

IMPACT OF REFLECTIVE TEACHING STRATEGY ON THE ACADEMIC ACHIEVEMENT OF SENIOR SECONDARY SCHOOL STUDENTS IN ECONOMICS IN YOBE STATE, NIGERIA

OBAYI, A. U (Professor)¹, OLEABHIELE Eric. Oziegbe (Ph.D.)², SULEIMAN, Aji Saleh³, GOTIP, Nehemiah Wokji⁴, SHUGABA, Mohammed⁵ & KALU, C. U.⁶

¹ Department of Educational Management, Michael Okpara University of Agriculture Umudike, Nigeria

² Department of Educational Management, Michael Okpara University of Agriculture Umudike, Nigeria

³ Department of Educational Management, Michael Okpara University of Agriculture Umudike, Nigeria

⁴ Department of Arts and Social Science Education, University Abuja, Nigeria

⁵ Department of Educational Management, Michael Okpara University of Agriculture Umudike, Nigeria

⁶ Department of Educational Management, Michael Okpara University of Agriculture Umudike, Nigeria

ABSTRACT

This study evaluated the impact of reflective teaching strategy on the academic achievement of Senior Secondary School students in Economics in Yobe State, Nigeria. Quasi-experimental research design was used in the research methodology. A multi-phase sampling process was employed to choose 161 students studying Economics. Mean score and standard deviation were used to answer the research questions. Analysis of Covariance (ANCOVA) was used to test the hypotheses. The study revealed that there was a statistically significant impact of reflective teaching strategy on Senior Secondary School students' achievement in Economics in Yobe State, and there was no statistically significant impact of reflective teaching strategy on male and female Senior Secondary School students' mean achievement in Economics. The study recommended that Economics teachers should use reflective teaching strategies in teaching Economics amongst several others.

Keyword: - Academic, Achievement, Economics, Impact & Reflective

1. INTRODUCTION

To create skilled labor with the knowledge, skills, and abilities to analyze economic problems and provide solutions for resolving individual and societal economic problems and policies, Economics is a nonvocational elective Social Science subject that should be taught in senior secondary schools across the country [1]. According to some, the study of Economics prepares both individuals and governments to make logical choices in the face of competing demands for limited resources. It is regarded as a discipline for constructing nations. This is why there is currently a focus on providing high-quality Economics training. The knowledge and skills that an Economics graduate needs to fulfill their goals are vitally important to impart. The emphasis on Economics education here is the kind that aims to educate the public on how to prosper in business, improve their financial situation, and make a substantial contribution to the diversification of the American economy. In every teaching and learning environment, it is considered that the purpose of gathering in a classroom setting is to impart knowledge to the students or learners [2]. This may have

impacted their opinion. They claim that by having this knowledge, kids can develop the abilities they need to be autonomous and self-sufficient, to reason logically, to draw the right conclusions, and to adapt to changes in the human environment.

There is a rising global movement advocating for poor nations to prioritize economic education as a means of improving their economic conditions. This is the context for the focus that successive Nigerian administrations have placed on students' development of Economics competency in the curriculum. This may have influenced the creation of the recently proposed National Policy on Education, which appears to give Economics a high priority in the classroom. The new policy mandates that Economics be taught starting in high school. The goal is to instill in secondary school students the fundamental knowledge required to study Economics at a higher educational level [3]. Economics is a subject taught in secondary and postsecondary education institutions. Its definition has been disputed by academics [4]. Economics is the study that examines how human behavior is influenced by limited resources and their potential uses.

Professor Lionel Robbins' concept is the most commonly recognized of these offered by economists. Economics is a study that examines how human behavior is influenced by limited resources and their potential applications [5]. The aforementioned definition is more inclusive since it captures the essential ideas of Economics as well as the core issues of human want, scarcity, choice, exchange, and opportunity cost. Thus, it is possible to define Economics as a social science that studies how material products and services are produced and distributed to satisfy human needs. Economics is crucial in preparing students to comprehend their surroundings and make significant contributions to the advancement of society [6].

The following is a summary of the benefits of studying Economics, it helps to understand the fundamental economic issues that face humanity; it aids in comprehending the sustainable and efficient use of finite resources; it helps to solve problems of efficiency and develop skills for resource development in tandem with improving citizen welfare; it aids in understanding trade, both internal and external; and it aids in understanding the standard of living of various nations and its implications [7].

