

Research Article

Sex Differences in Academic Performance Using Framing Teaching Strategies in Social Studies among Upper Basic Education Students in Delta State

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Abstract— The study examined sex differences in academic performance using framing teaching strategies in social studies among Upper Basic Education Students in Delta State. Two research questions and two hypotheses guided the study. This study employed quasi-experimental design. The population of the study was 80,912, comprised Upper Basic 8 Social Studies students in Delta State. The sample size for this study was 190 Upper Basic 8 Social Studies students. The study employed random sampling techniques for all stages of selection. Social Studies Performance Test (SSPT) and three different lesson plans (Instructional package) were the instruments used in the study. The reliability of the instrument was established with Kuder-Richardson's method, which yielded a reliability coefficient (r) of 0.86. Descriptive statistics of mean and standard deviation were used to answer the research questions while t-test statistical analysis and Analysis of Covariance (ANCOVA) were used to test the stated hypotheses at 0.05 level of significance. The result showed that, there is no significant difference between the mean performance scores of Social Studies students taught with framing and lecture strategy. It also revealed that there is no significant difference between the mean performance scores of male and female Social Studies students taught using the framing strategy. The study recommends among others that government should provide support for research undertaking to enable researchers explore other innovative teaching strategies that could enhance the academic performance of students in social studies

Keywords— Sex, Teaching method, Framing, Strategies, Social Studies, Academic Performance

1. Introduction

Social Studies is a field connected with all aspects of human life, aiming to enable individuals to live fulfilled, comfortable, and successful lives. The social, academic, economic, cultural, physical, and psychological aspects of human existence are all encompassed by this subject. It focuses on developing individuals in all aspects to prepare them to be productive members of society. Nevertheless, the poor performance of secondary school students in Social Studies calls into question the effectiveness of the teaching methods used by teachers. For instance, data obtained from the Delta State Ministry of Basic and Secondary Education in Asaba showed that in the 2016–2017 academic session, only 50 percent of the candidates who sat for the Basic Certificate Examination (BCE) passed Social Studies; in 2017–2018, 46 percent passed; in 2018–2019, 45 percent passed; and in 2019–2020, 51 percent passed. This trend reflects an average performance and calls for an urgent need to improve students' academic outcomes in the subject.

According to [1] Education has a crucial and strategic function, especially when it is linked to initiatives to increase

human resource quality, however, students' performance and engagement in the classroom vary according to certain factors, such as background, teaching methods, and developmental levels in terms of chronological and cognitive maturity. Notably, the regular poor academic performance of the majority of students is fundamentally linked to the application of ineffective teaching methods by teachers to impart knowledge to learners [2]. This trend of low performance among Social Studies learners indicate that future Social Studies educators and learners may lack the techno-scientific and socio-economic competencies required for future development and the application of Social Studies in achieving educational goals. In light of the above, this study is designed to investigate gender differences in academic performance using framing teaching strategies in Social Studies among upper basic education students in Delta State.

Framing is a visual layout that makes it possible to organize a lot of information into a framework, matrix, or grid. The primary ideas are arranged in rows and columns in frames, which enable material to be placed in "slots" pertaining to the key ideas, such as facts, examples, descriptions, and

explanations, as well as processes and procedures to demonstrate the relationships between and within the concepts. [3] Assert that the framework or grid for representing knowledge was introduced into cognitive science. They further stated that it was introduced as a product of a spatial learning strategy to describe the mechanism for knowledge and knowing. The purpose of framing is to promote understanding and recalling the key topic and its essential features. From their study, it used to evaluate mathematics subject which is different from Social Studies concepts. Moreover, most studies in the area of framing were main conducted in a foreign country and may not be effectively applied to Nigerian learners, considering their different socio-cultural backgrounds.

