EFFECTS OF SCAFFOLDING INSTRUCTIONAL METHOD ON THE ACADEMIC ACHIEVEMENT OF JUNIOR SECONDARY SCHOOL STUDENTS IN SOCIAL STUDIES EDUCATION IN ABAKALIKI EDUCATION ZONE OF EBONYI STATE.

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Abstract
The study investigated the effects of scaffolding instructional method of teaching on junior secondary school students' academic achievement in social studies in Abakaliki education zone of Ebonyi State, Nigeria. Three research questions guided the study and three null hypotheses were tested at 0.05 level of significance. Quasi-experimental research design was adopted, specifically a non-randomized pretest-posttest control group design was used. The population of the study was 638 junior secondary two (JSS2) students in the zone. A sample of 210 students drawn from four out of 36 junior secondary schools was involved in the study. The instrument for data collection was Social Studies Multiple Choice Test(SOSMCT) which was validated by three experts and one experienced social studies teacher. The reliability of SOSMCT was established using the Kunder-Richardson formulae 20 and the reliability index of 0.82 was obtained. The data obtained were analyzed using mean, standard deviation and analysis of covariance. The findings of the study revealed among others that the use of the scaffolding instructional method/strategy in teaching social studies enhanced academic achievement scores of students more than the use of conventional method which favour the males. Also gender had a significant influence on academic achievement of students taught with the scaffolding instructional strategy which was also in favour of males. It was recommended that school management, education ministries and other professional bodies should organize seminars and workshops from time to time for in-service training of social studies teachers to acquaint them with conferences, innovative teaching methods and strategies such as the scaffolding instructional technique for effective teaching and learning of social studies in junior secondary schools.
Key words: academic achievement, scaffolding instructional method, Social Studies.

 INTRODUCTION
One of the innovative elements in the curriculum of the new Nigeria educational system otherwise known as 9-3-4 system is the introduction of several new school subjects in junior secondary levels of education. Social Studies and civic education is one of the subjects newly

introduced in Nigeria school curriculum. Its inclusion in the curriculum and elevation to the status of compulsory subject to all students in junior secondary school level of the Nigeria educational system is an indication of its perceived importance to Nigerians (Nwafor, 2016). The importance of social studies is derived from the potentiality of the subject in achieving certain desirable goals of education in the nation. The subject focuses on man and his environment and the ways man does his things in mutual symbiosis with his environment.

Mbaba (2021) defines Social Studies as "a discipline that is concerned with the ways man transform himself. This means that Social Studies Education embodies a lot of things and by implication refers to the social learning designed to properly prepare the students or individuals to adjust adequately to their environments. The environments of man include economic, political and cultural. Toungo (2007) goes on to note that Social Studies education equips man with the knowledge of what happens around him, how all these respective environment influences him and how he can as well influence his environment. National council for the Social Studies (NCCS, 2011) avers Social Studies as ''the integrated study of the Social Sciences and humanities to promote civic competence''. With the school program, Social Studies provides coordinated, systematic study drawing upon such disciplines as anthropology, archaeology, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology as well as appropriate content from the humanities, mathematics and natural sciences.

The purpose of Social Studies education is enormous. The primary purpose of Social Studies is to help young people make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world. Comparative Education Study and Adaptation Centre(CESAC) in Akintola (2011) views social studies as a field of study that is concerned with the way man lives in and interacts with /her social and physical environments and how science and technology help him to live well in those environments. Therefore, it can easily be deduced that one of the primary purpose of Social Studies education is to help young people make informed and reasoned decisions to be good citizens of a culturally diverse, democratic society in an interdependent world.

