

EFFECTS OF SCAFFOLDING TEACHING STRATEGIES ON SECONDARY SCHOOL STUDENTS' ACHIEVEMENTS IN ENGLISH LANGUAGE SUMMARY WRITING IN EKITI STATE, NIGERIA

ADETUNJI Akinyemi Joseph

Abstract

This study examines the effect of scaffolding teaching strategy on secondary school students' achievement in English Language summary writing in Ekiti State. The study adopted quasi-experimental research of the pre-test, post-test non randomized group design. The sample was 104 students from two senior secondary schools out of eight schools in Ekiti East Local Government area. Two instructional packages were developed, one for the treatment group and one for the conventional group. Scaffolding Teaching Strategy (STS) and conventional instructional package (CIP) respectively. Research questions was analysed using frequency, percentage, mean and standard deviation while hypothesis was tested using t-test, and analysis of co-variance (ANCOVA). The findings reveals that student taught with conventional strategy had no appreciative improvement before ($\bar{X} = 44.02$) and after the treatment ($\bar{X} = 45.23$) while students taught using scaffolding teaching strategies performed better after the intervention ($\bar{X} = 54.88$) compared to their achievement before the intervention ($X = 46.50$). The general performance of female student in summary writing was fair ($\bar{X} = 43.35$) while male student seem better ($\bar{X} = 42.45$), it also reveal that teaching with scaffolding strategies improved student summary writing skill in English Language compared to the utilization of conventional teaching strategy ($t = -3.74, p < .01$). In conclusion, scaffolding teaching strategies influenced the achievement of student in English language summary writing. Based on the findings, it was recommended that the school authorities and Ministry of Education should ensure adequate training on use of scaffolding among English language teacher and regular supervision of school to ensure that scaffolding teaching strategies are used to improve students' achievement

Keywords: Achievements, Effects, Scaffolding, Strategies and Secondary School Students.

Introduction

English is thought to be one of the most important languages in the world. It is spoken as the first language in many countries. It is the main language for studying many subjects. It is very important in our day-to-day life because English is mostly used to communicate in Nigeria. English is the language of science, aviation, computers, diplomacy and tourism. It also serves as the language of international communication, it is estimated that about third of the world's population use English. Despite the importance attached to this language, students have not yet

observed the weight attached to it during English language lessons, most especially in summary writing. They find this aspect very boring, and an avenue for them to sleep and relax as a result of the method used by most teachers.

As observed overtime, students often dread and show negative attitude towards summary writing and the trends of their achievement in the Senior Secondary School Certificate Examination (SSCE) English language is a source of worry to stakeholders in Education. This is evidence of the annual release of the West African Senior School certificate Examination (WASSCE) in

English Language results. Students' outcomes do not match the government, teachers and parental investments. All stakeholders in Education are concerned about why the system is bringing out students with low scores in summary aspect of English language according to the WAEC reports of 2021, as indicated by the chief examiner Ikare Akoko centre.

Summary is an important aspect of writing involves the active participation of the teachers and students as they work through the interactive and recursive stages of pre-writing, writing and re-writing. Students are taught how to write more effectively by encouraging them to make full use of the many activities that comprise the act of writing not by focusing only on the final written products and its strength and weaknesses. Jenny A. W. (2022), writing an effective summary required one of the following:

Cues: a things said or done that serve as a signal. It is a facility for playing through an audio or video recording very rapidly until a desired starting point is reached. A Cue consists of a word, phrase or sentences that describe a particular aspect of a concept or skill.

Theory Underpinning Scaffolding: Vygotsky Theory of zone of Proximal Development (ZPD)

This study explores the Vygotsky Zone of Proximal Development (ZPD) to explain social scaffold. ZPD is one of the three major themes in Vygotsky Social Development Theory (2021). Social Development Theory envisages that social interaction precedes development where consciousness and cognition is the end product of socialization and social behavior. Vygotsky defines the ZPD as —The distance between the actual developmental level as determined by individual problem-

solving and the level of potential development as determined through problem- solving under adult guidance or in collaboration with more capable peers (Vygotsky, 2021). In other words, ZPD is the distance between the most difficult task someone can do alone and the most difficult task someone can do with help (Vygotsky in Mooney, 2000).

1. Zone of Proximal Development (ZPD)

The ZPD remains central to scaffolding, emphasizing the role of social interaction in learning. Educators focus on providing support that helps learners reach their potential without doing the work for them.