Sex is a socio-culturally designed feature that distinguishes between feminine and masculine traits. Sex is used to characterize traits of men and women that are innately, culturally, and socially determined, whereas traits that are biologically determined are not considered to fall under the category of gender. Gender is one of the factors interacting with performance in Social Studies and other social sciences. Social Studies seems to be a subject that is difficult to learn, especially among female students [4]. [5] Stressed that the importance of examining performance in relation to gender, primarily due to the socio-cultural differences between girls and boys. They see gender as encompassing the range of physical, biological, mental, and behavioral characteristics that differentiate the feminine from the masculine, or the female population from the male. This study aims to investigate the effectiveness of jigsaw and framing teaching strategies in improving the academic performance of male and female students in social studies. The underperformance of secondary school students in social studies raises concerns about teaching methods and gender differences. Several factors affect students' performance in the classroom. Therefore, the purpose of this study is to investigate Gender differences in academic performance using framing teaching strategies in social studies among Upper Basic Education students in Delta State.

Performance in social studies subject has consistently been unsatisfactory. An analysis of Basic Education Certificate results spanning from 2017–2018 to 2019–2020 in Delta State indicates persistently passive performance. Therefore, the problem of this study is to investigate sex differences in academic performance using framing teaching strategies in social studies among upper basic education students in Delta State.

Purpose of the Study

This study aims to examine how framing teaching strategies in social studies impact the academic performance of upper basic education students in Delta State, with a focus on sex differences. The specific objectives are to:

1. Compare the effect of framing strategies and lecture method on the academic performance of upper basic education students in Delta State.
2. Determine the mean performance scores between male and female social studies students taught using framing

strategies among upper basic education students in Delta State.

Research Questions

1. What is the effect of framing strategies and lecture method on the academic performance of upper basic education students in Delta State?
2. Does the mean performance scores differ between male and female social studies students taught using framing strategies among upper basic education students in Delta State?

Hypotheses

1. There is no significant difference between framing strategies and lecture method in teaching social studies on the academic performance of Upper Basic Education Students in Delta State.
2. There is no significant difference in the mean performance scores between male and female social studies students taught using framing strategies among Upper Basic Education Students in Delta State.

2. Related Work

Theoretical Framework

This study was hinged in Constructivist Theory developed by Seymour Papert. According to the constructivist view of knowledge, people learn and make sense of the world through interacting with their ideas and experiences. It is a combination of their early experiences and reflexes or behavioral patterns during infancy. Piaget dubbed these knowledge systems schemata. Jean Piaget's theories of experiential learning and constructivism serve as the basis for constructivism, an educational theory. A fundamental idea of many movements for educational reform, Piaget's constructivist learning theory has had a significant influence on learning theories and instructional strategies in the field of education. Constructivism is linked to instructional strategies that encourage active learning, or learning by doing. When given the opportunity, the idea contends, students interpret what is taught in the classroom.

Concept of Academic Performance

Academic performance is a key concept in education, reflecting how well students achieve their learning goals. It involves the knowledge, skills, and abilities acquired through instruction, demonstrating progress toward mastering specific objectives. The academic performance of learners is a primary goal of educational programs worldwide. [6] Define it as the total knowledge students possess, often assessed through tests or examinations.

Traditionally, academic performance has been measured through standardized tests, classroom assessments, and course grades, often summarized by a Grade Point Average (GPA). However, the effectiveness of these measures is debated. Critics argue that standardized tests may overlook critical aspects of student learning, such as critical thinking, creativity, problem-solving skills, teaching methods, teacher effectiveness, student gender, parental involvement, and environmental influences. [7] Stress the importance of understanding academic discourse, issues, and context, advocating for a more comprehensive measurement approach.

Academic performance is central to educational activities. Consequently, student achievement, especially at foundational stages, is a major focus of educational research. Schools, parents, and other stakeholders are deeply invested in understanding and supporting student performance. At the elementary level, a program's success depends on the academic achievement of its students. By exploring the factors influencing student performance, we can identify areas for improvement in teaching practices, student support systems, and the overall educational environment.

Concept of Framing Instructional Strategy

A framing strategy is a visual arrangement that makes it possible to arrange a large amount of information in the shape of a matrix, grid, or spatial framework. The primary ideas are arranged in rows and columns within the frames, allowing for the entry of information in "slots" for facts, examples, descriptions, processes, and procedures to demonstrate how the ideas relate to one another and to the concept as a whole. Frames can be traced back to the works of [8]. By framing, the student is given the opportunity to take significant control of his own learning.

