' knowledge of adapting smart board technology in textile instruction to enhancestudents' academic performance in juniorsecondary schools in Central Senatorial District in Bayelsa State.
3. Determine the level of utilization of smart board technology in textileinstruction to enhance students' academic performance in junior secondary schools in Central Senatorial District inBayelsa State.

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Research Questions

The following research questions shall anchor then solutions to the entire work:

1. Are smart board technologies available for textile instructionin enhancement of students' academic performance in juniorsecondaryschools in Central Senatorial District inBayelsa State?
2. Do teachers have the knowledge of adapting smart board technology for textile instruction in enhancement of students' academic performance in juniorsecondary schools in Central Senatorial District inBayelsa State?
3. To what extent is the level of adaptation of smart board technology in textileinstruction in enhancement of students' academic performance in junior secondary schools in Central Senatorial District in Bayelsa State?

Research Hypotheses

1. There is no significant relationship existing between availability of Smart Board technology forTextile instruction and enhancement of students' academic performance in juniorsecondary schools in Central Senatorial District in Bayelsa State.
2. There is no significant relationship existing between teachers' knowledge in adaptation of smart board technology for textile instruction and enhancement of students' academic performance in junior secondary schools in Central Senatorial District inBayelsa State.
3. There is no significant relationship existing between theutilization of smart board technology in textile instruction and enhancement of students' academic performance in junior secondary schools in Central Senatorial District inBayelsa State.

LITERATURE REVIEW

Conceptual Review

Concept of Smart Board

Rapid changes in information and communication technologies have been effective in education as well as in all other areas of life and have brought about fundamental changes in traditional classroom environments and teaching methods. Parallel to these changes are computers, tablets, projectors, flash disks, mobile phones, digital cameras and video recorders entering the teaching environment have affected many aspects of education from student projects to presentation of lectures. Another innovation of the last two decades is the smart board that combinesthe computer, projector, and touch screen electronic board (Akbas & Pektas, 2011).Smart boards are one of the most popular educational technologies in today's world (De Vita, Verschaffel &Elen, 2018). Smart boards were first used in education in the late 1990s (Beeland, 2002), and quickly began to be used in many countries around the world.

Ukwueze and Onyia (2014) carried out a study on the effectiveness of smart board and noted that Smart board technology was introduced in (2009) had dual touch interactive smart board. The dual

touch smart board accepts two simultaneous touches, on two separate sides of the surface. Smart Board is different from tablet computing which commonly displays images. The Smart Board operates as part of a system that makes use of an interactive whiteboard, a computer, projector and interactive software commonly called Smart notebook or collaborative software. The components are connected wirelessly, via USB or special cables. A projector connected to the computer displays images on the Smart board.

Smart boards offer great convenience to educators during lessons. The educator can use the board by touching the screen with a pen or a finger. The educator can use the smart board to perform many functions such as to drag, cut and copy items; to take handwritten notes, convert these into text and highlight them; add annotations, notes, drawings and save them for printing and sharing; show animations and videos to all students in the classroom; capture and save screenshots, to retrieve, review and change these if necessary; to use the contents of websites (Balta & Duran, 2015). Smart boards are equipped with their own software. However, they also serve as a digital center that enables teachers and students to integrate the Internet and other hardware resources into the lessons (Mercer, Hennessy & Warwick, 2010). All these functions of smart boards are thought to have a significant effect on the quality of effective teaching and learning.

Understandable, smart board which is also known as interactive smart board or an electronic whiteboard, is a classroom tool that allows images from a computer screen to be displayed onto a classroom board using a digital projector. The teacher or a student can "interact" with the images directly on the screen using a tool or even a finger. With the computer connected to the internet or a local network, teachers can access information around the world. They can do a quick search and find a lesson they used previously. Suddenly, a wealth of resources is at the teacher's fingertips. For teachers and students, the interactive white board is a powerful benefit to the classroom. It opens up the students to collaboration and closer interaction to the lessons. Multimedia content can be shared and used in lectures, keeping students engaged (Dme.us.com, 2018).

In the view of Malik (2021) a smart Board is an interactive whiteboard that is receptive to touch, which allows you to write and move things around. Smart Boards work by connecting to a PC via an HDMI cable. The Smart Board displays what's on the computer and allows you to see what's on the board. Smart Boards grant you the ability to tap things with a finger, and they also come with special-coloured pens to write with. This can save teachers time from buying expo markers when it comes to writing on a whiteboard. Advanced versions of smart boards now allow students to work on a problem on the board at the same time. Before, only one person could touch the board since smart boards wouldn't respond to multiple touches.

