Effects of Inquiry-Based Learning Strategy on Students' Academic Achievement in Agricultural Science in Ganye Local Government Area, Adamawa State

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Abstract
This study determined the effects of inquiry learning strategy on students' academic achievement in Agricultural Science in Ganye Local Government Area of Adamawa State for socio-economic development. The study was guided by three research questions and three hypotheses were formulated and tested. A quasi-experimental research design of non-randomized pretest, post-test control group was adopted. The population comprised all Senior Secondary School (SSS) II Agricultural Science students in Ganye Local Government Area of Adamawa State. The sample consisted of 145 SSS II Agricultural Science students. Data were generated using Agricultural Science Achievement Test (ASAT). The ASAT was validated and subjected to reliability analysis using Kuder-Rechardson (KR-21) formula which yielded coefficient of 0.79. Data collected for the study were analyzed using mean and standard deviation to answer the research questions while Analysis of Covariance (ANCOVA) was used to test hypotheses at 0.05 level of significance. The findings revealed that there was a significant difference in the mean achievement scores of students taught Agricultural Science using inquiry strategy and those taught using lecture method ($p = 0.000 < 0.05$); There was no significant difference in the mean achievement scores between male and female students taught Agricultural Science using inquiry strategy ($p = 0.001 < 0.05$). The study concluded that inquiry strategy enhanced students' achievement in Agricultural Science better than lecture method. It was therefore recommended among others that teachers of Agricultural Science should use inquiry strategy to improve the achievement of students since the strategy had proved effective for quality tertiary education in Nigeria.

Keywords: Inquiry, Strategy, Achievement, Agriculture, Quality

Introduction
The Agricultural sector was once the major backbone of the Nigerian economy which accounted for more than half of the Gross Domestic Product (GDP) in the 1960s. A steady decline in the revenue accruable from the Agriculture according to Ndem and Akubue (2019) was however, noticed with the emergence of the oil boom era in the 1970s. Since then, educational and economic experts have been devoting a lot of attention to how best to bring back Agriculture to its lost position. This has led to the formation of various policies. One of these policies from the educational viewpoint is the inclusion of Agriculture as a pre-vocational subject at the basic education school level and as a vocational subject in the Senior Secondary School (SSS) level. Agricultural Science also acquired the status of the elective subject students can choose at Senior Secondary School levels. This is to enable interested students to acquire practical skills that would make them self-reliant in future. More so, this would boost Nigeria's food production. The specific objectives of introducing Agricultural Science in the secondary school as listed in the National Curriculum for Agricultural Science for Secondary School by the Federal Government of Nigeria (FGN, 2017) are (i) to stimulate and sustain students' interest in Agriculture (ii) to provide students interest to advance in farming (iii) to advance food production through improvement of Agricultural production techniques in students (iv) to provide occupational entry level skills in Agriculture to the interest of students (v) to prepare students adequately for producing and marketing farm commodities efficiently and profitably and (vi) to enable students to acquire basic knowledge and practical skills required for future studies in Agricultural field.

In spite of all these policies and programmes, records of West African Examination Council (WAEC), one of the major examination bodies in the West African sub-region showed that Agricultural Science results are generally poor in Nigeria (WAEC, 2017). Kapur (2018) however, observed that the above objectives can only be attainable through better planning and directing the process of teaching, impartation of knowledge or the teaching giving by the teacher of Agriculture to the students. It is through effective instruction motivation of students by teachers of Agriculture that academic achievement in Agricultural Science among secondary school students can be achieved.

Academic achievement is the extent to which a student, teacher or institution has reached short or long-term educational goals. The determinants of academic achievement of students particularly include; class participation, class assignments, tests, examination and participation in competition or other events (Kapur, 2018). Ndem and Akubue (2019) reports that for the academic achievement of students to be achieved and Agricultural Science to be effectively taught to the students, appropriate learning strategies have to be used. Gunesekera (2016), Dostál (2018), and Aubrey and Christo (2019) also pointed out that innovative strategies are instrumental in reducing the decline in students' academic achievement. Hence, the introduction of learning strategies like inquiry needs to be investigated.

Inquiry learning strategy (ILS) is a form of active teaching and learning that starts by posing questions, problems or scenarios to develop knowledge or solutions. The teacher in the inquiry class is a facilitator who places the needs of learners and their ideas at the Centre, poses multiple open-ended questions and encourages learners to demonstrate learning using a range of answers. Yoon et al. (2015) classified inquiry learning strategy into four levels. The first level is confirmation inquiry; a particular theme or topic is taught by the teacher. The teacher then develops questions and a procedure that guides students through an activity where the results are already known. This method is great to reinforce concepts taught and to introduce students into learning to follow procedures to confirm and deepen understandings. The second level is structured inquiry; the teacher at this level provides the initial question and an outline of the procedure. Students are to formulate explanations of their findings through evaluating and analyzing the data that they collect. Level three is the guided inquiry; the teacher at this level provides only the research question for the students. The students are responsible for designing and following their own procedures to test that question and then communicate their results and findings. Level four is open/true inquiry; students at this level formulate their own research question(s), design and follow through with a developed procedure, and communicate their findings and results. All these levels of inquiry can be useful to students to learn Agricultural Science when taught appropriately.