Economics' crucial significance in economic development and progress may have had an impact on the subject's entry into Nigeria's educational system. In particular, the Nigerian Education Research and Development Council [8]. listed the following as the goals of secondary school Economics education: comprehend fundamental economic ideas and principles and acquire the instruments necessary for reliable economic analysis. Acquire the necessary abilities and recognize the foundation for sound financial judgments. Make a thoughtful contribution to the discussion of economic development and reforms as they impact or would impact Nigerians in general. Recognize how public policies affect the country's economy. Recognize the composition and operation of economic organizations. Develop a heightened awareness to actively engage in the growth of the country's economy through capital markets, entrepreneurship, and other means. Recognize the challenges emerging nations face as they work to improve economically and comprehend Nigeria's and other African nations' standing and role in global economic relations.

Economics' crucial significance in economic development and progress may have had an impact on the subject's entry into Nigeria's educational system. The Nigerian Education Research and Development Council [8] aims to support developing nations in their pursuit of economic progress and to comprehend the position and circumstances of Nigeria and other African nations in global economic connections. Examining these goals reveals that although senior secondary schools offer a very comprehensive Economics education, our country continues to struggle with underdevelopment and slow economic growth. Given the severe economic downturn Nigeria is currently experiencing, one may question if the goals of teaching Economics are being met [2].

Similarly, Nigeria's economy was beset by bank crisis, inflation, and unemployment and there had been a significant drop in students' performance on the majority of public tests[2]. Thus, concerns over the value of teaching Economics as a subject in our educational institutions have been raised. A related study [9] found that even with the best of intentions from educators and the government, there is still uncertainty about how much the goals of Economics, especially in senior secondary school, have been met. He added that the issue of instruction may be the reason why the nation is unable to address its economic issues despite having produced graduates in Economics for many years, the topic, which can be linked to inadequate choice and application of educational resources and methods. The degree of Economics instruction pupils receive will dictate how much of these skills they pick up. It's also critical to note that the goals of our national development plan might not be fully accomplished if the majority of the population lacks a basic understanding of Economics. This is because most of our nation's productive workforce won't be completely and successfully mobilized to take part in the development process. The proper teaching of Economics, with the appropriate teaching tools and methodologies, is necessary to guarantee students' full participation in the growth process.

Furthermore, for the teaching of Economics to have a meaningful influence on the students, teachers must mix instructional aids and tactics in a teaching-learning environment in an efficient manner. In this context[10]defined

teaching strategy as the action used by a teacher to engage students in learning activities. A teaching strategy is a methodical approach to conducting instruction, which is the process used to design and carry out the specified learning objectives to promote learning. When it comes to delivering instruction in the classroom, teaching practices are crucial. They foster a high level of interest among students and make learning more permanent. Also, they provide a reality of encounter that encourages learners' self-activity and the growth of their continuity of thinking. Furthermore, there are various teaching strategies available that can be used in various teaching-learning scenarios. [11] provided support for this by classifying teaching strategies into two categories: traditional teaching strategies and creative teaching strategies. Conventional techniques are old-fashioned approaches or methods of instruction where the instructor controls the lessons and activities [9]. Similar to that, this method involves little contact between the students and the teacher and has the learners remain passive listeners. This category includes the lecture method heavily.

Conversely, innovative teaching techniques center training around the needs, interests, and preferences of the student. As the students actively participate in the decision-making process, the instructor facilitates learning by offering guidance and feedback in addition to instruction. Field trips, problem-solving, futures wheels, projects, brainstorming, demonstration, reflective, reciprocal, and self-directed teaching tactics are a few of the educational strategies that fall under this category. The learner is viewed as the center of attention in the teaching-learning process by these tactics. Because of their prominent position in the teaching-learning context, learners serve as the center of attention for all aspects of teaching and learning. Based on this, the researcher believes it is appropriate to investigate if using reflective and reciprocal teaching methodologies will raise students' economic academic performance.

Reflective teaching is a cyclical process in which teachers observe, assess, and make changes to their teaching-learning process. Any type of teaching technique can be utilized in conjunction with the teacher's reflection as part of the cyclical process of reflective teaching, as outlined by [12]. According to [13] reflective teaching is the capacity to put teaching and learning theories and ideas to use in a practical setting. [14] this type of teaching methodology encourages educators to critically reflect on their teaching-learning process to enhance their instructional techniques. According to [15] reflective teaching is a catch-all phrase for the thoughtful and fruitful pursuits that people undertake to investigate their experiences to produce fresh insight and admiration.