Kormaz and Cakil (2013) points out that the most prominent benefits of smart boards are that they address more sense organs, provide visualization and make major contribution to the process of

learning, provide time saving, enable the use of all kinds of visuals in computer environment as teaching tools and make the topics easy, enjoyable and interesting.

Seymour (1995) while describing the role of smart board in education coined the term "mathematics" to indicate the manner in which students learn as opposed to the manner in which educators teach. The author further stressed the importance of the board as helping students in Piaget, and Vygotsky (1993) stated that allowing students control their learning process affords them the opportunity to collaborate with one another which subsequently encourages them to interact with computers and other smart devices, educators can use Smart Board in the classroom in the context of new ideals and views in the learning process.

Solvie (2001) investigated the correlation between the use of a Smart Board as a delivery tool for literacy instruction in a first grade classroom and students' attention and participation in the literacy lessons. The study found out that Smart Board interactive board created enthusiasm for individualised learning among students. Solvie (2004) in a study on smart board and its effect in students learning reported that the Smart Board effectively engaged students in literacy learning. In addition, Cox et al (2003) also found out that Smart Board allows teachers to gain deeper understanding of their students' needs while students are better able to learn through collaboration with each other. Kent (2003), indicated that teaching with interactive Smart Board is more fun, enjoying, exciting, and impacting on the speed and depth of learning.

Smart Board appeals to both intrinsically and extrinsically motivated students. According to a case study of the Jennings School District (2005) in St. Louis Missiouri, Dr Terry Stewart and his staff believed that students' performance should not be defined by test scores alone but also by attendance levels, motivation and behaviour. The author further stated that putting Smart Board in the hands of properly trained staff improves classroom enjoyment and motivation, particularly on the part of extrinsically motivated learners. It also leads to less student truancy.

Bell (1998) added that answers to opened questions indicated that students were more involved, attentive and motivated when lessons were taught using smart board rather than any other teaching methods. Blanton and Helms-Breazeale (2000) in their study indicated that if students are given the opportunity to view someone they like or respect; demonstrate behaviour they have acquired, then they stand a better chance of acquiring that behaviour. The Smart Board allows the students to watch peer leaders prompt and perform the appropriate behaviour which made the ownership of those behaviour much more enticing. This is because students with short attention span can attend any situation as long as it is on the television screen.

Smart Board as An Instructional Aid For Enhancing Teaching And Learning

Lockheed (1991) states that, instructional materials are critical ingredients in learning and that the curriculum could not be easily implemented without them. Kochhar (1991) corroborates that a

teacher who has adequate and relevant teaching facilities is more confident, effective and productive. Similar sentiments are shared by Steel (1983) who asserts that relevant instructional materials enable the learners to have a clear understanding of Conflict and Conflict Resolution. Instructional materials are essential since they help the teacher and learners avoid overemphasis on recitation and rote learning that can easily dominate a lesson. Resource materials allow learners to have practical experiences which help them to develop skills and concepts and to work in a variety of ways.

Samuel (2009) explained that as classroom teachers, it is essential that we become conversant with the type of instructional materials, which can be used in any teaching/ learning situations. The author further states that instructional materials are synonymous with what we call 'teaching aids' here in Nigeria. Instructional materials constitute alternative channels of communication, which a teacher can use to convey more vividly instructional information to learners. They represent a range of materials which can be used to 'extend the range of vicarious experience' of learners in a teaching-learning situation. According to him, in Nigeria, Educationists have realized the importance of these instructional materials for effective classroom teaching. However, in 1945 and in 1985, the federal ministry of Education organized an exhibition of improvised materials by instructional developers all over the federation. The major aim of these exhibitions were to identify materials, which teachers have improvised as include hopefully, to their further refinement through the process of formative evaluation. Though a center for educational technology has sprung up in colleges of education and universities all over the country, it is doubtful if most practicing teachers and educational authorities in Nigeria are aware of the benefits that can be derived from the use of instructional materials for teaching textile in Junior Secondary Schools in Nigeria. The truth is most Junior Secondary School teachers and their operators are not aware of the benefits the use of instructional materials or aids offer to learners that is why most Junior Secondary Schools in Bayelsa State do not have smart board to enhance or facilitate teaching and learning in most of Junior Secondary Schools.

The Concept of Textile.