Others scholars as Haruna and Lamic (2012) sees Social Studies Education as an integrated study of the social science and humanities to promote civic competence with the sole aim of helping individuals develop the ability to make informed and resolved decision for the good of the society; a planned and unplanned process by which individuals acquire values, skills and knowledge, which will make them useful to themselves and the society at large (Unugo, 2021). It is can also be classified as a programme of study designed to produce effective citizens with global values. It is as an aspect of social science that deals with the totality of man's activities within his physical, social and political environments. Social Studies education is set to integrate the society and groups economically, politically and culturally. No society or individual can develop to its fullest and keep pace with modern societal trends in science and technology without effective and efficient Social Studies education. As an inter-disciplinary subject, it enables the learners acquire wide knowledge of things or events around them. Indeed, it is an area of study that embraces various forms of instruction, as it is an integrated study of man and the outcome of his interaction with the environment. This implies that what he does, how he lives, how he influences or is being influenced by the forces of nature, people, customs and habits around him form important aspect of Social Studies learning and education. This integrated study envisages man's battles for survival in his environment for the purpose of promoting awareness, appreciation and understanding the reciprocal relationship between man and the environment (Ololobou, 2010). This shows that Social Studies is committed to

transmitting and forming the values of citizens, its philosophy is essentially geared to the maintenance and extension of the fundamental values of democratic society with reference to the citizens.

Social Studies education is a discipline that inculcates sound moral value of democracy and good governance in the youths. This may equally inform Nwafor's (2016) view that Social Studies is expected to: equip individuals in a society with the basic rules, institutional characteristics of democracy, political systems and knowledge about working of government, constitution processes of public affairs, democratic rights and practices and roles of citizens; enable the citizens to understand, respects and promote democratic values; create an environment that encourage individuals as well as collective responsible and informed participation in social and political process at the national, local and grass roots levels. Therefore, Social Studies education aims at helping young people to develop the ability to make decisions so that they can participate in determining the structures and compositions of the government of their own country and learn how to become activity informed and responsible citizens.

Commenting on the imperativeness of Social Studies Education to Nigeria society, Nwafor (2016) notes that Social Studies Education is an important means of teaching the populace about individual rights and what duties and responsibilities the governed and the leaders should do. The reintroduction of Social Studies Education as a subject to be taught in primary and junior schools in Nigeria is expected to further deepen democratic culture and encourage qualitative participation of the average Nigerians in the governance and children who are functional in social studies are capable of independent thinking, abstract thinking and critical thinking towards problem solving. The school is formal organization saddled with the responsibility of educating young adults. It makes the acquisition of knowledge friendly and more captivating to the learner. The junior secondary school students are in their formative stage, therefore, their cognitive, affective and psychomotor domains needs proper handling. They are expected to be taught using a calculated social studies teaching strategy to carry them through during the classroom instruction.

Despite the relevance of social studies in different areas of academic decision making in the life of the individuals, it has been observed that students' academic achievement in the subject declines over the years. Stressing on the poor academic achievement in social studies, Okigbo and Agu(2019), averred that it is very disappointing that students' achievement in social studies at both internal and external examinations has remained consistently poor. Students' achievement in social studies in junior secondary school examinations conducted by the Ebonyi state Education Development Council, EDC, an examination body in the state that sees to the conduct, supervision, publication of results) have not improved even in recent times. The EDC chief examiners reports of 2020 to 2023 still described students' performance to be below average. Studies also revealed that at both internal and external examinations, students' performance in junior secondary school examinations in Ebonyi state has remained poor when compared with other school subjects. (Unugo, 2021). Others researchers (Ahmed and Okigbo, 2021; Okeke,2013 and Okigbo and Ezeanyi,2020) had revealed that achievement of students in social studies could be influenced by methods, instructional strategies and techniques adopted in teaching such subjects. Reiterating, Umaru (2017), maintained that the low achievement of students in social studies could be attributed to poor delivery approaches adopted by teachers, students' attitudinal problems, teachers laxity towards teaching and so on. Equally, Okeke (2013) stated that students' academic achievement has a close link with teachers' strategy. The author

reiterated that teaching strategy adopted by teacherscould either enhance or deter students' academic achievement in any subject. The West African Examination Council(WAEC),chief Examiner's Report (2016),points out that among the factors that cause low achievement of students in social studies;poor instructional delivery approach to teaching by teachers is the most prominent factor, Specifically, Ahmed and Okigbo found that instructional technique such as the use of prior knowledge of social studies concepts in teaching greatly enhanced junior secondary school students' academic achievement. This made curriculum developers to recommend some teaching approaches which are learner-centred for the effective teaching and learning of the subject so as to bring the expected desired outcomes. This was also in pursuance of the objectives, content and context of social studies, the recommended approaches include but not limited to inquiry, concept mapping, discovery teaching/learning, field trips amongst others. Despite the recommendation for the use of these approaches by curriculum developers in teaching social studies, students' achievement in the subject is still not encouraging (Unugo, 2013). Exposing learners to the understanding of basic concepts in social studies and achieving desirable outcomes require the use of creative, innovative and interactive teaching approaches such as the instructional scaffolding that may arouse the interest of the learner and demystify difficult concepts in social studies. In addition, it is counter-productive to present ideas to learners without fully engaging them in the learning process.