Gender and Academic Performance

The term gender describes how women and men are socially formed, including roles, norms, and interactions within and between groups of men and women. Gender, on the other hand, is a societal construct that designates duties, attitudes, and values deemed suitable for every sex. [9] He pointed out that being a man or a woman, boy or girl, entails having a certain character. [10] Gender is a socially constructed state that is learned and applied to both men and women. He went on to say that gender identity is the product of cultural learning, therefore gender norms are imposed by cultural practices. As a result, expectations placed on men and women vary depending on their respective cultural environments.

[11] Asserts that gender is an innate physiological characteristic that determines an individual's gender. This emphasized that gender relates to a cultural view of what defines masculinity and femininity in a community, whereas sex is based on biological and physical differences between males and females [12]. Gender is therefore socially defined, but sex is defined by biology. Similarly, [13] said that gender determines whether a person is masculine or feminine, whereas sex determines whether a person is male or female. It is interesting to notice that the term "masculinity" describes characteristics that are deemed suitable for men, such as being assertive, athletic, physically active, rational, and in charge while interacting with women. However, femininity refers to characteristics typically associated with proper behavior.

[17] Supported the claim that gender matters when comparing the individual competence and skills demonstrated by male and female social studies students. Their investigation demonstrated that gender disparities in academia are related to ability. This proficiency can be in the areas of language proficiency, learning proficiency, subject-matter proficiency, and so forth. Competence is the combination of an

individual's innate traits and their capacity to express them. Therefore, according to the aforementioned scholars, a learner's academic performance is determined by their competence in relation to cognitive skills like understanding, reading, writing, and the ability to replicate knowledge that has been learned during the period of tests and examinations, rather than by their gender.

Nonetheless, several researchers have carried out experiments to raise social studies students' academic achievement. For example, [18] conducted research on the association between a student's aptitude for solving mathematical problems and the type of knowledge they can recall from problems they had already solved. The results showed that the type of problem recall varied between proficient and incompetent problem solvers. In other words, whereas incompetent problem solvers occasionally remembered the specifics of a problem statement, proficient problem solvers typically remembered facts about a problem's structure. From the solution and discussion of one problem to the solution of a structurally related problem, a considerable transfer effect was seen.

[19] Examined the impact of idea mapping and framing, both individually and in combination, as metacognitive techniques on students' mastery of a few molecular thermodynamics concepts that were thought to be challenging. The impact of pupils' gender on their performance was also looked at. One control and a quasi-experimental pre-test-post-test control group were used. 200 SSII chemistry students were chosen from four schools in the Ibadan municipality of Oyo State, and the experiment was carried out using the Concept Attainment Instructional Guide (CAIG) and Concept Attainment Test (CAT). The concept attainment of pupils was found to be significantly impacted by the treatment at the classificatory, formal, and use-of-concept stages of attainment. Gender had no discernible main or interaction effects, with the exception of the classificatory level. This investigation will examine the impact

[20] Done a meta-analysis of various teaching methods that have been applied in the classroom. The self-system, the metacognitive system, the cognitive system, and knowledge are the "four elements of human information processing" that he further postulated as part of his concept. Next, the four systems were divided into smaller groups. Metacognition has been divided into "four different categories:(1) goal specification;(2) process specification;(3) process monitoring; and(4) disposition monitoring" for analytical purposes. He pointed out that the meta-analysis of the various teaching styles employed the Effect size, "one of the most widely used indices of the impact of an independent variable... on a dependent variable."

[21] evaluated the relative efficacy of framing and team assisted individualized (TAI) learning methodologies. There were two posted null hypotheses. The sample was given two reliable tests, the Basic Science Achievement Test (BSC) and the Style of Categorization Test (SCT), and the collected data was examined using the Duncan Multiple Range Test and the 3x2x2 factorial ANCOVA. The results show that therapy has

a significant main effect ($F(2,360) = 23.782, p < .05$), but gender and categorization style had no significant main effects. Furthermore, no noteworthy interaction effects were discovered. The results show that in the Northern region of Nigeria, both TAI and framing strategies are beneficial in raising students' achievement in Basic Science. Therefore, these alternative techniques may be used as successful substitutes for teaching basic science and as a means of ensuring that Nigeria's new, nine-year basic education curriculum is implemented in a way that is efficient.

