



Effect of Scaffolding Instructional Strategy and Gender on Academic Achievement of Senior Secondary School Islamic Studies Students

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ABSTRACTS

The effect of scaffolding instructional technique and gender on academic performance and retention of senior secondary school Islamic Studies students in Katsina State, Nigeria was investigated in this study. The study's goal was to look at the academic performance of male and female Senior Secondary School II (SSSII) Islamic studies students in Katsina State who were exposed to a scaffolding instruction teaching technique and to see how well they retained the information. To provide direction for the investigation, two research questions and two matching hypotheses were raised and formulated. The investigation was carried out using a quasi-experimental research design. A sample of forty students comprising 17 males and 23 females were selected from Family Support Senior Secondary School Daura using intact class. Data was collected using a validated instrument titled: the Islamic Studies Achievement Test (ISAT) with a reliability coefficient of 0.68. The data were analyzed with descriptive statistics such as mean and standard deviation, as well as an independent sample t-test. When male and female students were exposed to the teaching strategy, the results revealed no significant differences in academic achievement. Because scaffolding education is gender friendly, it is advised that Islamic studies teachers adopt and implement it in secondary schools.

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1. INTRODUCTION

School is a formal organization saddled with the responsibility of educating young adults. Islam makes the acquisition of knowledge compulsory for all Muslims irrespective of gender, age, race, or nation because acquiring Islamic education is a gateway to knowing Islam and its teachings. Islamic Studies is an essential instrument for transmitting societal norms and values. Despite the usefulness of Islamic Studies as a source of moral values students' performance in the subject is not encouraging. This issue could be caused by the fact that most Islamic studies teachers still use traditional teacher-centered teaching methodologies. Teacher-centered practices do not promote student-centered learning through activity-based learning.

Learning is a labor-intensive process in which students actively construct their meaning based on previous experiences. A learner's ability to learn well is determined by his or her capacity to link or integrate past knowledge with current information and use it in practical life circumstances. As a result, a paradigm shift is required to promote student learning and retention. To improve students' performance, Islamic Studies teachers should use current innovative tactics such as scaffolding instruction.

Instructional scaffolding, according to [Hammond \(2001\)](#), is the support that is designed to help learners' complete tasks and acquire the understanding that they would not be able to complete on their own. Scaffolding is the process by which a more experienced person supports students by adjusting the learning activities so that the students may complete learning activities they could not have learned from experience. According to [Belland et al. \(2008\)](#), scaffolding is support provided in a classroom situation to assist students to meet their learning objectives.

Scaffolding is a makeshift structure that supports a construction project. Once the structure is stable enough to stand on its own, the scaffolding is removed. Therefore, Islamic Studies teachers should only offer the necessary assistance that is beyond the students' capability. Scaffolding as providing assistance for student learning and subsequently removing that support so that the student can learn independently. To use the technique, there is a need to find out what learners can do on their own and that which they may not be able to do without assistance, and finally, teachers have to provide reasonable instructions that would assist learners to accomplish tasks that are above their capacity without their help ([Alake & Ogunsoemi, 2013](#)) similarly, there has been debate regarding whether gender has an impact on student achievement. As a result, in addition to instructional methodologies, gender is a background component explored in this study. Gender is a physiological term that explains typical behaviors of people based on whether they are male or female ([Areelu & Ladele, 2018](#)). [Etobro \(2019\)](#) investigated the effect of scaffolding and cooperative learning on learners' performance, in Lagos State's Ojo Local Government Area. The findings revealed the gender effect on SS II academic achievement in genetics. [Udousoro \(2011\)](#) maintained that gender is the social structure that differentiates traits of both genders. Gender inequality is a recurring subject in the educational system, particularly in Islamic Studies.