Lecture method is a common strategy teachers employ in the teaching of Agricultural Science. It is also referred to as lecture method, talk and chalk or textbook method. In the course of employing this method, the teacher dominates the teaching with very little participation on the part of the learners. Here the teacher is seen as the repository of all knowledge while the students are passive recipients of knowledge transmitted by the teachers in the process of learning. The method has the advantage of covering a wider are within a short time. It is not student-centered and students do not gain mastery of concepts. The use of learner-centered methods (inquiry and inquiry methods inclusive) to the teaching and learning is also confronted by its inability to have the same effects on both male and female students (Neboh, 2017). This raises the issue of gender in relation to academic achievement. Gender according to Neboh is a socio-cultural construct that assigns roles, attitudes and values considered appropriate for each sex. The effect of gender on students' academic achievement has over the years attracted the attention of scholars. However, it is worth noting that opinions and findings on the issue have been diverse. While some scholars such as Trumper (2016), and Sunny (2018) found out that males perform higher than females, others such as Ertl et al. (2020) found that females perform higher than males. The problem, according to Danjuma (2019) might be linked to the type of learning strategy where some activities are preferred for males or females. This therefore makes it pertinent for teachers to be sure of how learning strategies affect their students' achievement in Agricultural Science before using such strategies on the students. The study like this could enable the researcher to determine the role of gender in teaching students' Agricultural Science at the secondary school using inquiry and inquiry strategies.

Statement of the Problem
Agricultural Science is one of the core subjects taught at the junior and an elective subject at senior secondary schools in Nigeria. Because of its promising role in promoting self-reliance through the provision of employment opportunities and production of staple foods for the populace together with raw material supply for the agro-allied industries, its teaching as a course offering in our schools and colleges has been made important by the Federal Government. In spite of the immense benefits to be derived from the introduction of Agricultural Science in the

Nigeria's school curriculum, there seems to be low academic achievement in the subject at the senior secondary school level particularly in Adamawa state in general and Ganye local government in particular (WAEC, 2017). Of great concern is that most Agricultural Science teachers still rely mostly on the lecture methods of imparting knowledge. This has consequently led to the failure of producing the desired results in terms of academic achievement on the part of many students. It is on this premise that this study investigated what results would be obtained when innovative teaching techniques such as inquiry is used to teach students in terms of academic achievement in Agricultural Science in Ganye local government area of Adamawa State.

Aim and Objectives of the Study
The purpose of this study was to determine the effects of inquiry strategy on students 'academic achievement in Agricultural Science in Ganye local government area of Adamawa state. Specifically, the study sought to:
1. Determine the difference in the mean academic achievement scores of students taught Agricultural Science using Inquiry learning Strategy (ILS) and those taught using Lecture Method (LM).
2. Ascertain the difference in the mean academic achievement scores between male and female students taught Agricultural Science using Inquiry learning Strategy (ILS).
3. Find out the interaction effect of learning strategies and gender on students' mean academic achievement scores.

Research Questions:
This following research questions guided the study:
1. What is the difference in the mean academic achievement scores of students taught Agricultural Science using Inquiry learning Strategy (ILS) and those taught using Lecture Method (LM)?
2. What is the difference in the mean academic achievement scores between male and female students taught Agricultural Science using Inquiry learning Strategy (ILS)?
3. What is the interaction effect of learning strategies and gender on students' means academic achievement scores?

Hypotheses:
The following hypotheses were tested at 0.05 level of significance.
$H0_1$: There is no significant difference in the mean academic achievement scores of students taught Agricultural Science using Inquiry learning Strategy (ILS) and those taught using Lecture Method (LM).
$H0_2$: There is no significant difference in the mean academic achievement scores between male and female students taught Agricultural Science using Inquiry learning Strategy (ILS).
$H0_3$: There is no significant interaction effect of learning strategies and gender on students 'mean academic achievement scores.