[22] Studied how students' performance and memory of the mole idea were affected by the framing of the instructional technique [22]. The study's specific goal was to ascertain how students' performance and retention of the mole idea were affected by framing, sex, school location, and the interaction of these three independent variables. The findings demonstrated that the framing teaching strategy outperformed the lecture method in terms of improving students' performance and knowledge retention of mole topics. Students' academic performance and recall of the mole idea were not significantly impacted by their sexual orientation or the location of their school. . Thus, it was determined that, in comparison to the lecture approach, the framing teaching style improved students' performance and memory of the mole idea. Among other things, it was suggested that Chemistry teachers embrace and use the method as a means of delivering lessons in the classroom. The framing strategy must be incorporated into the unique Chemistry method curriculum taught in teacher training programs. In-service educators should attend seminars on frame construction, and authors of chemistry textbooks should incorporate framing into their chapter summaries.

[23] Examined the impact of customized learning approaches and the Jigsaw instructional style on biology students' performance. The Ohafia Education Zone in Abia State served as the study's location. For the study, two intact classrooms of one hundred (100) SS2 students were used. The Biology Performance Test (BAT), a single researcher-developed tool, was used to gather data for the study. Analysis of Covariance (ANCOVA) was utilized to test the hypotheses and mean and standard deviation were employed to evaluate the data in order to address the research objectives. The study's findings revealed that using the Jigsaw instructional technique improved students' academic performance in biology. The study also discovered that when biology is taught using the Jigsaw teaching technique, gender has no discernible impact on students' performance. Because it addresses the Jigsaw instructional technique, this study is relevant to the current investigation. The current study, however, is concentrated on social studies, whereas the previous study was centered on biology.

[24] Studied how the Jigsaw teaching method affected Physics students' academic achievement. The state of Abia hosted the study. Two hundred and ten (210) senior secondary two (SS2) students participated in the study. Data was gathered using a physics performance test device that the researcher had created and had been verified by specialists.

The research hypotheses were tested using a t-test, and the gathered data were analyzed using mean and standard deviation. According to the study, using the identical teaching strategy with male and female students had no discernible impact on their performance.

[25] Investigated how the jigsaw teaching approach (JTS) affected the chemistry retention and academic achievement of senior secondary two (ss2) students. The study was guided by two research objectives, two hypotheses, and a pretest-posttest nonequivalent control group design. 1,129 SS 2 chemistry students from the 49 secondary schools in the Aguata Education Zone of Anambra State make up the study's population. For the study, a sample size of 71 was chosen by the use of multi-stage sampling. To answer the research questions, descriptive statistics of the mean were used, while standard deviation was used to determine whether or not the respondents' achievement scores were homogeneous. The developed hypotheses were tested using inferential statistics of Analysis of Covariance (ANCOVA) at the 0.05 alpha level. The study's conclusions showed that, in comparison to the traditional teaching approach, the JTS strategy considerably improved the accomplishment and retention scores of SS2 students in chemistry. Based on these results, the study suggested, among other things, that the Anambra State Ministry of Education host conferences, seminars, and workshops to train teachers—especially those teaching chemistry—on how to apply JTS in the classroom. In a similar vein, [26] conducted research on how Jigsaw teaching method affected biology students' performance. The study was carried out in the Enugu State local government area of Igbo-Eze North. Among other aspects, the study's conclusions demonstrated that performance in biology differs significantly between male and female pupils. Given that it addresses the Jigsaw instructional technique, this study is relevant to the current investigation. The current study, however, is concentrated on social studies, whereas the previous study was centered on biology. Additionally, a study by [27] on the impact of the Jigsaw instructional technique on Ebonyi State students' performance in Chemistry revealed that both male and female students' performance in Chemistry is significantly impacted. [28] Discovered that there is a substantial difference in the biology performance of male and female students when examining the impact of the Jigsaw educational technique.