The term “textile” is derived from the Latin word “Texere” meaning to weave, originally it is made from fabric which is made from fibre. However, in its present use, the term “textile” encompasses a vast number of fabrics produced by weaving, knitting, felting and embroidery and other methods. (Okeke, 2002: p67). According to Banjoko (2000) textiles is an art of fabric production and decoration. Fabric is derived from fibre. Fibre is converted into yarns for weaving of cloth materials. It also involves paper works, batik, tie and dye, block or screen printing. They are achieved through the use of various elements of design like motifs and colour. To achieve the desired pattern on the material, designs are made first on paper in repeat patterns and then transferred on the fabric planned by printing on machine, screen, stamping or stenciling. Textiles are two-dimensional art in the class of applied art (Banjoko, 2000: p46). Batter (2009: p) also states that textiles are formed by weaving, knitting, crocheting, knotting, or pressing fibres together.

While, the word fabric and cloth are used in textile assembly trades (such as tailoring and dressmaking) as synonyms for textile. However, there are subtle differences in these terms in specialized usage. Textilerefers to any material made by interlacing fibers (Abamowicz, 1998).
It is obvious that textile is a practical base topic in the subject fine arts or creative arts in Junior Secondary School in Bayelsa State, Nigeria. Teaching textile effectively will help give students opportunity to be self-reliant after school. The important thing is that teaching it requires a lot of materials and facilities and one of such facility as mention earlier to use to teach it effectively at this point in time is Smart Board. Unfortunately, it was observed that in most of the public secondary schools in Bayelsa State smart board available for teaching this subject is negatively affecting students' academic performance. This is why this study is carried out to obtain the effect of the unavailability of Smart Board in textile instruction and students' academic performance in junior secondary schools in Bayelsa State.

METHODOLOGY

This study will adopt survey research design. Survey research design deals with a group of people or items that can be studied by collecting and analyzing data from only a few people considered to be representatives of the entire group (Nworgu, 1991:p55). Creswell (2014) states that that it is the study of a group of people or items by collecting and analyzing data from only a few people or group of items considered to be representative of the entire group. Ogbazi and Okpara (1991:p2,4) support Olaitan and Nwoke by corroborating that a survey study involves the use of questionnaires and interviews to determine the options, preferences, attitudes and perceptions of people and about issues. Survey design does not make decision for administration but can provide it with information in which to base sound decisions.

This study will be carried out in Yenegoa metropolis the capital of Bayelsa State. Conversely, despite the numbers of higher institutions and secondary schools in the state created by government, it is appears that in some of the institutions the necessary facilities and equipment are inadequate to enhance or facilitate teaching and learning in the schools. The situation of inadequate facilitates for teaching and learning in some of the schools is affecting the teaching and learning of textile especially in Junior Secondary Schools. This one reason among others why this research is carry out to unveil the situation of unavailability of instructional materials like the smart board in some of the Junior Secondary Schools in the state.The population of this study consists of all the government public junior secondary school students in Yenegoa metropolises which are owned by the Bayelsa State Universal Basic Education Board (UBEB).

Out of the total population, 360 Junior Secondary School class three (J.S.S.3) students offering Fine Art within the secondary schools in the Metropolis formed the sample for the study. A simple ballot technique will be used to pick 60 students from each school which formed the sample size as sampled. The balloting will be made by using papers marked yes and no folded and shuffled in

a small container, the students will be asked to pick one of the papers. Those who pick "yes" will be used while those who pick "no" will be dropped.

The following schools will bde used for the sampling:
i. Government Girls Secondary School, Amarata
ii. Government Secondary School, Agudama Epie
iii. Community Secondary School, Azikoro; and
iv. Government Secondary School, Igbogene,

The instrument to be used for this study is a simple structured questionnaire on the problems of Smart Board in the Teaching of Textile and Student Academic Performance in Junior Secondary Schools in Bayelsa State (STTASAPJSSIBS). The responses from respondents through the questionnaire will provide the necessary data which will be used for analysis. Research assistants from among the art teachers within the schools will be selected and used to facilitate the study. The teachers that will be selected must be specialists in Fine Art. They however will be briefed with all the details on their roles and expectation on the study. The teachers will join the researcher to administer the questionnaires to respondents which will be collected later by the researcher to carry out the analysis.

To establish the relationship between variables, the information will be collected and turned to data which will be analyzed using Pearson's product moment correlation coefficient (PPMC) to test the relationship existing between Smart Board in the Teaching of Textile And Student Academic Performance in Secondary Schools in Bayelsa State.

PRESENTATION OF RESEARCH QUESTIONS

Research Question One: What is the relationship between Smart Board availability and teaching and learning of Textile in Secondary Schools in Bayelsa State?