Methods and Materials
The researcher used the quasi-experimental design. Specifically, pre-test, Post-test non-equivalent group control design. There was no randomization of subjects so as not to disrupt school programme. Intact classes were assigned to control and experimental groups. The design was implemented in two stages. In the first stage, pre-test was administered to the experimental group and the control group. In the second stage, pot-test was administered to the experimental group, while the control group was not given any treatment. The population of the study comprised all public Senior Secondary School (SSS) II Agricultural Science students in Ganye local government area of Adamawa State. The researcher used SSS II because the class is relatively stable. It is neither facing the problem of being newly introduced to senior secondary school as in the case of SSS I, nor preparing for an end of course or external examination as in the case of SSS III. The topics covered were ornamental plants, animal science and Agricultural economics and extension drawn from SSS II Agricultural Science curriculum. A sample of 145 SSS II Agricultural Science students who are all offering the subject was selected from three out of eighteen public Senior Secondary Schools in the study area. The two schools were assigned to experimental group and the control group. The control group consists of students taught Agricultural Science using lecture method. The experimental group consisted of students taught Agricultural Science using inquiry strategy. Agricultural Science Achievement Test (ASAT) was developed and used by the researcher for this study. In constructing ASAT, consideration was given to the objectives of the contents as these served as a guide on determining the number of topics for each of the units that were studied. The items of the ASAT were developed by the researcher according to lower order questions, which represented knowledge and comprehension of cognitive domain and higher thinking processes covering application of analysis, synthesis and evaluation. The instrument was validated by two experts in Agricultural Science from Modibbo Adama University (MAU) Yola and one in measurement and evaluation.

The instrument (ASAT) was trial tested on two SSS II Agricultural Science classes in Government day secondary school (GDSS) Jada using Kuder-Richardson formula 21 (K-R$_{21}$) which yielded a reliability coefficient of 0.79. The school was not part of the study sample but within the same area to prevent its influence on the main study. The ASAT was administered on 145 students. Agricultural Science teachers in the participating schools assisted in administering the instruments. The Agricultural Science teachers in the selected schools (research assistants) were given adequate training by the researcher for two weeks to enable them understand the instructional procedure involved in the course of using inquiry learning strategy. The lesson plans prepared by the researcher were explained in details to the research assistants before the treatment. The ASAT pre-test was administered to the control and experimental group in the first week of the study to ascertain their previous knowledge. After the pre-test, the real treatment was administered to the experimental group which lasted for 6 weeks. The data collected were analyzed using mean and standard deviations to answer the research questions while Analysis of Covariance (ANCOVA) was used to test hypotheses at 0.05 level of significance.

Results
Presentations in this section are based on research questions and hypotheses of this study.
Research Question 1: What is the difference in the mean academic achievement scores of students taught Agricultural Science using Inquiry Learning Strategy (ILS) and those taught using Lecture Method (LM)?

Table 1: Mean academic achievement scores of students taught Agricultural Science using inquiry learning strategy (ILS) and those taught using lecture method.

Exp. Groups	Strategies	No:	Pre-test		Post-test		Mean Gain
			X	SD	X	SD	
Exp 1	Inquiry Str.	145	36.40	8.72	62.04	9.74	25.65
Contr. Group	Lecture Mthd	145	43.44	9.44	53.07	9.91	9.93
Mean Diff.							15.72

Table 1 shows the mean academic achievement scores of students taught Agricultural Science using inquiry learning strategy (ILS) and those taught using lecture method. The table shows that 145 students were taught Agricultural Science using inquiry learning strategy (ILS) and 145 students were taught using lecture method. The table reveals that the mean scores of students taught Agricultural Science using inquiry learning strategy (ILS) is 36.390 with a standard deviation of 8.72 during pre-test and 62.04 with a standard deviation of 9.74 in post-test. The mean scores of students taught Agricultural Science using lecture method is 43.14 with a standard deviation of 9.44 during pre-test and 53.07 with a standard deviation of 9.91 in post-test, Table 1 further shows that the mean gain of students exposed to inquiry learning strategy (ILS) is 25.65 and that of students exposed to lecture method is 9.93. The difference in the mean academic achievement scores of students taught Agricultural Science using inquiry learning strategy (ILS) and those taught using lecture method is 15.72 in favour of students taught Agricultural Science using inquiry learning strategy.