Based on the literature review, there were fewer research done on effect of framing strategies on academic performance as well as the differences in sex on academic performance. However, it was observed that no research has specifically examined sex differences in academic performance using framing teaching strategies in social studies among upper basic education students in Delta State. This is the focus of the current study.

3. Method and Procedure

This study utilized a quasi-experimental research design. This is because subjects were not randomized in this study, and intact classes were randomly assigned to the experimental and

control groups. It is considered a quasi-experimental study due to the use of non-randomized intact classes. The independent variable is the instructional method (framing), while the dependent variable is the students' academic performance.

The population of the study was 80,912 comprised Upper Basic 8 Social Studies students in Delta State from 453 public upper basic schools for the 2021/2022 academic session (Source: Ministry of Basic Education, Asaba, 2022). These schools were spread across the three senatorial districts of Delta State. The sample size for this study is 190 Upper Basic 8 Social Studies students, selected from six mixed secondary schools in Delta State. The study used purposive and random sampling techniques for all stages of selection. The study will utilize the Social Studies Performance Test (SSPT) and three different lesson plans (Instructional package) as research instruments. The SSPT was developed by selecting and compiling test items on the topics of Family, Concept of Marriage, and Readiness in Marriage drawn from 2019-2021 question papers. The three different lesson plans (instructional packages) are comprehensive lesson plans drawn from both first and second-term schemes of work topics for Upper Basic 8 Social Studies, taught using Jigsaw, Framing, and Lecture methods, respectively, for six weeks. The Social Studies Performance Test (SSPT) is a 50-item multiple-choice test based on the selected topics for this study.

The reliability of the instrument (SSPT) was established by using Kuder-Richardson's method. When the KR-21 formula was used, the calculation yielded a reliability coefficient (r) of 0.86. this value is in line with [29] who stated that a reliability value of 0.6 and above is considered high and accepted index. This is a high reliability index and is considered suitable for making group inferences that are accurate enough. (See Appendix IV for computation). The researcher employed descriptive statistics to analyze the data and address the research questions. This included the utilization of mean and standard deviation. Hypothesis testing was carried out using t-test statistical analysis for hypotheses, while Analysis of Covariance (ANCOVA) was used for hypotheses 4 and 7. ANCOVA was chosen as the statistical method because it facilitated the establishment of a standardized baseline for the variations identified in the pre-test scores, which were beyond the researcher's control during the data analysis process.

4. Result and Discussion

Table 1: Mean and Standard Deviation of Pretest and Posttest performance Scores among Social Studies Students Taught Using Framing and Lecture Method

| Group | N | Pretest | | Posttest | | Mean Difference |
|----------------|-----|---------|------|----------|------|-----------------|
| | | Mean | SD | Mean | SD | |
| Framing | 97 | 22.48 | 4.76 | 64.66 | 7.19 | 42.18 |
| Lecture method | 93 | 22.10 | 6.34 | 56.22 | 7.94 | 34.12 |
| Total | 190 | | | | | |

Table 1 presents Mean and Standard Deviation of Pretest and Posttest performance Scores among Social Studies Students Taught Using Framing and Lecture Method.

The data presented in the table represents the two groups in the study: one received the "Framing" intervention, and the other received a "Lecture" intervention. The sample size for each group. The Framing group had 97 participants, while the Lecture group had 93 participants, making a total of 190 participants. In the average pretest score for each group. The Framing group had a mean pretest score of 22.48, and the Lecture group had a mean pretest score of 22.10. These scores are close, which imply implies that both groups started at a similar baseline. Furthermore, Standard Deviation shows how much individual scores in each group varied around the mean. The Framing group had a pretest SD of 4.76, and the Lecture group had an SD of 6.34, indicating a bit more variability in the Lecture group.

For the Posttest, the average posttest score after the interventions. The Framing group's posttest mean was 64.66, and the Lecture group's posttest mean was 56.22. The higher posttest mean in the Framing group suggests that this intervention may have been more effective. The standard deviation for posttest scores was 7.19 for the Framing group and 7.94 for the Lecture group, suggesting similar variability in posttest scores across both groups. The MD (Mean Difference) represents the improvement from pretest to posttest within each group. For the Framing group, the mean difference was 42.18, while for the Lecture group, the mean difference was 34.12.