Some studies have found that male students outperform female students in some academic areas, while others have found the opposite. According to [Eugene and Ezeh \(2016\)](#), gender is an analytical notion that represents the sociological position and cultural obligations of people in places they found themselves. Various studies consider gender as one of the student variables that influence academic achievement and retention of the learner. The effect of scaffolding strategy among Colleges of Education students found no disparity in their academic performance based on gender. The effect of scaffolding on gender, scaffolding

avored male students more than female students. As a result, it's impossible to say how gender influences students' performance when scaffolding instruction is used. The purpose of this research was to look at the effect of sexes as well as scaffolding instructional techniques on the academic performance and retention of Senior Secondary School II (SSSII) Islamic Studies students in Katsina State. The general goal of the research was to see how gender, as well as scaffolding instructional method, affected academic achievement and retention of SSSII Islamic studies students in Katsina State's Daura Local Government Area. The goals are the following:

- (i) The study looked at the learning achievement of both sexes in SSSII Islamic studies who were exposed to a scaffolding instruction technique.
- (ii) examined the memory abilities of male and female SSSII Islamic studies students in Katsina State who were subjected to a scaffolding instruction style.

Research questions are in the following:

- (i) How is the academic performance of both sexes in SSSII in Islamic studies in Katsina State who were exposed to a scaffolding instruction technique?
- (ii) What are the differences in the memory abilities of both sexes in SSSII Islamic studies in Katsina State who were subjected to a scaffolding instructional strategy?

Hypotheses are in the following:

- (i) HO1. There is no substantial difference between learners of both gender achievement of SSSII Islamic studies in Katsina State who were exposed to a scaffolding instruction technique.
- (ii) HO2. There are no substantial differences in the memory abilities of learners of both sexes in SSSII Islamic studies in Katsina State who were subjected to a scaffolding instructional strategy.

2. METHODS

The research design used in the study was quasi-experimental. The study's participants were selected from the Family Support Senior Secondary School Daura intact class. A total of forty students were chosen utilizing a purposeful and simple random sample procedure, with 17 boys and 23 girls. Achievement Test in Islamic Studies was developed from themes in the Qur'an and Hadith in the SSSII Islamic studies curriculum that students thought were challenging. The achievement test comprised 30 WAEC and NECO multiple-choice questions. The instrument was validated by three lecturers, a curriculum expert, a test and measurement expert, and an Islamic studies specialist, with a 0.68 reliability coefficient based on the pilot research. The duration of treatment was two weeks.

3. RESULTS AND DISCUSSION

3.1. HO₁: There is no substantial difference between learners of both gender achievement of SSSII Islamic studies in Katsina State who were exposed to a scaffolding instruction technique.

Table 1 shows a t-test study of mean academic performance between male and female students taught Islamic studies utilizing a scaffolding teaching technique. The analysis indicated a t-value of .784 at 38 degrees of freedom with a p-value of 0.438. Because the p-value (0.438) exceeds the alpha value (0.05), there is no significant difference in the mean academic performance of male and female SSSII Islamic studies students. The null hypothesis, that there is no significant disparity in academic performance of male and female SSSII Islamic studies students taught utilizing scaffolding instructional approach in Katsina State, is retained as a result of this finding.

Table 1. t-test study of mean academic performance score of male and female SSSII Islamic studies students who were taught utilizing the scaffolding instructional technique.

Variables	N	\bar{X}	SD	df	t	p-value
Male Scaffolding Instruction	17	45.59	4.109	38	0.784	438
Female Scaffolding Instruction	23	44.30	5.748			

3.2. H0₂: There is no significant difference in the memory abilities of male and female SSSII Islamic studies students in Katsina State who were subjected to a scaffolding instruction style.

Table 2 shows the t-test results of the mean difference in retention scores of male and female students who were taught Islamic studies utilizing the scaffolding instructional technique. The results of the research revealed that the t-value was.121 at 38 degrees of freedom, with a p-value of 0.905. Because the p-value (0.905) exceeds the alpha value (0.05), there is no significant disparity in the mean recall ability of male and female students exposed to the scaffolding instructional technique. As a result of this finding, the null hypothesis that there is no substantial disparity in recall ability among both sexes in SSSII Islamic studies subjected to scaffolding instructional technique, Katsina State is upheld.