Instructional scaffolding is the teaching strategy that emphasizes the teaching of new skills by engaging students collaboratively in task that would be too difficult for them to complete on their own. It is one of the participatory instructional strategies for teaching and learning of social studies. It is a teaching strategy geared to support learning when students are introduced to a new subject. Scaffolding is a form of coaching and support to students as they develop new skills or learn new concepts. This implies that when the learner achieves competence, the support is carefully removed (Mohammed, 2022). Unachukwu and Ebenebe (2009), noted that in scaffolding instruction, when the students' competence increases, less support or guidance is given. The efficacy of the scaffolding instructional strategy is better explained by the Chinese proverb which states: tell me, I forget; show me , I remember but involve me , I understand(Anu,2012). Going further, Nzewi and Ibeneme (2011), states that just as scaffolds helps worker to complete difficult jobs, instructional scaffolding helps students to build solid understanding of challenging academic tasks. This teaching strategy emphasizes the roles of teachers and other more skillful persons in supporting the learners' development and providing support structures to get to the next stage or levels (Nonye and Nwosu in Fatima, 2019). Margaret (2005) and Omiko (2013), in their studies saw scaffolding as the assistance (parameters, rules or suggestions) a teacher gives to the student in a learning situation. Margaret added that scaffolding is a learning process designed to promote a deeper level of learning. Scaffolding is the support given during the learning process which is tailored to the need of the student with the intention of helping the student to achieve their learning objectives. Sawyer (2006), stated that scaffolding is the provision of support to promote learning when concepts and skills are being first introduced to the student. This teaching strategy originated from Lev Vygotsky socio-culture theory and his concepts of Zone of Proximal Development (ZPD). His socio-cultural theory spelt out that social interaction is an important role in the development of cognitive. In his view, the learner does not learn in isolation, rather learning is strongly influenced by social interaction which takes place in meaning context. The Zone of Proximal Development (ZPD) is that area between what a learn can do independently (mastery level) and what can be accomplished with the assistance of a competent adult or peer (instructional level). It

is believed that any learner could be taught any concept effectively using instructional scaffolding techniques by applying the scaffolding at the ZPD.

Carrying out scaffolding instruction requires certain steps or procedures which are the three major levels of scaffolding and they are: (a.) content (b.) task and (c.) material scaffolding.

At the content level, the teacher breaks instructional plans to lead the students from the known to a deep understanding of what is unknown. The plans when using the instructional scaffolding must be written such that each bit of information that is learnt by the student serves as a logical link to the next step. Here prior knowledge is connected to the new information so that the previous knowledge would act as a scaffold to the current materials. In the second level of the instructional scaffolding, i.e. the task scaffolding, the instructor provides support to the learner at every step of the learning process. By the end of properly executed scaffolding plan, the students perform the entire task with little or no support (scaffolds) from their teacher. This form of hand-on –task learning that promotes students' involvement in the teaching and learning is the advocacy of Lev Vygotsky in his theory of cognitive development.

At the third level of the scaffolding instructional plan which is the material scaffolding. The teacher uses manipulative, verbal or physical prompts or cues to help the learner perform a task. The cues and prompts must be phased out over time as learners master the steps of the task or strategy. The teacher uses the scaffolding instructional strategy so as to offer enough assistance to guide the students towards independent and self- regulated learning irrespective of students' gender. It is the process of building on what the learner already knows that makes scaffolding an effective instructional technique.

The lecture method is a common method teacher employed in the teaching of social studies. It is referred to as talk and chalk or textbook method (Gbamanja in Joda, 2018). In the course of employing the method, the teacher dominates the teaching with little participation on the part of the learners. In the lecture method, the teacher is seen as the custodian/repository while the students are passive recipients of knowledge transmitted by the teacher in the process of learning. The method has the advantage of covering a wider area within a short time but it is not learner-centred, and students do not gain mastery of concepts.