Lastly, the larger mean difference in the Framing group (42.18 compared to 34.12) indicates that participants in this group showed greater improvement between pretest and posttest, suggesting that the Framing intervention might have been more effective than the Lecture intervention.

Hypothesis 1: There is no significant difference between framing strategies and lecture method in teaching social studies on the academic performance of Upper Basic Education Students in Delta State.

Table 2: t-test Comparison of Posttest Mean Achievement Scores of Students Taught social studies using framing and lecture method

| Group | N | \bar{X} | SD | DF | t-cal. | Sig. (2-tailed) | Decision |
|---------|-----|-----------|------|-----|--------|-----------------|-----------------|
| Framing | 97 | 64.66 | 7.19 | 188 | 2.028 | 0.977 | Not Significant |
| Lecture | 93 | 56.22 | 7.94 | | | | |
| Total | 190 | | | | | | |

P>0.05

The table 2, present a t-test comparison of posttest mean achievement scores between students taught social studies using the framing method and those taught with the lecture method.

The table 4 demonstrated that the students taught with the framing method had a higher mean score (64.66) compared to

those taught with the lecture method (56.22), highlighting that framing might be associated with higher achievement scores. Furthermore, the standard deviations for the framing method was 7.19, and lecture method was 7.94. This indicates the variability in scores within each group. That is, a slightly higher variability is seen in the lecture group. The degrees of freedom (DF) is 188, correspond to the combined group sizes, adjusted for independent groups, that is 190 - 2. The t-calculated value of 2.028 represents the observed difference in mean scores between the two groups. This value is compared to critical values to assess statistical significance. The significance level of 0.977 is higher than the set level of significance of 0.05. This means that the observed difference between the two groups' mean scores is not statistically significant. Therefore, even if the framing method shows a higher mean score, the high p-value of 0.977 indicates that this difference is likely due to chance. Therefore, there is no significant difference in the mean performance scores of Social Studies students taught using framing and lecture strategies,

Table 3: Mean and Standard Deviation of Posttest Performance Scores of Male and Female Social Studies Students Taught Using the Framing Teaching method

| Sex | N | Posttest | | Mean Difference |
|--------|-----|----------|------|-----------------|
| | | Mean | SD | |
| Male | 93 | 64.64 | 7.27 | 0.04 |
| Female | 97 | 64.68 | 7.18 | |
| Total | 190 | | | |

The table 3 presents the mean and standard deviation (SD) of posttest performance scores for male and female social studies students taught using the framing teaching method. There were 47 male students and 50 female students participated, totaling 97 students in the study. However, Male students had a mean posttest score of 64.64, while the Female students had a slightly higher mean posttest score of 64.68. Furthermore, the standard deviation for male students' scores is 7.27, indicating how much their scores vary from their mean score. While the female students had slightly lower standard deviation of 7.18. This indicates a marginal smaller spread of scores around the mean compared to male students. The mean difference between male and female students' scores is 0.04, indicating almost no difference in average performance.

Finally, , the table 2 demonstrated that both male and female students performed similarly on the posttest after being taught using the framing teaching method, with almost same mean scores and a slight difference in score variation.

Hypothesis 2: There is no significant difference in the mean performance scores between male and female social studies students taught using framing strategies among Upper Basic Education Students in Delta State.

Table 4: t-test Comparison of Posttest Mean Performance Scores of Male and Female Social Studies Students Taught Using Framing Teaching method

| Sex | N | \bar{X} | SD | DF | t-cal. | Sig. (2-tailed) | Decision |
|--------|-----|-----------|------|-----|--------|-----------------|-----------------|
| Male | 93 | 64.64 | 7.27 | 188 | 0.028 | 0.977 | Not Significant |
| Female | 97 | 64.68 | 7.18 | | | | |
| Total | 190 | | | | | | |

P>0.05

The table 4 presents a t-test compares posttest mean performance scores of male and female social studies students taught using the framing teaching method. The mean score for male students is 64.64 and female students is 64.68 is almost identical, suggesting very similar performance between genders. The standard deviations for males is 7.27 and females is 7.18. This show a comparable variability in performance scores within each sex group. The degrees of freedom is 188 are based on the total number of participants minus the two independent groups. The t-calculated value (0.028) is very close to zero, indicating an extremely small difference in mean scores between male and female students. The significance level of 0.977 is much higher than the standard significance level of 0.05. This means that any observed difference is likely due to chance.

