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Computer-based advanced organiser and students' academic performance in selected bible schools in rivers state

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Abstract
This paper examined Computer-based advanced organizer and students' academic performance in Bible Schools in Rivers State. The accessible population of consisted of 91 respondents in five departments in two Bible schools. The sample size of 37 student pastors was chosen from one department using multi-stage sampling technique. Two instruments were used in this study and they were the Advance Organizer Achievement Test (AOAT) and Student Engagement and Interest Questionnaire (SEIQ). The face and content validity of the instruments were determined. Test-retest reliability was used to determine the reliability of the AOAT, while Cronbach Alpha test of reliability was used to determine the reliability of the SEIQ. A reliability coefficient of. 786 was obtained for the AOAT, while the SEIQ had a reliability coefficient of. 851 and the Interest towards Power Encounter Questionnaire subscale had a coefficient of. 751. The findings revealed that there is a significant relationship between the computer-based advance organizer and students' performance in Bible schools in Rivers State. Thus, the paper concludes that computer-based advanced organizer affects students' academic performance in Bible Schools in Rivers State.

Keywords: computer-based advanced organizer, Students academic performance, engagement, students' interest, bible school in rivers state

Introduction

The teaching activity is crucially important for the performance of determined goals in terms of behavioural change of learners. Thus, teaching is said to be effective when learning has actually brought the needed change in knowledge, skill, and attitude, in the learner. This change can only occur when students or learners have mastered the subject matter and made an application for it in their everyday life. In order for students to achieve mastery, some teachers have employed the use of advance organizers. It is very important that before a lesson, concept or idea is introduced, students should be prepared for it. Much thought and care should be given to choosing the best way of preparing students for and introducing them to new and different learning materials. This introduction has been termed, advanced organizer. The purpose of the advanced organizer is to relate the potentially meaningful materials to be learned to the already existing cognitive structure of the learner. It is assumed that the full learning potential of material can only be reached when the learner possesses a cognitive structure to which substantive aspects of the new knowledge can be related, as the student already processes adequate background knowledge for the new task. An advanced organizer is a kind of cognitive bridge, which teachers use to help learners make a link between what they know and what is to be learnt.

Mayer (2003) also described an advance organizer as information that is presented prior to learning and that can be used to organize and interpret new incoming information. This view is in line with that of Esu and Inyang Abia (2004) who noted that advance organizers refer to the process of communicating well in advance, the way in which a lesson will be organized to improve students' cognitive structure. Traditional teaching methods such as the lecture method emphasize rote learning and memorization, making the entire process of educating the student somewhat uninteresting. Whereas innovative teaching approaches emphasize improved and active processes beyond rote learning; and encourage effective classroom interaction that stimulates, motivates, and engages students. This makes the teaching work very tasking because a lot of preparation has to be done by the teacher in order to accomplish the goal of making his learners actively engaged in the class. It also means teachers would have to use various instructional methods or strategies in driving home their ideas irrespective of their area of specialization. However, it has been observed that in most Bible schools, the lecture method has been the common teaching method, even in this digital age that teaching and learning are driven by modern technology such, as computers and the Internet. Interaction with some trainee Pastors reveals that classroom lessons in Bible schools are not very interesting nor engaging because most bible school instructors use the traditional lecture method to present their lessons. This, in turn, affects their academic performance within and outside the bible school. That is why this study is aimed at investigating the impact of computer-based advance organizers on the academic performance of trainee pastors in Bible schools in Rivers State.

Research Findings

Research carried out in recent times shows that the

performance of trainee pastors has been very poor because of the poor teaching methods by Bible School teachers. This is observed by the researcher and report from some instructors who teach in some bible schools in Rivers State. This situation has been blamed on the poor teaching techniques and strategies adopted by the teachers. Given the fact that we live in the 21st century where computer and the internet have transformed the teaching environment; would the use of computer-based advance organizer enhance students' academic performance? This is the problem that this research seeks to address.

Significance of the Study

The paper will enable pastors and student pastors to see the need to start using digital facilities in order to manage their congregation effectively. It will enable teachers in the Bible schools to learn new teaching skills in order to develop their students, ministerial career and calling. Incorporating computer-based advance organizers into the school arrangement. This paper offers useful guidance and suggestion to the authority on the need to be enthusiastic in the use of computer-based advance organizers in order to arouse the audience interest and maximum participation in the subject matter. This study will also help bible school authorities/administrators to see the need to train and retrain their teachers so that they will be more productive in order to retrain their student and to keep them intact.