Research Question 2: What is the difference in the mean academic achievement scores between male and female students taught Agricultural Science using Inquiry Learning Strategy (ILS)?
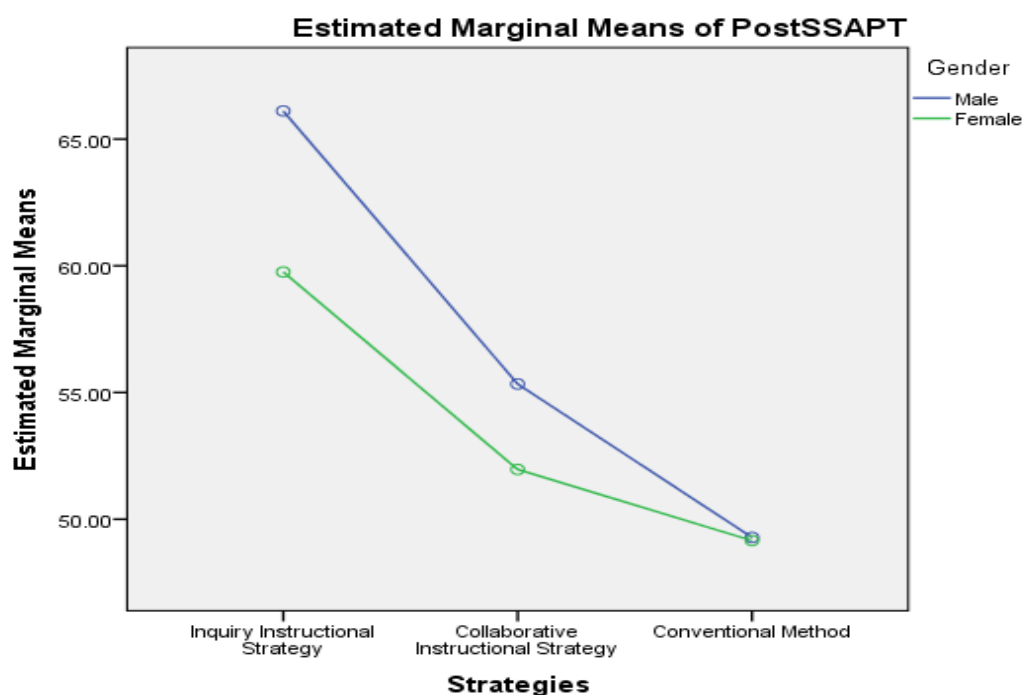
Table 2: Mean academic achievement scores between male and female students taught agricultural science using inquiry learning strategy.

Exp. Groups	Strategies	No:	Pre-test		Post-test		Mean Gain
			X	SD	X	SD	
Male	Inquiry learning Str.	100	39.13	8.58	66.21	7.91	27.07
Female	Inquiry learning Str.	45	36.67	8.33	58.57	6.99	21.90
Mean Diff.							5.17

Table 2 shows the mean academic achievement scores between male and female students taught Agricultural Science using inquiry learning strategy (ILS). The table shows that 100 male students and 45 female students were exposed to inquiry learning strategy. The table reveals that the mean academic achievement scores of male students exposed to inquiry learning strategy is 39.14 with a standard deviation of 8.59 during pre-test and 66.21 with a standard deviation of 7.91 in post-test. The mean academic achievement scores of female students when

exposed to inquiry learning strategy is 36.67 with a standard deviation of 8.33 during pre-test and 58.57 with a standard deviation of 6.99 in post-test. Table 3 further shows that the mean gain of male students exposed to inquiry learning strategy is 27.07 and that of female students exposed to inquiry learning strategy is 21.90. The difference in the mean academic achievement scores between male and female students taught Agricultural Science using inquiry learning strategy (ILS) is 5.17 in favour of male students.

Research Question 1: What is the interaction effect of learning strategies and gender on students' mean academic achievement scores?

Figure 1: Interaction Effect of learning Strategies and Gender on Students' Mean Achievement Scores.

In Figure 1, the profile plot/graph shows the interaction effect of strategies and gender on students' mean achievement scores. The interaction pattern shows that the plots for males and females do not intersect at inquiry and inquiry learning strategies though not parallel lines. This indicates that there is likelihood of an interaction effect between methods and gender in ASAT for strategies. But there is intersection at lecture method, which means that the interaction effect between lecture method as strategy and gender is tenable in this case.

H0₁: There is no significant difference in the mean academic achievement scores of students taught Agricultural Science using Inquiry Learning Strategy (ILS) and those taught using Lecture Method (LM).