Gradual Release of Responsibility, This framework outlines a shift from teacher-directed learning to independent student work. It usually follows a sequence. Initially, the teacher demonstrates a task, then collaborates with students, and finally allows them to work independently.

2. Differentiated Instruction: Scaffolding is increasingly personalized, taking into account diverse learner needs, backgrounds, and learning styles. Educators tailor their support to enhance accessibility and engagement for all students.

3. Collaborative Learning: Emphasizing peer interactions, scaffolding often involves collaborative tasks where students support each other, fostering a community of learners. This reflects social constructivist principles.

In his theory, Vygotsky stresses that interaction is vital for a learner in the edge of learning where the learner can benefit from the interaction to enhance his or her learning achievement.

He stresses that interaction between the learner and other more skillful peers could effectively aid in developing the learner's skills, competence, and strategies. Vygotsky did not propose a specific procedure for determining how to locate an individual's ZPD, nor did he specify how to perform dialogic interaction within it. Consequently, those were issues left for his successors to wrestle with. He did, however, briefly mention examples of the work that could be conducted within the ZPD, such as giving demonstrations, and is a comprehensive framework that provides temporary support and guidance to learner and they develop new skill and knowledge.(Helen M. Powell, 2022)

The assistance given by the more skilled learners here is what is also termed as 'scaffolding'. It is worthy to note that, Vygotsky never used the term scaffolding in his theory, (Cheryl Torrez, 2020) as a metaphor to idealize the role of a teacher. Vygotsky suggests that when a student is at the ZPD, he should receive the appropriate assistance (scaffolding) just enough to achieve the task. Once this student gain mastery of the task, the scaffolding may be removed, and he would be able to face the task on his own again. This is likened to scaffolding as a metaphor taken from building construction where the scaffolds are used to support workers to construct a building, and the scaffolds will be removed after the building is completed (Johnson, Christie, and Wardle, 2005).

However, in education, scaffolding can be directive where students are expected to acquire standard skills and knowledge taught through series of specified contents and strategies designed by an instructor. Supportive scaffolding is a learner centered strategy where learning ends

are determined by the learners' needs, which manifests in instructions tailored to students needs based on their own ability and interest (Lenski and Nierstheimer, 2002). In scaffolding, the ZPD actually serves as a critical concept. ZPD concept was originally applied in face-to-face tutoring but later it was found to be also successful in other settings where computer software could serve as scaffolding support. Similarly, mobile phones can as well serve as scaffolding support. One of the most recent studies was one conducted by Zhang and Quintana (2012) who design the Digital Idea-Keeper, a scaffolding software tool to assist students with online inquiry. The software tool resulted in Students online activity to be more systematic, integrated, efficient, continuous, and focused. The online environment which facilitates the students' activity allows them to participate and manage their own learning (Sharon Kane, 2022). All these tutoring systems are geared towards scaffolding the learners to reach their projected learning outcomes where assistances are offered based on the learners' individual needs, level and pace within their ZPDs.

An issue of contention in Nigeria today is the issue of gender in the society including the educational system. Gender roles are roles which society assigns to a man or woman in accordance with the culture and tradition of that society.

Gender is a set of characteristics distinguishing between males and females, particularly in the case of man and woman, depending on the context, may vary from sex to social role to gender identity (Dr. Sara Mead 2019). Dr. Christianne Corbett (2018). Lend credence to significant gender differences in educational achievement.

They found out that gender influences students' conceptual shift in favour of male students. Therefore, the issue of gender and students' academic performance has been inconclusive. While there are some views that male students perform better than females, others disagree with this view, arguing that achievement is a factor dependent on several factors such as socio-economic background, cognitive ability, type of exposure and appropriate teaching strategies, among others. Jennifer I's (2022) work emphasizes effective instructional scaffolding structures to enhance teaching and learning. (Jennifer I's 2022). Therefore, one sees that the issue of gender has not yet been resolved particularly in relation to students' achievement and interest in Summary, hence the need for further study in that regard, especially when trying out new instructional scaffolding strategies.