Table 1: Summary ofRelationship Test between Smart Board availability and teaching and learning of Textile

Variables	$\sum X$ $\sum Y$	$\sum X^2$ $\sum Y^2$	$\sum XY$	r_{cal}
Smart Board availability	1011	3053	4825	0.667
Teaching and learning of Textile	1726	8358		

Source: Field survey, 2023

The result from Table 1 shows the summary of the Pearson Product Moment Correlation (PPMC) of the relationship between Smart Board availability and teaching and learning of Textile in secondary schools. The result of the analysis shows an r-value of 0.667. This indicates that Smart

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Board availability has a positive relationship to teaching and learning of Textile in secondary schools in Bayelsa State.

Research Question Two: Do teachers' knowledge of operating Smart Board relate to the enhancement of teaching and learning of textile in Secondary Schools in Bayelsa State?

Table 2: Summary ofRelationship Test between teachers' knowledge of operating Smart Board and the enhancement of teaching and learning of textile

Variables	$\sum X$ $\sum Y$	$\sum X^2$ $\sum Y^2$	$\sum XY$	r_{cal}
teachers knowledge of operating Smart Board	866	2188	4089	0.807
Enhancement of teaching and learning of textile	1704	8214		

Source: Field survey, 2023

The result from Table 2 shows the summary of the Pearson Product Moment Correlation (PPMC) of the relationship between teachers' knowledge of operating Smart Board relate to the enhancement of teaching and learning of textile in secondary schools. The result of the analysis shows an r-value of 0.807, indicating a positive relationship to the enhancement of teaching and learning of textile in secondary schools in Bayelsa State.

Research Question Three: To what extend does the level of utilization of Smart Board relate to the teaching and learning of textile in secondary schools in Bayelsa State?

Table 3: Summary ofRelationship Test between level of utilization of Smart Board and the teaching and learning of textile

Variables	$\sum X$ $\sum Y$	$\sum X^2$ $\sum Y^2$	$\sum XY$	r_{cal}
Level of utilization of Smart Board	871	2195	2867	0.595
Teaching and learning of textile	1213	4235		

Source: Field survey, 2023

The result from Table 3 shows the summary of the Pearson Product Moment Correlation (PPMC) of the relationship between level of utilization of Smart Board and the teaching and learning of textile. The result of the analysis shows an r-value of 0.595. This indicates that the level of utilization of Smart Board has a positive relationship to the teaching and learning of textile in secondary schools in Bayelsa State.

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TESTING OF NULL HYPOTHESES

Null hypothesis one: There is no significant relationship existing between availability of Smart Board and the teaching and learning of Textile in secondary schools and students' academic performance in Bayelsa State

Table 6: Summary of PPMC SignificantRelationship Test between availability of Smart Board and the teaching and learning of Textile in secondary schools and students' academic performance

Variables	$\sum X$ $\sum Y$	$\sum X^2$ $\sum Y^2$	$\sum XY$	r_{cal}	df	r_{crit}	Decision
availability of Smart Board	1011	3053	4825	0.667	358	0.196	Reject Null Hypothesis
Academic performance	1726	8358					

Significant @ .05 alpha level

The result from Table 6 shows that at 0.05 level of significance and with a df of 358 the calculated value of r (0.667) is greater than the table value of r (0.196), therefore, the null hypothesis is rejected. Meaning is that, there is a significant relationship between availability of Smart Board and the teaching and learning of Textile in secondary schools and students' academic performance in Bayelsa State.

Null hypothesis two: There is no significant relationship existing between teachers' knowledge in operating Smart Board and the teaching and learning of textile in secondary schools and students' academic performance in Bayelsa State.

Table 7: Summary ofPPMC Significant Relationship Test between teachers knowledge in operating Smart Board students' academic performance

	$\sum X$ $\sum Y$	$\sum X^2$ $\sum Y^2$	$\sum XY$	r_{cal}	df	r_{crit}	Decision
Teachers knowledge in operating Smart Board	866	2188	4089	0.807	358	0.196	Reject Null Hypothesis
Students' academic performance	1704	8214					

Significant @ .05 alpha level

The result from Table 7 shows that with a df 358 and at 0.05 level of significance, the critical table of r (0.196) is less than the calculated value of r (0.807), therefore, the null hypothesis is rejected.

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Thus, there is a significant relationship between teachers' knowledge in operating Smart Board and the teaching and learning of textile in secondary schools and students' academic performance in Bayelsa State.

Null hypothesis three: There is no significant relationship existing between the utilization of Smart Board and teaching and learning of textile in secondary schools and students' academic performance in Bayelsa State.