Table 2: t-test analysis of mean retention ability scores for male and female SSSII Islamic studies students who were taught utilizing a scaffolding instructional technique.

Variables	N	\bar{X}	SD	df	t	p-value
Male Scaffolding Instruction	17	45.41	5.466	38	0.121	0.905
Female Scaffolding Instruction	23	45.17	6.624			

The summary of findings is the following:

- (i) The average academic achievement of both sexes exposed to Islamic studies via scaffolding instruction is not significantly different. As a result, the scaffolding instructional technique has a considerable impact on male and female SSSII Islamic studies students in Katsina State academic performance.
- (ii) The mean retention scores of male and female students taught Islamic subjects via scaffolding instruction do not differ significantly. As a result, the scaffolding instructional technique has a considerable good influence on male and female SSSII Islamic studies students in Katsina State retention ability.

3.3. Discussion

The study found no substantial differences considering average academic performance among students of both taught Islamic studies utilizing a scaffolding instructional technique. As a result, the use of a scaffolding teaching technique had no connection with the academic achievement of students of both sexes in SSSII Islamic studies in Katsina State. The mean performance scores of male and female students taught Ecology concepts utilizing the scaffolding instructional technique did not differ significantly. When the instructional scaffolding strategy is used in the classroom, gender is not a role in learners' mathematics achievement, according to [Ihechukwu \(2020\)](#). [Leonard \(2020\)](#) revealed that gender is not a substantial determinant of learners' academic achievement in mathematics when the scaffolding technique is employed. This discovery corroborates that of [Azih and Nwosu \(2011\)](#)

who carried similar study in Social Studies. The study revealed that no substantial relationship between learners' average test scores based on gender. The effect of scaffolding and found that there was no substantial disparity in average academic performance between students of both sexes taught using scaffolding methodologies in teachers' colleges.

This suggests that the scaffolding technique is particularly efficient in boosting the performance of students of both in Islamic studies. This implies that the teaching strategy is capable of improving all students' performance in Islamic studies. Etobro (2019) carried out a similar study in Lagos Nigeria found no disparity among students when thought genetics using scaffolding and cooperative teaching strategy instructional strategies. Akani (2015), on the other hand, looked at the influence of scaffolding on gender and discovered that scaffolding favored male students more than female students. This is because the adoption of the scaffolding technique of instruction resulted in a considerable difference in the mean achievement of both parties. Similarly, the study's findings show that there is no significant difference in mean retention scores between male and female students who were taught Islamic studies via scaffolding instruction.

As a result, scaffolding instruction had no substantial favorable effect on male and female SSSII Islamic studies students in Katsina State memory ability. According to Etobro (2019), the gender gap that once existed is rapidly narrowing. This indicates that women are more exposed to educational activities than ever before. The ability to retain events and things learned is referred to as retention. As a result, the amount of information or knowledge learned and retained, as well as the abilities or attitudes demonstrated regularly, represents what is retained. Thus, the ability of learners to preserve and remember as well as recall or reproduce acquired knowledge, abilities, or attitudes after a certain period has passed is referred to as retention in Islamic studies. According to Chianson *et al.* (2011), when participants are both visually and physically engaged in a collaborative learning setting, both male and female participants retain the same amount of information.

4. CONCLUSION

According to the findings of this study, the scaffolding instructional method is an effective strategy for teaching and studying Islamic studies in secondary schools. As a result, the study concluded that, regardless of gender, the scaffolding instructional method has no meaningful impact on student's academic achievement and retention. Both male and female students excelled in terms of performance and retention. Based on the findings of the study the following recommendations were made:

- (i) For effective teaching, the Katsina State Government should emphasize the training of Islamic studies instructors in the use of learner-centered and activity-based instructional methodologies such as scaffolding.
- (ii) When teaching Islamic studies, Islamic studies teachers should apply a scaffolding instructional technique.
- (iii) When employing the scaffolding instructional technique to teach Islamic studies, teachers should make an effort to build and apply a variety of scaffolds.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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