The article focused on computer-based advance organizer which is the independent variable, and students' academic performance which is the dependent variable. Other dependent variables studied were engagement and interest. Gender was an intervening variable. Furthermore, the researcher studied these variables to see how engagement and interest can be improved through computer-based advance organizers. Variables such as perception and attitude were outside the scope of this study. The Advance organizer that was used is concept map presented through Microsoft PowerPoint. The three topics chosen were: Power Ministry and preaching the gospel, the gifts of the Holy Spirit and Power Ministry and; The Power Ministry in Crusade Evangelism. This study is delimited to two schools in Rivers state which are Assemblies of God Pentecostal theological seminary (PTS) Eleme, and Greater' Evangelism world Crusade Kuran Bible School (KBC) at Nonwa Uedume in Tai Local Government Area of Rivers State. Geographically; Eleme and Tai are situated in the south-East senatorial district of Rivers state. Eleme is the gateway to Ogoni land through the shared boundaries with the Ikwerre through the East-West road to Akwa Ibom state. Eleme shares boundaries with Ikwerre through the East-West road on the west, Okrika on the south, Ndorki on the north and Tai on the East. Eleme has ten (10) Urban cities. While Tai shares boundaries with Gokana on the East, Ndorki on the North, Okrika on the South and Khana on the west. Tai is a semi-Urban area with about sixteen (16) villages. Residents are predominantly farmers and fishermen. They speak Ogoni as a language, and 80 percent of them are Christians. Economically, they are very viable and resourceful in nature, physically they are very strong; politically, they are very outstanding in the state. They have interesting sites for tourism, and they possess rich cultural values.

Theoretical Framework

Ausubel's theory of comparative advance organizers was used: The main goal of the comparative organizer is to activate existing schema. Similarly, they act as reminders to bring into the working memory what you may not realize is relevant. By acting as reminders, the organizer points out explicitly whether already established anchoring ideas are non-specifically or specifically relevant to learning material, Birabil & Aderonmu, 2014) [8]. Similarly, a comparative organiser is used both to integrate as well as discriminate. It integrates new ideas with basically similar concepts in the cognitive structure as well as increases discriminability between new and existing ideas which are essentially different but confusably similar (Birabil & Aderonmu, 2014) [8]. An example of the comparative organiser in a computer class might be a statement that will raise the interest of student pastors for computer packaging like software and others.

Concept of Computer-Based Advanced Organizer

An organizer is an instructional procedure used at the beginning of a learning activity that will organize and anchor concepts for the facilitation of learning. The term organizer is used to describe more complex and deliberately prepared sets of ideas which are presented to the learner in advance in order to ensure that relevantly anchoring ideas will he available Ciullo, S. &, C. (2013) [9]. organizers may be of two kinds. of the new learning, the material is totally unfamiliar to the learner, an expository organizer would be used. Such an organizer would build on whatever established and relevant knowledge currently exists in the student's cognitive this would serve to make the learning material more plausible or comprehensive.

The organizer itself' would thus bear a combinational relation to cognitive structure, and its content would make explicit both its relatedness to general relevant knowledge already present in cognitive structure and its own relevance to he learned. This lather detailed aspect would then be subsumed under the organizer. 1f the new learning material is not completely novel; a comparative organizer would be used. This organizer is used to integrate new concepts with basically similar concepts in cognitive structure, as well as to increase discriminability between new and existing ideas (Ciullo, 2013) [9]. Thus, whether already established anchoring ideas are non-specifically or specifically relevant to the learning material, the organizer both makes this relevance more explicit and itself explicitly related to the more differentiated concept of the learning task. Advance organizer: is an instructional unit that is used before direct instruction, or before a new topic, this is sometimes called a hook, set induction, or anticipatory set. An advance organizer is a cognitive instructional model strategy used to promote the learning and retention of new information. Its organizing principle is compatible with many modern instructional design models in the teaching and learning process.

The Importance of Computer-Based Advance Organizer

The computer enables the students to learn by self-evaluation and reflecting on their learning process. Computer-based

advanced organizer motivates students to learn better by providing them with the immediate feedback and reinforcement and by creating an exciting and interesting game-like atmosphere (Adekemi, 2001; Andrea, 2011) [2, 4]. When computer-based advance organizer technique is provided as a supplement to the classroom education, it increases students' achievement. Computer-based advance organizer has an impact on the development of the educational technology to a great extent in the 21st century and this has resulted in the production of the software for the computer-based instruction, which increases the motivation and achievement of students and to protect them against the negative effects of the rote-memory based educational system (Udeani & Okafor, 2012) [18]. Another importance of using computer-based advanced organizer in teacher and learning include the release from laborious processes, expediting and enhancing work production, increasing currency and scope of reference and supporting exploration and experimentation, fostering self-regulated and collaborative learning, improving motivation and engagement, increasing student persistence and participation, improving students' understanding and perception.