John Dewey's idea of reflective inquiry is the foundation of reflective teaching strategies. According to Dewey, a student should be an active learner and a questioner. Reflective thought, according to Dewey [16] is "active, persistent and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends." Dewey's statement supports the claims of social and cognitive constructivist theories, such as those of Lev Vygotsky and Jerome Brunner, which maintained that, contrary to behaviorists' view of learners as "tabula rasa," learners are active and capable of creating their ideas using the concepts they are taught. informed to them by the instructor, and they respond suitably to topics of discussion [6]. Therefore, research is required to determine whether implementing reflective teaching strategies can aid in improving the low academic performance of Economics students.

Performance in a subject as measured by a score or mark on an achievement test is referred to as achievement. A student's academic status in comparison to other pupils his age is used to quantify their achievement [17] According to research, there are several reasons why students perform poorly academically in Economics, including in impactive teaching strategies, the difficulty of some concepts and topics, students' negative attitudes toward the subject, gender issues, and teachers' and students' inability to finish the syllabus before final exams [17].

Gender may also have an impact on economic achievement. This is due to the biological distinctions between men and women, which are interpreted and elaborated by all societies into a set of societal expectations about what behaviors and activities are proper for them as well as what rights, resources, and even power they have. Gender is a social factor that, like race, ethnicity, and class, shapes a person's participation in society and substantially determines their life chances. In a similar vein, gender was described by [1] as the roles and characteristics associated with men and women in any community that is created via social and cultural processes. Many individuals believe that a student's gender, whether it be male or female, has an impact on their academic success in a certain field. According to [18] gender variations in senior secondary school Economics accomplishment are caused by the roles and relevant learning approaches that boys and girls choose to use. They maintained that girls are less likely than boys to engage in meaningful learning and that if this trend is maintained year after year, girls are less likely to pursue careers in Economics. It became necessary for the researchers to begin the study on the impacts of reflective teaching strategies on senior secondary school student's academic achievement in Economics in Yobe State, Nigeria, after observing these situations of low academic achievement and learning disparities among students.

The pervasive twin evils of low academic attainment and exam cheating have put additional strain on Nigeria's educational system. The nation's appalling inability to confront and resolve these threats has damaged its reputation abroad. The quality of the output (graduates) from educational institutions keeps going down, despite the government

and stakeholders in education continuing to point fingers at one another. This has significantly slowed down the country's development and progress. The focus of the art of teaching and learning is gradually moving from traditional teaching tactics to creative ones. It is anticipated that good teaching of subjects like Economics will result in desired learning outcomes from students, however, this cannot be done without finding additional ways to motivate pupils. The incapacity of educators to integrate innovative teaching tactics into their lessons may have contributed to students' negative views toward learning in general and Economics in particular. Poor academic performance by pupils on both internal and external exams is the outcome of this, and the country has also suffered hitherto unheard-of economic and social losses. A paradigm shift in teaching methodologies is required because all remedial approaches used to increase the pupils' learning, interest, and academic accomplishment appeared to have failed. Thus, the study examines the impact of reflective teaching strategies on the academic accomplishment of Yobe State, Nigeria, senior secondary school students in the field of Economics.

1.1 Research Questions

The following research questions guided the study:

1. What are the mean achievement scores of students taught Economics using reflective teaching strategy and lecture methods?
2. What are the mean achievement scores of male and female students taught Economics using reflective teaching strategy?
3. What is the interaction impact of gender and teaching strategies on students' achievement in Economics?

1.2 Hypothesis

The following null hypotheses were developed and put to the test at the significance level of 0.05.