Gender is a variable that could influence students' academic achievement in different subject areas. Gender refers to the varied socially and culturally constructed roles, qualities, behavior and so on that is ascribed to women and men by different societies (UNICEF, 1995). According to Tukura (2015). Gender connotes masculine and feminine roles associated to males and females in the society. Also Onuh and Okigbo (2020), refers to it as the roles and responsibilities of men and women that are created in families, societies and culture. There is a controversy on research findings of scholars on the influence of gender on students' academic achievement. According to Gambari in Onuh and Okigbo (2020), gender has no influence on students' academic achievement while Adigun et al in Nwoye, Okeke and Nwosu (2020), identified gender as a strong influencing factor in the academic achievement of students.

Statement of the Problem

The teaching of social studies in the Nigerian secondary schools has been with the use of the traditional method of instruction (lecture method). However, the achievement of students in the subject especially at the junior secondary school level has consistently remained poor. This may imply that students are not learning from the use of this method of teaching. This study therefore, is to determine the effect of introducing the scaffolding instructional strategy in social studies classroom on students' learning outcomes.

Research Questions

The following research questions were formulated to guide the investigation.

1. What are the pretest and posttest mean achievement scores of secondary school students taught social studies with the Scaffolding Instructional Strategy (SIS) and those with the conventional lecture method (CLM)?

2. What are the pretest and posttest mean achievement scores of male and female students taught social studies with the Scaffolding Instructional Strategy?

3. What is the interaction effect of methods and gender on students' achievement in social studies?

Hypotheses

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

1. There is no significant difference between the mean achievement scores of secondary school students taught social studies with the Scaffolding Instructional Strategy (SIS) and those taught with the conventional lecture method (CLM).

2. There is no significant difference between the mean achievement scores of male and female students taught social studies using the Scaffolding Instructional Strategy (SIS).

3. There is no interaction effect of treatment and gender on students' academic achievement in social studies.

Research Method

The study adopted the quasi-experimental research design, specifically a non-randomized pretest, posttest group design was used. The study was conducted in Onueke education zone of Ebonyi state, Nigeria. The population consists of 638 junior secondary school students. The sample size was 208 JSS2 students drawn from four out of the 36 junior secondary schools in the zone through multi-stage sampling procedure. The instrument for data collection was the Social Studies Multiple Choice Test (SOSMCT). The SOSMCT consisted of 50-item multiple choice questions with four options A-D adapted from the Education Development Centre of the state ministry of education compiled past questions on social studies. A test blue print was used to draw the 50-item so as to ensure content validity of the items. Instructional strategy lesson plans were developed on the topics taught. The SOSMCT was validated by three experts; two from the department of Arts and Social Science Education, Measurement and Evaluation(ASSE)Ebonyi State University, Abakaliki and one from the Ebonyi State College of Education, Ikwo. The reliability of the SOSMCT was established using Kunder-Richardson formulae20.The co-efficient of internal consistency was 0.82.

The experimental aspect of the study was conducted in four stages. The first was briefing of the research assistants who were the regular social studies teachers of the selected four secondary schools. The regular social studies teachers of the selected schools were used to avoid faking of behaviors on the part of the students. The regular social studies teachers were given one (1) week briefing by the researcher to ensure uniformity of instructional delivery for a better experimental outcome. The second stage was pre-testing and familiarization when both groups (Experimental and Control), were given pretest before the commencement of the experiment. The third stage was teaching of students by the regular social studies teachers. The social studies teachers taught the experimental groups four (4) lesson (each a week) using the scaffolding instructional strategy lesson plan on family. On the other hand, the control group was also taught

the same four (4) lessons (each a week) using the conventional method lesson plans on family. After teaching the students for four (4) weeks, the final stage (stage 4) was post- testing. Here, both the experimental and control groups were given post -test and using SOSMCT. The scores of the experimental and control groups in both the pretest and posttest were recorded. Research questions were answered using mean and standard deviation. The analysis of the Covariance was used to test the null hypotheses at 0.05 level of significance. Decision rule for the hypothesis is that null hypothesis is rejected when the probability value is less than or equal to the significant value of 0.05 ($p \leq 0.05$) otherwise the hypothesis is accepted.