Concept of Scaffolding

Scaffolding for learning is a comprehensive framework that provides temporary support and guidance to learners as they develop new skill, knowledge and instructional scaffolding in the classroom (Helen M. P. and Cheryl Torrez, 2022). Scaffold functions as a tool that allows learners to accomplish a given task). In the context of education it serves as a framework to help the student step beyond age-related limitations by breaking up the learning into chunks and then providing a tool, or structure through which a child can gradually build up knowledge. Hence, support and the helpful interactions between the teacher and the learner provide a step by step approach through which a child can gradually build up knowledge to enable him/her to perform beyond their independent efforts, where

the support is not given the reverse would be the case. Instructional scaffolding is a learning process designed to promote a deeper level of learning, Jenny A. W. 2022)

Statement of the Problem

English Language as a subject of study in schools is to be taught with the aim of helping students on how to speak, read and write correctly. Despite the great importance attached to English language in Nigeria and the emphasis placed on English language skills, most especially the summary writing, most learners fail it. Their failure could be traced to the inability of the students to present their thoughts, feelings, ideas or utterances on paper explicitly. The methods of teaching employed by English language teachers could be another factor. It on this basis that this study examines the effects of scaffolding teaching strategies on senior secondary school students' achievement in summary writing in Ekiti state, Nigeria.

Purpose of the Study

The main purpose of this study is to find out the effects of scaffolding teaching strategy on senior secondary school students' achievement in English language Summary writing by investigating the effect of using cue questioning strategy on secondary school student's achievement in summary writing in Ekiti East Local Government Ekiti state.

Research Questions

The study sought to provide answer to the following research questions:

- i. Will the cueing as a strategy influence the achievement of the students in summary writing?

- ii. What is the effects of Cue teaching strategies on the achievement of students in summary writing on the bases of gender?

Research Hypotheses

The following hypothesis was raised for this research,

1. There is no significant difference in the mean scores of students' achievement when taught using scaffolding and those taught using conventional teaching methods.
2. There is no significant difference in the mean scores of male and female students' achievement on summary writing in the experimental and control group.

Methodology

This chapter discusses research design, population, sample and sampling technique, research instrument, validity of the instrument, reliability of the instrument, administration of instrument and data analysis technique. The research design adopted for this study was quasi-experimental design. More specifically, pre – test, post- test control group design was used. Intact classes were used by the researcher in order to avoid disruption of the normal academic program in the school. The classes are of two groups, the control group and experimental group. The total population of the study was all the government secondary schools students in Ekiti East Local Government Area, Ekiti State, comprising of eight Schools. The sample size was 104 senior secondary school two students comprising forty two (42) male and sixty two (62) female, selected using proportional stratified sampling from SS2 Students because they have spent more years in school and have just a year

to graduate from school. While two secondary schools were purposively selected for the study, one for the experimental group while the second was for the control group respectively. The schools chosen were preferably mixed schools so as to enable the researcher sample both male and female students.

Validity of Instruments

To establish the validity of Summary Achievement Test (SAT), the content validity and construct validity were established by two experts in the field of Art Education. They examined the items on the instrument and made various corrections, suggesting cancellation of some items and restructure of ambiguous items. The vetted questions were submitted to the supervisor for proper screening, comment and approval. The instrument was then modified along the line of suggestion given.

The data collected for the study was used for the computation of the reliability of the Scaffolding Achievement Test (SAT) using the Kuder-Richardson (K-R) 2021. A reliability coefficient of 0.85 was obtained at the end of the computation, the high value of 0.85 of the coefficient indicates that the instrument was good for the test items and was also good for the study. This was done using frequency, percentage, mean and standard deviation. The formulated hypotheses were tested using t-test,

Administration of Instruments

The instruments were administered by the researcher to the two groups

In each of the two schools were experimental group and control groups. Data collected was an additional tool to analyze and answer the research

questions and as well as test the hypotheses that guided the study.

Data Analysis

The research questions were answered using mean and standard deviation while the hypotheses were tested using analysis of co-variance (ANCOVA) at level of significance of 0.05.

Results

This section presents the analysis of the research data. The research

questions were first addressed. This was done using frequency, percentage, mean and standard deviation. The formulated hypotheses were tested using t-test, and Analysis of co-variance (ANCOVA).