Concept mapping as a teaching strategy and computer-based-organizers.

According to Novak, and Cañas, (2006) [15], the term concept map is based on Ausubel's hierarchical memory theory it can also be called associationist memory theory. A concept map is known as a visual illustration displaying the organization among or between the concepts. Novak and Cañas, (2006) [15] stipulated that each concept map should have the following:

1. Hierarchical with its subordinate concepts at the apex
2. Using the precise linking words for labelling
3. To Cross-linked such relations between sub-branches of the hierarchy are identified.

Safeyenic, (2010) [17] suggested that concepts are a non-linguistic representation of a class of entities and words as labels which map our conceptual structure. Conceptual structure. Concept maps and Vee diagrams are important and valuable tools that help students impact the knowledge in the text, laboratory and lectures, they are also powerful tools for curriculum design.

The features of a concept map are

a. Cross-links are included which help us to see how a concept in one domain of knowledge represented in a map is related to the concept in another domain shown on the map. The connection creates meaning to the linking words which also define the relationship between the concepts.
b. A concept map can be good examples of events or objects that help to clarify the meaning of a given concept, they are not represented in boxes because they are not concepts.

It is noted that the main thrust of concept mapping is Ausubel's important distinction between the rote learning and meaningful learning.

Power Ministry and Preaching the Gospel Concept Map

***Source*:** Research desk (2018).

Fig 1

Power Ministry and Preaching the Gospel.

Specific objectives at the end of the lesson, the student pastors should be able to:

1. Define declaring.
2. Explain demonstrating.
3. State the power-plus formula.
4. Discuss faith shift in action.

Instructional Materials

Bible, books, chalkboard, concept map.

Entry Behaviour

The student pastors are called by God and are trained in the Bible school for the work of God.

Gift of Holy Spirit and Power Ministry Concept Map

***Source*:** Research desk (2018). The gifts of the Holy Spirit and Power Ministry

Fig 2

Specific objectives at the end of the lesson, the student pastors should be able to

1. Define spiritual gift.
2. Group spiritual gifts.
3. Highlight spiritual gifts.
4. Discuss spiritual gifts in power ministry.

Instructional materials

Concept map, books, Bible, chalkboard.

Entry behaviour: The student pastors are God's servant, trained in bible school and to be blessed with the spiritual gifts to do the work of God.

The Power Ministry in Crusade Evangelism Concept Map

***Source*:** Research desk (2018). The Power Ministry in Crusade Evangelism

Fig 3

Step 1: Power Ministry in crusade evangelism

This ministry is for a crusade evangelist pastor usually prays for people one person at a time while a crude evangelist often prays for people in mass. In power ministry on crusade evangelism, two issues are unique.

a. The necessity of signs and wonders in crusade evangelism
b. The approach to power ministry in an evangelistic crusade

Step 2: The need for signs and wonder in Crusade Evangelism

a. The New Testament pattern: The ministries of Jesus and the apostle should be the pattern for our ministries today. We should learn to minister by imitating Christ.
b. Jesus also promised his followers that they would receive power for ministry.
c. He promised that they would do the same miraculous work he had been doing (John 14:12).

Step 3: How to minister in power during an evangelistic crusade

a. Preparing for the evangelistic crusade.
b. Spiritual preparation.
c. Strategic prayer warfare:
    1. The team should travel to the place of crusade
    2. There they can pray with believers in their homes
    3. Take a prayer walk through the area after alter workers training
    4. They should be trained to lead people to Christ.
    5. To follow up new converts
    6. Terrain for power ministry

Step 4: Factors to consider when conducting the evangelistic crusade

Three factors must be considered:

a. The spiritual atmosphere of the crusade.
b. The anointing of the Holy Spirit upon his ministry.
c. The time reserved for power ministry.

A. Atmosphere

1. There should be a manifestation of the presence of God.
2. There should be prayer and worship.
3. A positive statement from leaders of services.
4. The atmosphere of faith expectant.

B. Anointing

a. Sense the anointing of the spirit upon the ministry team.
b. Holiness, prayer and submission to the spirit.