PRESENTATION OF RESULTS
Research Question 1
What are the pretest and posttest mean achievement scores of secondary school students taught social studies with the Scaffolding Instructional Strategy (SIS) and those with the Conventional lecture method.

Table 1: Mean and Standard Deviation of Pretest and posttest achievement scores of students taught social studies using the Scaffolding Instructional Strategy (SIS) and the Conventional Lecture Method(CLM) ..

Method	N	Pre test		Posttest		Mean gain	Mean Gain difference
		Mean	SD	Mean	SD		
SIS	201	22.13	9.49	58.59	12.50	36.46	9.71
CLM	162	20.65	8.95	47.40	11.92	26.75	

From table 1, mean pretest and posttest scores of 22.13 and 58.59 was obtained for students taught with SIS respectively while mean pretest and posttest scores of 20.65 and 47.40 respectively were obtained for students taught using CLM. A mean gain of 36.46 was obtained for students taught with SIS while a mean gain of 8.59 was obtained for students taught with CLM. From the mean gain, the students taught with SIS has higher mean gain than the students taught with CLM.

Research Question 2
What are the pretest and posttest mean achievement scores of male and female students taught social studies with the Scaffolding Instructional Strategy (SIS)?
Table 2: Pretest and posttest mean achievement scores of male and female students taught social studies with the Scaffolding Instructional Strategy.

Group	N	Pretest		Posttest		Mean Gain
		Mean	SD	Mean	SD	
Male	56	43.13	10.80	58.86	13.62	15.73
Female	50	41.86	9.57	54.66	10.38	12.8

From table 2, the mean pretest and posttest scores of male student are 43.13 and 58.86 respectively while the mean pretest and posttest scores of female students are 41.86 and 54.66 respectively. The mean gain scores of13.62 and 10.38 were obtained for male and female student respectively. From the mean gain, the male students taught Social Studies with SIS has higher mean gain than their female counterparts taught Social Studies using SIS.

Table 3: Mean and standard Deviation on effect of gender and teaching methods on social studies achievement.   .

Mthds	Scaffolding Instructional Strategy			Conv.LectureMthd		
	N	Mean	SD	N	Mean	SD
Pretest						
Male	109	22.28	9.27	74	21.11	8.68
Female	922	1.96	9.80	88	20.27	9.20
Posttest						
Male	109	59.74	12.93	74	49.08	10.57
Female	92	57.22	11.90	88	45.98	12.83

Table 3 shows a mean achievement score of 59.74, for male students who were taught with the Scaffolding Instructional Strategy (experimental group) while their female counterparts had a with the conventional lecture method (control) had a mean achievement score of 45.98.

Test of Hypotheses
1. **HO$_{1:}$** *There is no significant difference between the mean achievement scores of secondary school students taught social studies with the Scaffolding Instructional Strategy (SIS) and those taught with the conventional lecture method (CLM).*

Table 4: Analysis of Co-variance (ANCOVA) test of significance difference between the mean achievement scores of students taught social studies with SIS and CLM..

Source of Variation	Sum of Sq.	Df	Mean of Sq.	F	Sig.
Corrected model	19678.21	2	9839.16	228.78	.000
Intercept	1922.45	1	1922.45	44.70	.000
Pretest	15380.37	1	15380.37	357.63	.000
Method	2448.37	1	2448.37	56.93	.000
Error	8816.289	205	43.01		
Total	600011.00	208			
Corrected total	28494.61	207			.

Table 4 is on the significance of the mean difference between students taught using the scaffolding instructional strategy and those taught using the conventional lecture method. From the table $F(1,205) = 56.93$, P= .000<α =.05 means that there is a significant difference between the mean achievement scores of students taught using the scaffolding instructional strategy and those taught using the conventional lecture method in favour of the scaffolding instructional strategy group. Therefore, the null hypothesis is rejected.

HO$_{2}$:*There is no significant difference between the mean achievement scores of male and female students taught social studies using the Scaffolding Instructional Strategy (SIS).*

Table 5: Analysis of Co-variance (ANCOVA) test of significance difference between the mean achievement scores of male and female students taught with the scaffolding instructional strategy in social studies.