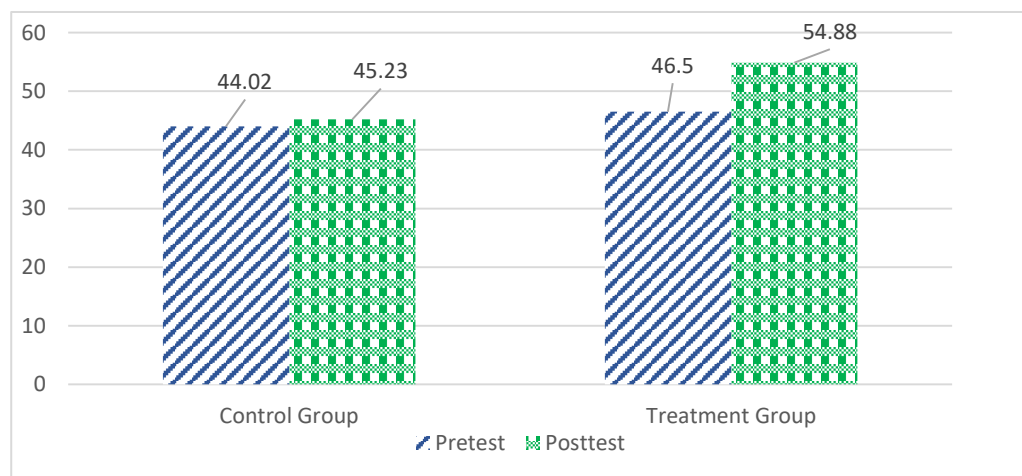
Research Question 1:

Will the cueing strategy influence the achievement of the students in summary writing?

Table 1: Summary of Mean and Standard Deviation showing Differences in Summary Writing based on Scaffolding Teaching Strategies

Experimental Groups	Test	N	X	SD
Control	Pre	52	44.02	16.43
	Post	52	45.23	13.53
Treatment	Pre	52	46.50	10.55
	Post	52	54.88	12.79

Figure 1: Bar Chart showing Differences in Summary Writing based on Cueing Teaching Strategies



The test on the influence of Cueing scaffolding on students' achievement in summary writing were presented in Table 1 and Figure 1. It was noted that students taught with conventional strategy had similar scores before ($X=44.02$) and after ($X = 45.23$)

the intervention in summary writing. On the contrary, students taught with scaffolding strategy scored higher after the intervention ($X=54.88$) compared to their achievement before the intervention ($X = 46.50$). This implied that scaffolding strategies influence the

achievement of students in English Language summary writing.

What is the effect of Cueing scaffolding strategies on the achievement of students in summary writing on the bases of gender?

Research Question 2:

Table 1: Summary of Mean and Standard Deviation showing Differences in male and Female Students' Achievement in Summary Writing based on Scaffolding Teaching Strategies

Experimental Groups	Test	Gender					
		Male			Female		
		N	Mean	SD	N	Mean	SD
Control	Pre	19	42.68	18.90	33	44.79	15.09
	Post	19	44.26	15.12	33	45.79	12.73
Treatment	Pre	23	49.17	8.96	29	44.38	11.37
	Post	23	56.83	12.44	29	53.34	13.06

Figure 1: Bar Chart showing Differences in male and Female Students' Achievement in Summary Writing based on Scaffolding Teaching Strategies

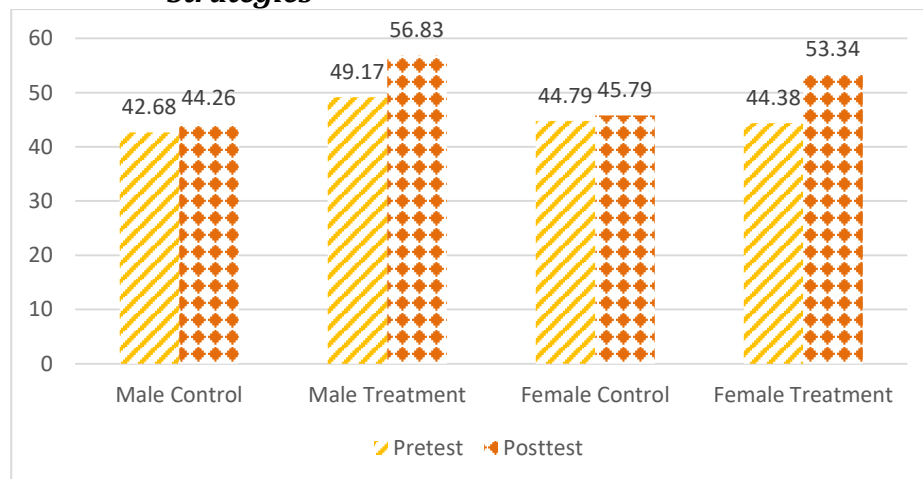


Table 1 and Figure 1 shows the effect of scaffolding on the students' achievement in summary writing in English Language based on the students' gender. It was noted that among male students, the groups exposed to conventional teaching strategy showed little difference in their achievement after (M=44.26) the intervention compared to before the intervention (M=42.68). However, there was much difference in the achievement level of

male students in the group taught with scaffolding strategy after the intervention (M=56.83) compared to before (49.17) the intervention.