Table 3: ANCOVA of Mean Achievement Scores of Students Taught Agricultural Science Using Inquiry Learning Strategy and those Taught Using Lecture Method.
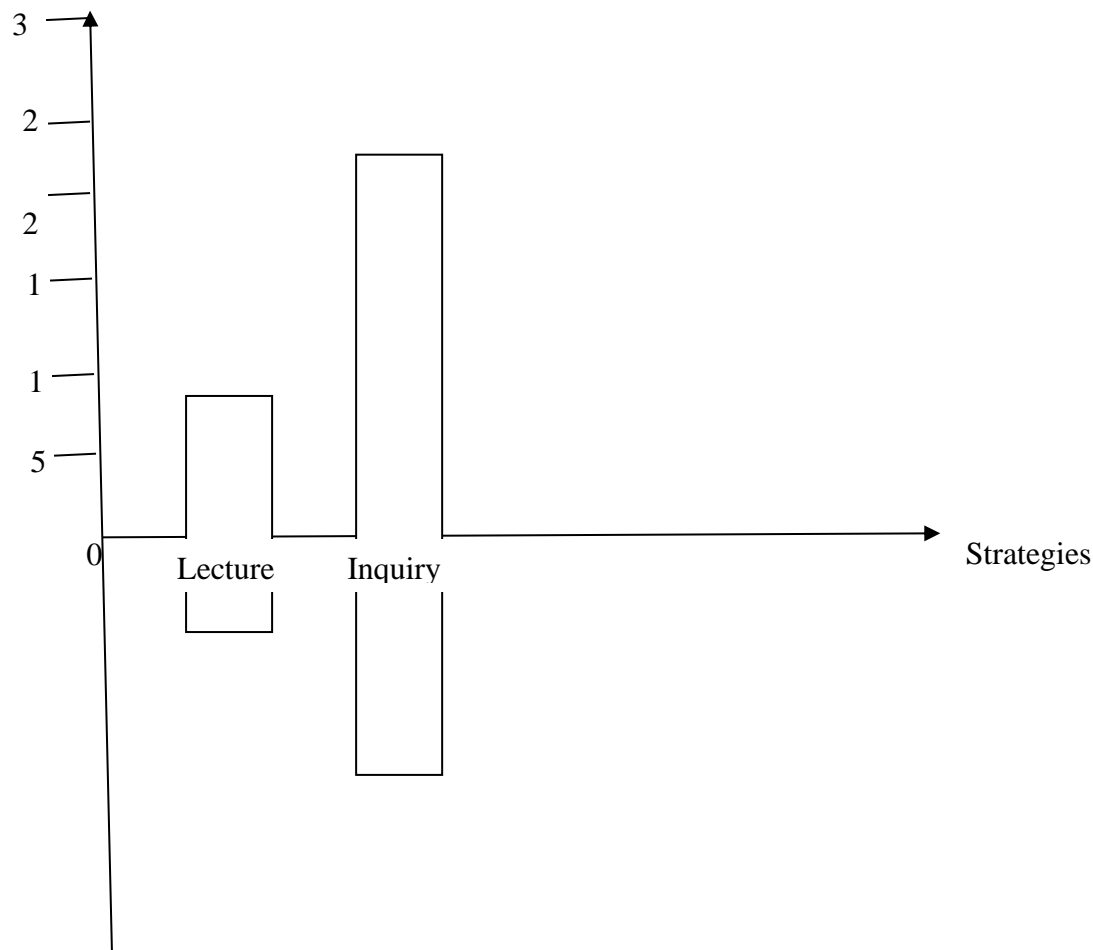
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	16142.816[a]	2	8071.408	204.387	.000
Intercept	6187.901	1	6187.901	156.692	.000
Pre-test	11926.638	1	11926.638	302.010	.000
Strategy	9794.466	1	9794.466	248.018	.000
Error	8174.613	207	39.491		
Total	716906.000	210			
Corrected Total	24317.429	209			

a. R Squared = .664 (Adjusted R Squared = .661)

Table 3 reveals that $F(1, 209) = 248.018$; $p = 0.000 < 0.05$. Since p is less than 0.05, the null hypothesis is rejected. This implies that there is significant difference in the mean achievement scores of students taught Agricultural

Science using inquiry learning strategy (ILS) and those taught using lecture method (LM). Thus, it can be concluded that based on evidence from data analysis there is significant difference in the mean achievement scores of students taught Agricultural Science using inquiry learning strategy (ILS) and those taught using lecture method (LM).

Figure 2: Bar chart on mean academic achievement scores of inquiry and lecture method.