Table 8: Summary ofPPMC SignificantRelationship Test between utilization of Smart Board and students' academic performance

	$\sum X$ $\sum Y$	$\sum X^2$ $\sum Y^2$	$\sum XY$	r_{cal}	df	r_{crit}	Decision
Utilization of Smart Board	871	2195	28677	0.595	358	0.196	Reject Null Hypothesis
Students academic performance	1213	4235					

Summary of result in Table 8 indicates that at 0.05 level of significance and with a df of 358, the calculated r value (0.595) is greater than the table value of r (0.196), leading to the rejection of the null hypothesis. Therefore, there is a significant relationship between the utilization of Smart Board and teaching and learning of textile in secondary schools and students' academic performance in Bayelsa State.

DISCUSSION OF RESULTS

Relationship between availability of Smart Board and students' academic performance

The result in table 6 shows that at 358 degree of freedom and .05 alpha level, the critical r value(r_{crit}) is less than the calculated r value(r_{cal}) therefore, the null hypothesis is rejected. Thus, there is a significant relationship between availability of Smart Board and the teaching and learning of Textile in secondary schools and students' academic performance in Bayelsa State. The findings of the study support the views of Kadzera (2006) who states that the availability and the use of instructional materials in the classroom has the potential to help the teacher explain new concepts clearly, resulting in better student understanding of the concepts being taught.

Relationship between teachers' knowledge in operating Smart Board and students' academic performance

The finding in table 7 reveals that the r_{cal} is greater than the $r_{crit,}$ this leads to the rejection of the null hypothesis. Thus, there is a significant relationship between teachers' knowledge in operating Smart Board and the teaching and learning of textile in secondary schools and students' academic performance in Bayelsa State. This finding is in agreement with the views of Kormas &Cakil

(2013) who notes that the reason for the inadequate use of smart boards is not due to the smart boards but due to teachers' lack of knowledge on how to use them or not making adequate preparation before the classes. Also, the finding of the study is in agreement with the views of Erduran&Tataroglu (2009) who expresses that one of the primary difficulty teachers experience in using smart boards is their lack of knowledge on using these technologies. On the other hand, lack of suitable presentations and instructional materials, teachers' inability to fix technical failures by themselves and the lack of preparation to be made before classes are the reasons constituting other difficulties.

Relationship betweenutilization of Smart Board and students' academic performance

The result in hypothesis three reveal that at 358 degree of freedom and .05 alpha level, the critical r value is less than the calculated r value which means that the null hypothesis is rejected. Thus, there is a significant relationship between the utilization of Smart Board for teaching and learning of textile in secondary schools and students' academic performance in Bayelsa State. This finding agrees with the views of Elaziz (2008) who observes that smart boards can work in conjunction with some other technologies. Thus, their use lets teachers reach a number of resources in the shortest time. Also, the findings of the study supports the views of Levy (2002) who refers to smart boards that provide teachers with the means to integrate multimedia resources such as written text, video clips, soundtracks and diagrams into their classes. In this case, smart boards can bring variety into the class. Hence, they can contribute teachers to arrange the classes based on the needs of students with different learning styles such as visual, auditory and kinesthetic.

FINDINGS

The following were the findings of this study:

1. There is a significant relationship between availability of Smart Board and the teaching and learning of Textile in secondary schools and students' academic performance in Bayelsa State.
2. There is a significant relationship between teachers' knowledge in operating Smart Board and the teaching and learning of textile in secondary schools and students' academic performance in Bayelsa State.
3. There is a significant relationship between the utilization of Smart Board and teaching and learning of textile in secondary schools and students' academic performance in Bayelsa State.

CONCLUSION

In bringing the research to a conclusion, it will be pertinent to mention that, the research work was motivated by the observed fall of performance of students in public secondary schools in Bayelsa State. And in bit to proffer remedy the issue of unavailability smart boards in the schools. This study is carried out to obtain the significant of smart board towards students' academic

performance and the results from the findings in this study revealed that there is significant relationship in the use of smart board to teach textile in secondary schools in Bayelsa State. Thus, this study concludes that if smart boards are provided in all the secondary schools it will make so much impact in improving students' academic performance. The study also concludes that while using the smart board to teach Fine Art or possible textile, textile visual like fabric as the case may be should be projected on the screen to enhance teaching and as a way of providing solution to students' academic performance in the schools.

RECOMMENDATIONS

Consequent to the findings of the research, the research makes the following recommendations:

1. Having obtain the how significant of smart board can aid or facilitate teaching and learning in secondary schools the study recommends that those saddled with the responsibility of providing smart board should do the needful to ensure that smart board are provided in the schools.
2. There is need for teachers and students to effectively utilize the smart board as to enable them obtain academic excellence in their examination and class work.
3. There is also need for stakeholders to provide the necessary materials energy (Electricity) that will aid the smart boards to functions in some schools that have smart boards.
4. Stakeholders should also train operators of smart board to effectively utilize the smart board to teach.

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