The findings among the female students showed that those taught with conventional strategy had similar scores before (M=44.79) and after the intervention (M=45.79). This means that in a similar form like the males, female students in the control group had no difference in their achievement in

summary writing. The findings of the female students in the group exposed to scaffolding revealed that their scores after the intervention ($M=53.34$) was higher compared to their scores before the intervention ($M=44.38$).

Considering both genders, the observed changes among female students after exposure to scaffolding teaching strategies (8.96) was higher when compared to that of their male counterparts (7.66). This showed that

both male and female students' summary writing were influenced by scaffolding, however, that of female were a bit higher than that of their male counterparts.

Test of Hypotheses

Hypothesis 1: There is no significant difference in the mean scores of students' achievement when taught using scaffolding and those taught using conventional teaching methods

Table 1: *Dependent T-test showing the Difference in the Achievement of Students Before and After Intervention in the group Exposed to Scaffolding Strategies and those Exposed to the Conventional Methods*

Groups	Test	Mean	SD	N	Df	t	P
Control	Pre	41.15	18.00	52	51	-1.37	> .05
	Post	42.35	14.77				
Treatment	Pre	41.54	12.27	52	51	-9.40	< .01
	Post	50.58	15.52				

The result in Table 1 indicated that those in the control groups indicated no significant difference in their performance when exposed to the use of conventional method of teaching [$t(51) = -1.37, p > .05$]. This implied that their mean score on summary writing before they were taught with the conventional method ($\bar{X}=41.15, SD= 18.00$) do not significantly differ from the mean score on summary writing after they were taught with the conventional method ($\bar{X} = 42.35, SD= 14.77$). However, it was observed that those in the treatment group had a significant difference in the use of scaffolding strategies [$t(51)= -9.40, p < .01$]. This was such that students

exposed to scaffolding strategies method had higher mean scores in summary writing after exposure ($\bar{X}=50.58, SD=15.52$) compared to their summary writing before they were taught with scaffolding strategies ($\bar{X}=41.54, SD=12.27$). This implies that the intervention had a significant difference on the achievement of students taught with scaffolding strategies. Based on this findings, the hypothesis was partially confirmed.

Hypothesis 2: There is no significant difference in the mean scores of male and female students' achievement on summary writing in the experimental and control group

Table 1: *ANCOVA showing the Influence of Gender and Scaffolding Teaching Strategies on Students' Achievement in Summary Writing After the intervention while controlling for their pretest were*

Source	SS	Df	MS	F	P
Pretest on Achievement	19026.65	1	19026.65	455.16	.000
Gender	3.66	1	3.66	.09	> .05
Experiment Groups	1460.22	1	1460.22	34.93	< .01
Gender * Experiment Groups	40.15	1	40.15	.96	> .05
Error	4138.42	99	41.80		
Corrected Total	25169.85	103			

The table shows the influence of gender and the experimental groups on summary writing in English language when the pretest scores for summary writing are kept under control. The result indicated that gender had no significant influence on students achievement in summary writing while controlling for the pretest on summary writing [$F(1, 99) = .09, p > .05$]. This implied that male students do not differ from students in their summary writing achievement. The experimental groups had a significant influence on student achievement in summary writing when controlling for the pretest on summary writing [$F(1, 99) = 34.93, p < .01$]. This

implies that the treatment had influence on summary writing. The interaction effect of gender and the experimental groups on student achievement in summary writing was not significant when controlling for the pretest on summary writing [$F(1,99)=.96, p > .05$]. This implied that both variables do not interactively determine the achievement of students in summary writing. This confirmed the formulated hypothesis 3 and it was accepted. To further understand the groups with higher performance in summary skills after the posttest, the mean and standard deviation test was conducted and presented below.