The bar chart graph confirms the rejection of the null hypothesizes and emphasizes that inquiry learning strategy enhances students' academic achievement far better than the lecture method. It also confirms that inquiry learning strategy is better than inquiry strategies and enhances student's academic achievement better.
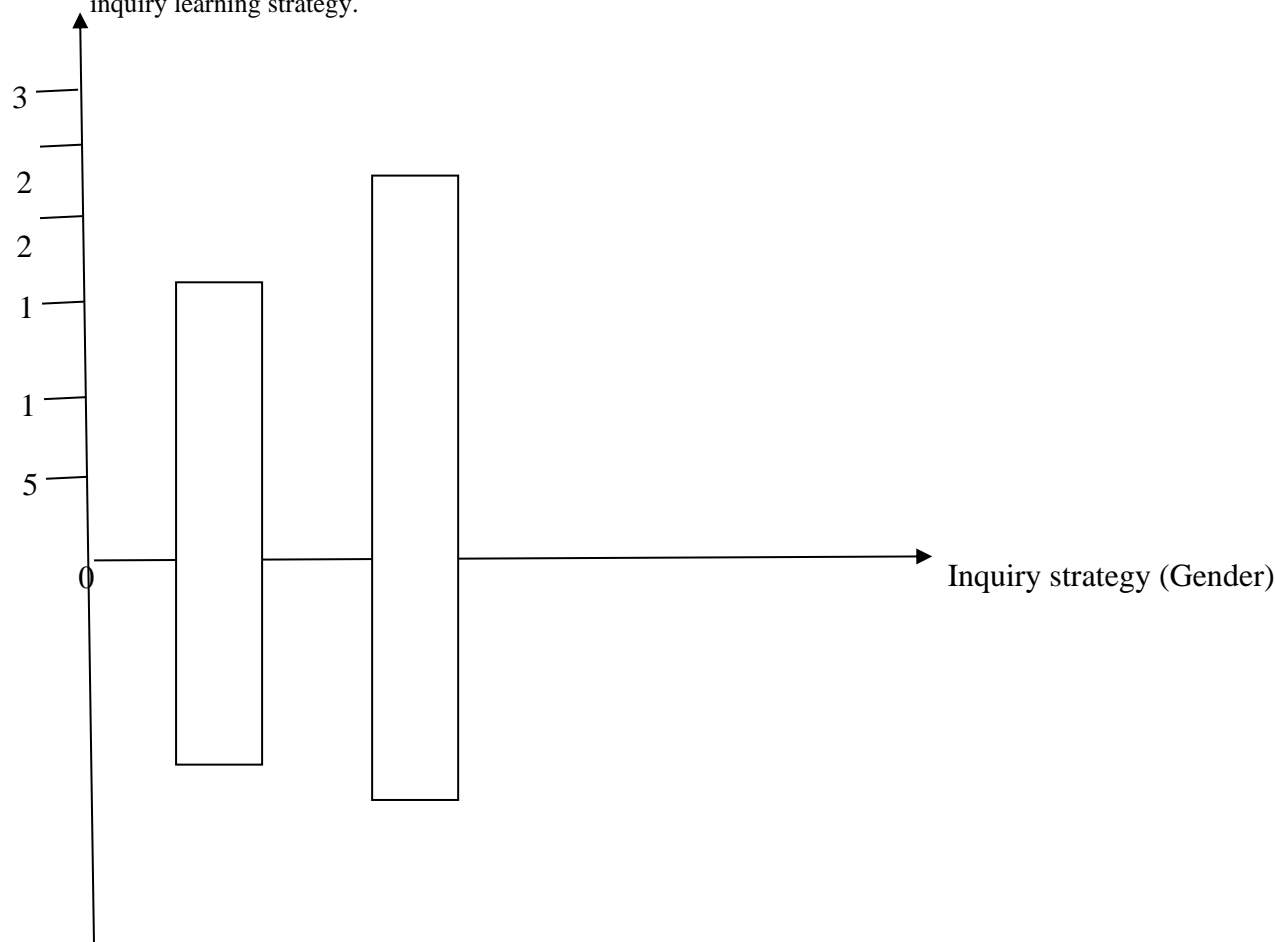
H0₂: There is no significant difference in the mean academic achievement scores between male and female students taught Agricultural Science using Inquiry learning Strategy (ILS).

Table 4: ANCOVA of Mean Academic Achievement Scores between Male and Female Students Taught Agricultural Science Using Inquiry learning Strategy.

Exp. groups	Strategies	No:	Pre-test		Post-test		Mean Gain
			X	SD	X	SD	
Male	Inquiry learning Str.	100	39.13	8.58	66.21	7.91	27.07
Female	Inquiry learning Str.	45	36.67	8.33	58.57	6.99	21.90
Mean Diff.							5.17

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Table 4.3 presents the mean academic achievement scores of male and female students who were taught Agricultural Science using the inquiry learning strategy (ILS). The table indicates that 100 male students and 45 female students were exposed to the inquiry learning strategy. In terms of pre-test scores, male students taught Agricultural Science with the inquiry learning strategy (ILS) achieved a mean score of 39.14 with a standard deviation of 8.59. Their post-test mean score was 66.21 with a standard deviation of 7.91. On the other hand, female students taught Agricultural Science with the inquiry learning strategy (ILS) had a pre-test mean score of 36.67 with a standard deviation of 8.33, and their post-test mean score was 58.57 with a standard deviation of 6.99. Table 3 further demonstrates that the mean gain for male students exposed to the inquiry learning strategy (ILS) was 27.07, while for female students, it was 21.90. The difference in the mean academic achievement scores between male and female students taught Agricultural Science using the inquiry learning strategy (ILS) is 5.17, favouring male students.

Figure 4 displays the mean academic achievement scores of male and female students who were taught using inquiry learning strategy.

The bar chart confirms the rejection of the null hypothesis. Though, it shows difference in the mean achievement between males and females using inquiry learning strategy, but is insignificant based on the rule.