Source of Variation	Sum of Sq.	Df	Mean of Sq.	F	Sig.
Corrected model	9648.45	2	4824.23	79.85	.000
Intercept	1803.55	1	1803.55	29.85	.000

Pretest	9183.12	1	9183.12	151.99	.000
Method	242.59	1	242.59	4.02	.043
Error	6222 .95	103	60.42		
Total	3587.85	106			
Corrected total	25871.41	105			

Table 5 shows the test of difference in the mean achievement scores of students taught social studies using the scaffolding instructional strategy. From the table, $F(1, 103)=4.02$, P= .043 < α=0.05 shows that there is a significant difference between the mean achievement scores of male and female students taught social studies using the scaffolding instructional strategy in favour of male students. Therefore, the null hypothesis that there is no significance difference between the mean achievement scores of male and female students taught social studies using the scaffolding instructional strategy is rejected.

HO$_3$: There is no interaction effect of treatment and gender on students' academic achievement in social studies.

Table 6: test of interaction effect of treatment and gender on the achievement of students in social studies.

Source of Variation	Sum of Sq.	Df	Mean of Sq.	F	Sig.
Corrected model	5216.69	3	1738.89	15.24	.000
Intercept	558591.95	1	558591.95	4895.32	.000
Mthds Gender	521.69	3	1738.89	15.24	.000
Error	232677 .91	204	114.11		
Total	6000.11	208			
Corrected total	28494.61	207.			

Table 6 is on the interaction effect between gender and method on the achievement of the student taught social studies. From the table $F(3,204) =15.24$, p=0.00<α =0.05 was obtained. This means that there is statistically significant interaction of gender and method on the achievement of students taught social studies. Therefore null hypothesis is rejected.

Discussion
The major findings from the result of data analysis showed that there is a significant difference between the mean achievement scores of secondary schools students taught Social studies using scaffolding instructional strategy and those taught using conventional lecture method (CLM) in favour of scaffolding instructional strategy group. The students in SIS group performed better than those in conventional lecture method group because SIS is a learner- centered, more practical-oriented teaching approach where the students were given opportunity to exercise their mastery over the content of the learning materials and to ensure they were able to make progress in each phase of learning based on the established knowledge they have in the previous phase. Scaffolding instructional strategy help the learners develop in them appropriate mastery skills that will enable them successfully migrate from one level of knowledge to the other, that is the Zone of Proximal Development (ZPD)in a given learning process thereby improving their achievement in the subject matter.
 This finding agreed with the work of Nzewi and Ibeneme (2011), and states that just as scaffolds helps worker to complete difficult jobs, instructional scaffolding helps students to build solid understanding of challenging academic tasks. Also, Adit (2017), found out that students

exposed to scaffolding instructional strategy developed a positive attitude towards science generally.

However, sex /gender were also significant in the achievement of students based on the instructional approach. There was significant difference in the achievement of male and female student who were taught social studies using scaffolding instructional approach. The finding of the study is contrary to that of Okereke and Okigbo, (2019) whose study revealed that gender is not a factor in students' achievement in social studies when instructional scaffolding approach applied in teaching.

The interaction effect of teaching approaches and gender was examined on achievement of the students in social studies. It was observed that gender and treatment has significant interaction on students' achievement. This implies that male and female students react differently to the treatment in terms of their academic achievement in Social Studies. In other words, the teaching strategies used in the study imparted differently on male and female students based on their academic achievement in social studies.

Conclusion

Based on the findings, it was concluded that the use of SIS in teaching social studies was more effective than the use of CLM. However the use of SIS was gender bias since it favour males more than females in learning of social studies.

Recommendations

 From the findings of the study, it was recommended that:

1. The school authorities, those in business of education and professional bodies should organize seminars and workshop from time to time for in-service social studies teachers to acquire skills in the use of innovative teaching strategies such as SIS so as to ensure effective social studies curriculum delivery.
2. Teachers of social studies should adopt the use of SIS in teaching to improve students' learning outcomes.
3. Teacher Education Institutions should include and introduce the use of SIS in teaching social studies in the class.

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