Table 2: Summary of Mean and Standard Deviation Showing the Interaction among categories of Gender and Experimental Groups on Students' Achievement in Summary Writing After the intervention

Gender	Experiment Groups	Mean	SD	N
Male	Control Group	39.53	16.56	19
	Treatment Group	50.22	17.02	23
	Total	45.38	17.46	42
Female	Control Group	43.97	13.64	33
	Treatment Group	50.86	14.52	29
	Total	47.19	14.37	62
Total	Control Group	42.35	14.77	52
	Treatment Group	50.58	15.52	52
	Total	46.46	15.63	104

The result in Table 2 indicated that females ($\bar{X}=47.19, SD= 14.37$) had higher mean scores compared to their male counterparts ($\bar{X}=45.38,$

$SD=17.46$), however it's been explained earlier that the differences were not significant. For the experimental groups, the result shows that the treatment group ($\bar{X}= 50.58, SD= 15.52$) had a

higher mean score compared to the students in the control group ($\bar{X} = 42.35$, $SD = 14.77$). This means that the teaching with scaffolding strategies improved students' summary writing in English Language compared to the utilization of conventional teaching strategy. However, the interaction effect was not significant, thus nullifying the reasons for explaining such.

Conclusion

From the findings, it was concluded that majority of the students performed better with the experimental method (scaffolding teaching strategies) the modeling and concept mapping and the students also develop interest in summary writing English language.

The finding also put forward that in order to find a lasting solution to students' poor performance in summary writing English language, teachers, government and stakeholders in education must know their roles in the implementation of curriculum at the secondary school level. Instructional scaffolding is a formidable and highly effective instructional strategy in the domain of Summary writing English Language. Therefore, for students' achievement in the subject to be improved, English Language teachers should imbibe the spirit of regular use of instructional scaffolding in the classroom especially when teaching summary writing. Students should on their own establish a sense of competition in the classroom so as to effectively utilize the teacher's instructions through scaffolding teaching strategies.

Recommendations

- i. English language teachers teaching summary writing should on regular basis apply an effective method of

instruction like scaffolding teaching strategies to enhance better performance

- ii. Opportunity should be provided for teacher to undergo training programs as well as participate in workshops this will serve as a mean of retraining in order to increase the level of performance

Teaching profession should be professionalized so that only qualified teachers would be allowed to teach.

References

- (Vygotsky 2021). Learners Center, Role of tutors in teaching difficult tasks.
- Chen K S. (2023), Academic outcomes of flipped classroom learning: a Meta – analysis.
- Cheryl Torrez, (2020). Writing skills, A tool to model learning strategy
- Donato R. (2000) ZPD, Tutor; Peer Scaffolding: Sociocultural Theory in Writing Strategy Application.
- Dr. Christianne Corbett (2018). Lend credence to significant gender differences in educational achievement. They found out that gender influences students' conceptual shift in favour of male students.
- Dr. Sara Mead (2019). Gender Identity, social roles and sex.
- Hartman, B. E. (2004). Young children's regulatory Talk. An article on evidence of emerging meta-cognitive control over literacy products and processes; 20, 6-13
- Helen M. Powell (2022) Effective Science Teaching through the use of scaffolding Approach: A way out. A

- paper presented at the international symposium on the cultural implication of science Education Ahmadu Bello University, metacognitive scaffolding in the classroom (2000), embracing the essence of inquiry: New roles for science teachers
- Jenifer L. Geoke A. (2022). Effective instructional scaffolding structures to enhance teaching and learning.
- Jenny A. W. (2022) Effective writing, its strength and weakness.
- Lenski S. D. (2002) Instructional Strategy from a socio-cognitive perspective.
- Margaret, M. (2005). The Psychology of Learning and Instruction. Easy way Teaching Approaches. Englewood, the free press, London.
- MRTL Abdullah (2013) EJ1015435 - mLearning Scaffolding Model for Undergraduate English Learners
- Naoh S. Podolefsky, Emily B Moore, and Katherine Perkins (2014), Implicity scaffolding in interactive simulation: Design strategies to support multiple educational goals.
- Nierstheimer S & Susan Lenski (2019) Teacher of Reading & Notion, Language Arts Activities Package.
- Rachel E. Cultis (2012). The relevance of staff development programme to staff performance in the school system.
- Sandra M. & Jessica A. (2022), effect of improvised instructional materials on senior secondary school students achievement in Biology in Enugu South Local Government Area of Enugu State, Nigeria.
- Sharon Kane (2022).The online environment which facilitates the students' activity allows them to participate and manage their own learning
- Zhang and Quintana (2012) Digital Idea-Keeper, a scaffolding software tool to assist students with online inquiry.