C. Power Ministry Time

1. Time should be given for power ministry.
2. The release of spiritual gifts.
3. Praying for the sick.
4. Casting out demons.
5. Allow the holy spirit to demonstrate his power at any time during the service.

Students' Academic Performance

The importance of academic performance cannot be over emphasis, academic performance classified level of the grade for students. Some come out 1st class, 2" class, 3rd class, even pass respectively. It projects intelligent student who scores high on the standardized test. It prepares the student for future carriers and allows them to enter competitive fields with other students (Akessa & Dhufera, 2015) [3]. In the other hand, it makes student compete favourably with their colleagues. Academic performance is often a sign of a refined intellect, which can help a student in all areas of their lives. The academic performance brings about academic success which directly decides the positive outcome of the student after graduating. It makes one knowledgeable enough in his/her field of study (Akessa, & Dhufera, 2015) [3].

Engagement

According **to** Appleton, Christenson, and Rulong, (2008) [8], engagement is referred to as the degree of attention, curiosity, interest, optimism and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education (Balfanz, Herzog & MacIver, 2007) [7]. According to George Kuh Engagement premise is straightforward and easily understood; the more students study a subject, the more student practices and get feedback from facu1t and stall members on their writing and collaborative problem solving the deeper they come to understand what they are learning and the more adept they become at managing complexity tolerating and ambiguity situation (Appleton, *et al*., 2008) [8].

Interest

Interest is often thought of as a process that contributes to learning and achievement. That is, being interested in a topic is a mental resource that enhances learning which then leads to better performance and achievement (Hill & Flynn, 2012). Interest is a feeling of concern or curiosity about or desire to be involved with something. eg an interest in music. Interest is a quality that attracts your attention and makes you want to learn more about something or to be involved in something.

Computer-Based Advance Organizer and Student Engagement

In a related study by Robert (2009) [16] on the impact of computer-based tools and embedded on writing processes and product of Novice and advance college writer, this study examined the impact of computer-based tools and embedded topical and rhetorical prompts on college writers. Two types of organizational tools, an outline and a graphic idea organiser, and the prompt increased the conceptual planning of both advanced and novice writers (Gonzalez-Ledo, 2012) [12]. There was no correction, however between the amount of planning and the quality of composition. Increased planning corresponded to better composition only under a certain condition; there was an interaction between treatment and level of writer. Advanced writers both planned more and wrote better composition when they used the idea organiser with prompt. Although novice writer with this treatment also planned more, their compositions were actually worst, the composition of novice writers with this (Gonzalez-Ledo, 2012) [12].

Computer-Based Advance Organizer and Student Interest

In a study done by Abdul-Majeed (2015) to investigate the effectiveness of graphic organizer on student writing ability as well as their attitude towards this essential language skill. The sample of this study was composed of 24 Saudi male subjects registered in the preparatory program at UMM. Aiqura University during the academic year 2012-2013. This study (within-subject design) was conducted in three phases and lasted for six weeks. Two main sources were used to generate data for the study (1) samples of students' writing before and after the graphic organiser intervention (2) a writing attitude survey which was administered twice before and after the intervention. The writing sources of the participant before and after the graphic organiser intervention were compared and analysed quantitatively using the test of significance to see if there were any differences between means of the scores (Gonzalez-Ledo, 2012) [12]. The data generated through the writing attitude survey was analysed quantitatively to detect any changes in students' attitudes. The result of this study proved that the graphic organiser model had significantly improved the student writing ability and had positively impacted their attitudes towards this skill (Gonzalez-Ledo, 2012) [12]. These results suggest that graphic organiser can be effective support in teaching writing of learners of English as a foreign language. The study only deals with a student in writing ability especially those English and foreign language while this research will address engagement and interest of the student.

Empirical Review

In a study by Rechel (2013) on the effects of advance organizer on attainment and interest of student concept of gravity in Nigeria was carried out to find out the efficacy of