H0₃: There is no significant interaction effect of learning strategies and gender on students' mean academic achievement scores.
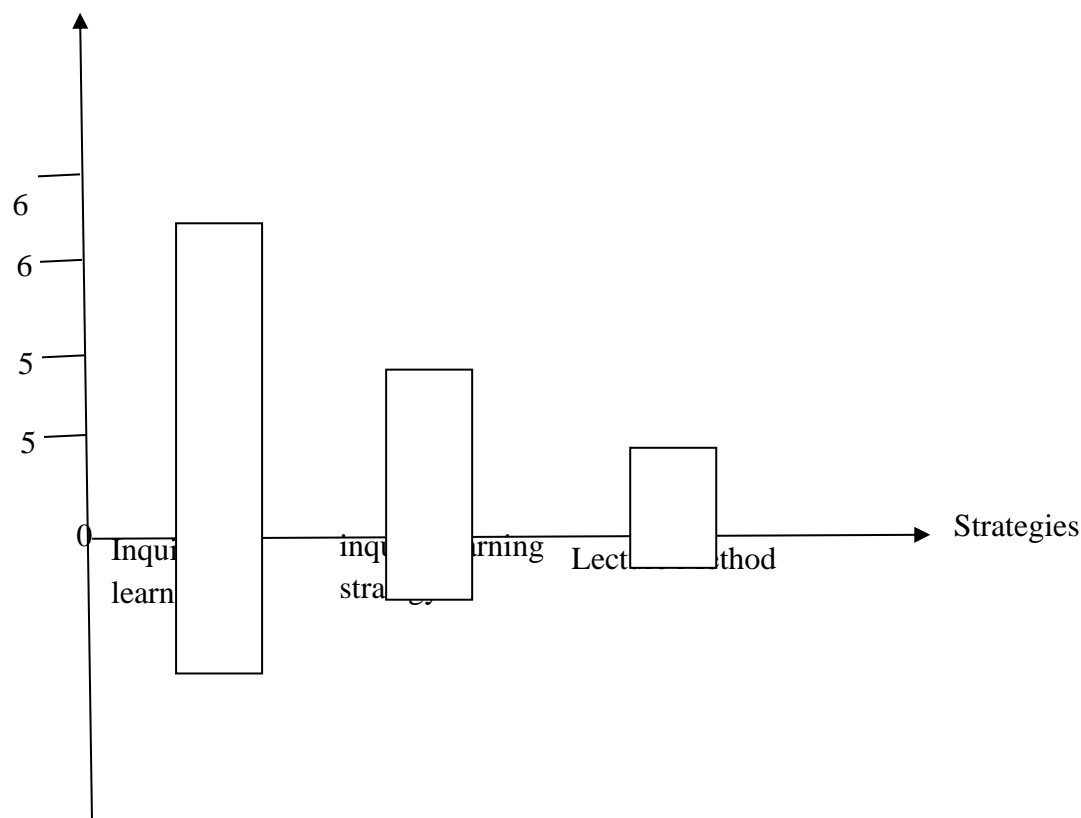
Table 5: ANCOVA of Interaction Effect of learning Strategies and Gender on Students Mean Achievement Scores.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	25782.705[a]	6	4297.118	119.294	.000
Intercept	9088.032	1	9088.032	252.297	.000
Pre-test	13990.130	1	13990.130	388.387	.000
Strategies	8702.440	2	4351.220	120.796	.000
Gender	745.603	1	745.603	20.699	.000
Strategies * Gender	435.572	2	217.786	6.046	.003
Error	10914.404	303	36.021		
Total	992796.000	310			
Corrected Total	36697.110	309			

a. R Squared = .703 (Adjusted R Squared = .697)

Table5 reveals that $F_{(1, 309)}$ = 6.046; p = 0.003 < 0.05. Since p is less than 0.05, the null hypothesis is rejected. This implies that there is significant interaction effect of learning strategies and gender on students' mean achievement scores. Thus, it can be concluded that based on evidence from data analysis there is significant interaction effect of learning strategies and gender on students' mean achievement scores.

Figure 5: level of interaction effect and gender on students mean academic achievement scores.

The graph illustrates the interaction effect between gender and various learning strategies. The level of interaction is most prominent in the inquiry learning strategy and least pronounced in the lecture method. This has confirmed that, an interaction effect exists between strategies and gender.

Discussion

Findings arrived at in this study are discussed in this section. The study determined the effects of inquiry learning strategy on students' academic achievement in Agricultural Science in Ganye local government area of Adamawa state. Since the population for the study consists of both male and female students, gender was incorporated as a moderating variable for comparison. The discussion of the findings is tailored along the variables in the study as guided by the answers to the research questions and test of hypotheses. Findings revealed that there is significant difference in the mean achievement scores of students taught Agricultural Science using inquiry learning strategy (ILS) and those taught using lecture method (LM). This means that Agricultural Science could be better taught using inquiry learning strategy (ILS) than lecture method (LM). The finding is in agreement with that of Thoron and Myers (2016) that inquiry based teaching provide learners with a connection to the scientific process by creating knowledge through inquiry or authentic investigations to enhance their academic achievement. The finding agrees with that of Olibie and Ezeoba (2018) that students taught with Guided Inquiry Method achieved significantly better and participated more in Agricultural Science lessons than those taught with the Lecture Method.