The high p-value of 0.977 indicates that there is no statistically significant difference in performance scores between male and female students taught using the framing method. Therefore, sex does not appear to affect students' performance in social studies when taught with these framing strategies.

Discussion

The findings from this study provide insights into the effectiveness of framing instructional strategies in Social Studies education, traditional lecture methods and implication on sex of the students. The findings from this study provide insights into the effectiveness of framing instructional strategies in Social Studies education, especially in comparison with traditional lecture methods.

The result in Hypothesis 1 indicated no significant difference between the mean performance scores of Social Studies students taught using the framing strategy and those taught using the lecture method. This finding is in line with previous research by Nneji, whose study found that framing strategies as effective alternatives for teaching, particularly in Basic Science. Nneji stated that such strategies could facilitate the effective implementation of Nigeria's new 9-year Basic Education Curriculum by actively engaging students and encouraging a deeper understanding of content. Supporting this perspective, Miriogu's work on the mole concept underscored that framing instructional strategies can improve student performance and enhance knowledge retention. The consistency of these results implies that while framing techniques may not significantly alter immediate performance outcomes in Social Studies, they could play a role in

supporting broader educational goals by promoting active learning and content mastery. This also suggest that framing strategies encourage students to take an active role in their learning, prompting them to analyze, connect, and organize information rather than passively receive it. This active engagement not only aids retention but also builds essential life skills, such as critical thinking and analytical abilities.

The result in the hypothesis 2 revealed no significant difference between the mean performance scores of male and female students when Social Studies was taught using framing strategies. This finding implies that the framing strategy supports academic achievement across genders in Social Studies at the upper basic education level in Delta State. The strategy's focus on active involvement and self-paced learning would allow students of all genders to explore content independently, promoting equitable learning outcomes. These results are in line with Miriogu's study, which found that gender and school location had no significant effect on students' academic performance and retention of knowledge in the mole concept when taught using framing techniques. Similarly, Igwe's findings in chemistry education reinforce this observation by indicating that gender had no significant main effect on cognitive performance. These studies collectively affirm that gender-neutral instructional strategies, such as framing, can create inclusive learning environments that support all students' academic growth, irrespective of gender. In addition, the finding suggest that framing can bridge gender gaps in learning outcomes, creating an inclusive environment that benefits all students. Through independent supporting, self-paced learning, this approach accommodates diverse learning styles, helping students build confidence and achieve academic success regardless of gender.

5. Conclusion and Future Scope

The study conclusion that framing strategies and lecture methods are significant and effective in the teaching of social studies which can positively impact on the student's academic performance. Second, the performance score in the social studies topic, which is taught utilizing framing method, is unaffected by gender disparities among the students at Delta State's upper basic education programme who participated in this study. This is because both approaches had a positive impact on students' academic achievement.

The study recommends that Delta State teachers should incorporate both framing strategies and lecture methods into their social studies curriculum. The study further suggest that all educational activities should offer equal opportunity to male and female students to guarantee that all students have equal access to academic support. However, efforts should also be directed toward enhancing a gender-atmosphere.

Furthermore, study on pedagogical approaches of learning social studies that can improve students' academic achievement in social studies subject should be carried out. On the other hand, the government and non-governmental organization should fund research undertaking to motivate

future researchers. The study was carried out among student in Upper Basic Education in Delta State.

Data Availability

The collected for this study are available in the manuscript.

Conflict of Interest

The authors declare no conflicting interest.

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Authors' Contributions

Data collection: Ezene Stanley

Writing of the paper: Ezene Stanley

Data Analysis: Ezene Stanley

Student: Ezene Stanley

Supervisor: Prof. E. O. Osakwe

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