using advanced organizer to teach student the concept of gravitation, weightlessness and space travels which are topics the student of junior secondary schools in Delta state Nigeria were used for the study. The students were grouped into two: the advanced organizer and control group. The exercise took place in six weeks. The advanced organizer was given before each of the four lessons to those in the experimental groups while those in the control had no organizer, they were only taught lesson same with the student in the experimental groups. Based on the result educational implication and conclusion were stated. This research did not address the issue of academic performance whereas, it is addressed in my study.
In another research work by Zamfir (2008) [19] on the effects of advance organizer on learning and interest from a fully web-based class among 166 college students on health care ethics, the experimental group and control group did not show any statistical significance or effect of advanced organiser but the student using a concept map consistently obtained higher learning achievements than individual using a text online. Furthermore, a student of high learning abilities benefited more from using the advance organiser, incorporation of instructional strategies such as advance organiser in web-based courses and program is therefore beneficial to the student of lower verbal and analytical abilities.
In a related study, Birabil and Aderonmu, (2014) [8] investigated the effectiveness of advance organiser on academic achievement and retention of hearing-impaired students (20 males and 20 females) drawn from three special schools in the state which state? Were assigned to experimental and control, five research ballot sampling techniques- five research questions were answered while two hypotheses were tested in the study. Two instruments used in data collected were social studies interest and skills inventory (SSIST). Data collected were analysed using mean (x) and standard deviation (SD) for the research question, while t-test was used to test the hypotheses at 0.05 level of significance.
In the same vein, Cuillo (2013) [9] investigated student with learning disabilities as a case study, the article presents a systematic review of the literature for studies that utilized computer-based graphic organizer for a student with learning disabilities. A comprehensive search yielded 12 studies that were coded and analysed, the researcher investigated the effectiveness of the treatments on academic outcomes and selected integral instructional and methodological. Features for evaluation in order to delineate practical implications and prioritize future research findings revealed high effect size measure and encourages result for written expression. While comprehension result was less promising. This review found no evidence suggesting that these treatments were efficacious without the use of explicit instruction and guided and guided practice the prevalence of technology in schools has rapidly expanded and statistics suggest that increased technological access has influenced instruction. The following figures demonstrate that numerous educators perceive technology as beneficial for enhancing learning teachers reported that computers are utilized in some capacity between 29 and 40 percent of instructional time. Access to laptops has increased over the past decades, with over 50% of teachers reporting access to mobile computers. Statistics related to the prevalence of computer labs is another indicator of technology's expansion as 27% of schools reported having a computer lab, 23 percent in elementary, 33 percent in secondary schools.

Methodology

The study adopts the two-group pre-test post-test quasi-experimental design. The population for this study consists of 91-degree two student pastors in five departments in two Bible schools namely Pentecostal Theological Seminary (PTS), Eleme and Kumran Bible College (KBC), Nonwa Tai. PTS has 66 students and KBC has 25 students. (Source: Office of the registrar, 2017). The sample consists of 32-degree two student pastors from one department: Mission and Communication Studies. The Department of Missions and Communication studies was purposively sampled from the five departments and all the 32 students from the department were used for the study. PTS has 21 student pastors while KBC has 11 student pastors.
The researcher chose the department of Mission and Communication because this is the only department in the Bible school that has the opportunity of using computers since students in this department serve as public relation officers (PRO) to the school. Thus, they communicate with the public on behalf of the school. Also, degree two (2) is chosen for this study because degree one students are new and just coming into the programme, they are not used to the academic activities on campus neither are they familiar with the school environment. Besides, degree three (3) students are very busy, preparing to pass out. Sample distributions of the population are: P.T.S. Eleme; male = 21, female = 15; K.B.C Nonwa, male = 11, female = 7. Therefore, total number of male = 32 while female = 22, make up 54 respondents.

Instruments for data collection

Two instruments were used in this study. They are the Advance Organizer Achievement Test (AOAT) and Student Engagement and Interest Questionnaire (SEIQ)
The AOAT contained 40 objective questions and was scored 100%; 2.5 marks per question. The SEIQ has two parts. Part A covers demographic variables such as gender while Part B has two sections. Section A contains items that measure students' engagement in the course Power Encounter. It was prepared on a four-point response scale of Very Frequently (VF), Frequently (F), Not Frequently (NF) and Rarely (R) on the items below. Section B measures students' interest in the course Power Encounter. It describes the extent of students' interest using a four-point Likert Scale of Very High Extent (VHE), High Extent (HE), Moderate Extent (ME) and Low Extent (LE).

The validity of the Instruments

The face and content validity of the instruments AOAT and the SEIQ were determined using the expert judgment of the researcher's supervisors, measurement and evaluation experts, and subject matter experts. The experts were given copies of the instrument and their input, corrections and recommendation were incorporated in the final version of the instruments

Reliability of the Instruments

The reliability of the instruments Advance Organizers achievement test (AOAT), and the two sections of the Students Engagement and Interest Questionnaire (SEIQ) namely Students engagement towards Power encounter and Interest towards Power encounter were estimated using, test-retest and Cronbach (1951) [10] Alpha test of internal consistency. The whole instrument and its subscales were pilot tested on a sample of 20 respondents. The Advance Organizers achievement test had a test-retest reliability coefficient of. 586, the Students Engagement towards Power Encounter Questionnaire had a Cronbach alpha reliability coefficient of. 651 and the Interest towards Power Encounter Questionnaire subscale had a Cronbach alpha coefficient of. 751 From the above it shows that the instruments/ questionnaires had good psychometric properties of validity and reliability.