The inquiry-based lessons enabled Agricultural Science students develop important skills that helped them become successful with better academic achievement as life-long learners. This statement is factual because Agricultural Science teaching focus on the practice of inquiry with emphasis on the disciplinary concepts and practices that support students as they develop the capacity to know, analyze, explain, and argue about interdisciplinary challenges in their science world for improved academic achievement at Senior Secondary School level. The finding agrees with Edinyang and Ubi (2018) that students taught with the experiential method were superior in terms of achievement than those taught using the lecture method. The finding also agrees with that of Graciela (2019) those students in the experimental groups achieved better results compared to those in the control group. Another finding is that there is no significant difference in the mean academic achievement scores

between male and female students taught Agricultural Science using inquiry learning strategy (ILS). This implies that the use of inquiry learning strategy (ILS) is gender sensitive in enhancing students' mean academic achievement in Agricultural Science. The finding did not agree with the views of Ibrahim (2016) that male students performed better than their female counterparts in the experiential group. However, the finding agrees with that of Olibie and Ezeoba (2018) that no significant difference between the mean scores of male and female students taught in schools with the guided inquiry method. The findings also agree with the view of Peter (2017) that gender had no significant effect on students' achievement in learning. Yusuf (2018) noted that the intention of any educational programme should be to maximize the opportunity of impacting knowledge in the students irrespective of gender stereotype. The use of inquiry learning strategy in the present study as an innovative learning strategy was capable of motivating the male and female students to arouse their interest and hence achievement across gender stereotype.

Finding also revealed that there is significant interaction effect of learning strategy and gender on students mean achievement scores. This implies that the combination of inquiry learning strategy (ILS) and lecture method (LM) in enhancing students' mean academic achievement in Agricultural Science is gender sensitive. The finding agrees with that of Olukayode (2019) that a significant statistical interaction existed between the methods of learning and academic ability in ASAT than those on low academic ability in the treatment conditions. The finding also agrees with that of Peter (2017) that there was significant interaction effect of treatment and gender on students' academic achievement in Agricultural Science. The finding consents to that of Oyediji and Okwilagwe (2020) that gender and achievement motivation had significant effects on students' achievement and not on critical thinking. This finding has implications for the teaching of Agricultural Science in Nigeria. If the rationale of instruction is to enhance the acquisition of cognitive learning outcome with the teacher acting as a facilitator, then the self-directed learning is most beneficial to students followed by a combination of self-directed learning and inquiry task method. When students are actively involved in the teaching-learning process, their academic achievement is more enhanced, especially when a conducive environment is provided. However, the finding disagrees with that of Telima and Omeodu (2019) that gender and teaching approaches do not jointly affect students' conceptual understanding of electromagnetic induction at the secondary school level.

The combination of inquiry learning strategy (ILS) and lecture method paved way for the significant interaction effect in the present study. Okobia (2017) maintained that some teaching methods that involved students' competition such as individual learning like inquiry learning strategy (ILS) favours male students' more than female students while other teaching methods that encouraged group work such as cooperative learning favours female more than males. This finding is in line with the observations of Ogunkula (2016) that male tend to be dominating in competitive while females always shy away and female prefer working in groups. However, inquiry learning strategy is effective in teaching Agricultural Science since it enhances students thinking ability as well as questioning and response to questions. This strategy is far better than the lecture method.

Conclusion

Based on the results obtained in this study, it was concluded that inquiry learning strategy enhanced students' academic achievement and self-concept in Agricultural Science better than lecture method. The study also concluded that the inquiry learning strategy is gender friendly and sensitive in enhancing students' academic achievement in Agricultural Science. Finally, the study revealed that, there was no gender segregation in inquiry learning strategy.

Recommendations

Based on the findings of the study, the following recommendations were made:
1. Teachers of Agricultural Science should use inquiry learning strategy to improve the academic achievement of students since the strategy had proved effective to enhance students' academic achievement in Agricultural Science.
2. Teachers of Agricultural Science should actively involve male and female students in learning activities while using inquiry learning strategy since the strategy had proved gender friendly and sensitive in enhancing students' academic achievement irrespective of gender.
3. Curriculum developers should use inquiry learning strategy to re-develop new Agricultural Science curriculum that will emphasize child involvement in the Agricultural Science classroom.
4. Ministry of Education and relevant academic and professional bodies like Teachers Registration Council of Nigeria (TRCN) should enlighten Agricultural Science teachers on the effects of inquiry strategy through organized in-service trainings, workshops and seminars to use inquiry learning strategy in the classroom considering its potentials to improve students' academic achievement.

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