Method of Data Collection

The researcher had an interaction with the Bible school teachers on the procedure to follow in carrying out the research. The AOAT and interest subscale of SEIQ were administered as pre-tests to the students of both the experimental and control groups. Following the administration of the pre-test, the treatment was given to the experimental group. Concept map was the advance organizer used. Each topic was prepared using concept map. The concept maps were prepared on Microsoft PowerPoint and burnt on CD. Each student in the experimental group was given a CD to go home and watch before each new topic was presented. The students in the control group were taught using the conventional lecture method. The teaching was done for two weeks. After two weeks, the AOAT and SEIQ were administered to the two groups. The test items of the AOAT and the interest subscale of the SEIQ were reshuffled and re-administered as post-tests. The engagement subscale of the SEIQ was administered as post-tests at the same time.

Results and Discussion

The instruments were retrieved from the respondents after filling. The research questions were answered using mean and standard deviation. Hypotheses were analysed using product moment correlation coefficients, at 0.05 level of significance on two-tailed tests to examine the relationship between the Computer-based advance organizer and student academic performance. The table below depicts the result of the analysis.

Hypothesis 1

There is no significant relationship between the computer-based advance organizer and students interest in Bible Schools in Rivers State.

Table 1

Correlations			
		Computer based-organizer	**Students' Interest**
computer based-organizer	**Pearson Correlation**	**1**	**.807****
	Sig. (2-tailed)		.000
	N	36	36
Students' interest	Pearson Correlation	.807**	1
	Sig. (2-tailed)	.000	
	N	36	36
**. Correlation is significant at the 0.0 level (2-tailed).			

***Source*:** SPSS Output (2018).

The result showed that computer based-organizer correlate with Students' interest at. 807, when the p-value is. 000 < 0.05 level of significance. The result here showed that there is a strong positive and significant relationship between the computer base organizers and students' performance in Bible schools in Rivers State. The implication of this relationship is an indication of the fact that the use of computer-based advance organizer improves student academic performance. The result of this outcome collaborates the finding made by Kerrano and Shihusa (2005), who also found out in their study the significant advantage of the use of advance organizer in enhancing students' performance over the use of a conventional method.

Hypotheses 2

There is no significant relationship between the computer-based advance organizer and students' engagement in Bible Schools in Rivers State.

Table 2

Correlations			
		Computer based-organizer	**Students' engagement**
computer based-organizer	Pearson Correlation	1	.754**
	Sig. (2-tailed)		.000
	N	36	36
Students' engagement	Pearson Correlation	.754**	1
	Sig. (2-tailed)	.000	
	N	36	36
**. Correlation is significant at the 0.05 level (2-tailed).			

The result showed that computer based-organizer correlate with Students' engagement at. 754 when the p-value is. 000 < 0.05 level of significance. The result showed that there is a strong positive and significant relationship between the computer base organizers and students' engagement in Bible schools in Rivers State. The finding here showed that students who are exposed to the use of computer based-organizer do well than those not exposed to the computer-based advance organizer. This finding is in tandem with the finding of King (2013). In his study on the effect of the advance organizer on student engagement behaviours, a statistically significant difference between the experimental group and control group was obtained. The study) also agrees with the finding of the present study.

Conclusion

The result in respect of Computer-based advance organizer and student academic performance showed that there was a significant difference in the performance of student taught with computer-based advance organizer. When compared with those taught without computer-based advance organizer in bible schools. The implication of this difference is an indication of the fact that the use of computer-based advance organizer improves student academic performance.

Effect of the computer-based advance organizer on student engagement, the finding here showed that there was the difference in the mean values of student engagement between those exposed to the computer-based advance organizer and those not exposed to the computer-based advance organizer. Indicative of the fact that, computer-based advance organizer affects students' engagement. Effect of computer-based advance organizers on student interest, the result of this sub-section showed that there was no significant difference in the effect of the computer-based advance organizer on student level of interest. This means that the use of computer-based advance organizer on student interest does not differ between the experimental group and the control group. A plausible reason for this lack of difference in terms of student interest could be that some of the respondents are not technological (computer used) savvy.

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