- HO₁:** There is no significant difference between the mean achievement scores of students taught Economics using reflective teaching strategy and lecture method.
- HO₂:** There is no significant difference between the mean achievement scores of male and female students taught Economics using a reflective teaching strategy
- HO₃:** There is no interaction impact of gender and teaching methods on students' mean achievement in Economics

2. METHODS

This study used a quasi-experimental approach with non-equivalent, non-randomized control groups for the pre- and post-tests. The study's sample consisted of 4,542 Economics students in senior secondary school two (SS II) across 50 public secondary schools in Yobe State during the 2020–2021 academic year. There are 1,230 girls and 3,312 boys among them. 161 senior secondary school two (SSS II) students who were enrolled in the Economics program at the public secondary schools in the Gashua Education Zone served as the study's sample. Selecting the subjects for the study involved a multi-stage sampling technique. Gashua Education Zone was chosen in the first step from among the three Education zones in the state using simple random sampling. Second, four coeducational institutions in the education system were chosen using purposive sampling. As gender is a significant variable in the study, this is to guarantee that both male and female students who participated in it are represented.

More specifically, the following criteria were also applied to choose the study's participating schools: the schools had to be government-owned secondary schools; they had to have more than one stream of SS II classes offering Economics; they had to have qualified and experienced Economics teachers; they had to present candidates for the senior secondary school certificate examination in Economics for the previous ten years; they had to have a good number of students offering Economics; and finally, a simple random sampling technique was used to assign the participating schools to the experimental group and the control group. Additionally, 81 students (42 male and 39 female) from the experiment group I of the 161 senior high school II students were employed in the study, while 80 students (42 male and 38 female) from the control group were taught using the reflective teaching style.

The researchers created the Multi-choice Economics Achievement Test (MCEAT) as the instrument for gathering data for the study. The Economics Achievement Test (MCEAT) featured four alternatives (A–D) and 25 multiple-choice questions. Five topics chosen from the senior secondary school two Economics curriculum are covered by the tools. The subjects discussed were money, production, supply, demand, and market structure. Both the pre-test and the post-test employed the same instrument. To guarantee sufficient coverage of the contents and subjects and to maintain an even distribution across the various levels of the cognitive domain, the items were created using a table of specifications.

Three research professionals approved the instruments' front and content. Three experts from Michael Okpara University of Agriculture, Umudike—one from the Department of Educational Management (Economics Education unit), one from the Department of Science Education (Measurement and Evaluation unit), and one from the Department of Psychology and Counseling—vetted the items based on their sentence structure, clarity, and suitability as an instrument. Following the instrument face validation, the MCEAT underwent content validation using the specification table (test blueprint). Furthermore, the instrument was put through item analysis, and 26 items were kept to determine the degree of item distraction, discrimination, and difficulty. As instructed by the specialists, the researcher completed all the necessary modifications.

Additionally, utilizing data from 20 students who participated in trial testing, the Kuder-Richardson 20 (KR-20) was utilized to examine the reliability of the study's instrument (MCEAT). The Government Higher Islamic College Nguru senior secondary II pupils who participated in the trial testing were not affiliated with the study's chosen school. The instrument's items had a good degree of internal consistency, as indicated by the reliability coefficient of 0.89 that was found. Because the involved items were dichotomously scored, the Kuder-Richardson estimates (K-R 20) were utilized to calculate the reliability coefficient of the instrument.

MCEAT was given as a pre-test to the treatment and control groups at the start of the experiment. Following this, the kids' test results were documented and stored securely. After the therapies, the students took a post-test using the same instrument that had been rearranged and given to them. The test results were examined to ascertain the students' achievement and attitudes that were employed in the investigation.

The researchers created two educational resources. While the second package was based on the lecture approach, the first was based on the reflective instructional strategy. For one week, the research assistants—regular Economics teachers—in the chosen schools received training from the researchers. Students in the treatment and control groups took the pretest (MCEAT 1) at the start of the trial, which was administered by the appropriate qualified research assistants. The test results were maintained after they were recorded.

Following the pretest, the research assistants carried out the treatment at their schools, making sure that the researcher's instructional guide was followed. The trial ran for four weeks according to the standard school schedule. After the experimental period, the students took the posttest (MCEAT II, which was a reshuffled version of the pretest). The results were noted and preserved. To respond to the research questions and evaluate the study's null hypotheses, all of the scores earned by each group were examined.

The null hypotheses were tested using Analysis of Covariance (ANCOVA) at the .05 level of significance, and the research issues were addressed utilizing the mean and standard deviation. The determined value of ANCOVA served as the basis for accepting or rejecting each null hypothesis. In cases where the P-value exceeds the significance level of .05. (P-value > 0.05 level of significance), the null hypothesis was declared valid. Conversely, in cases where the difference is significant (P-value < 0.05), the null hypothesis was dismissed. The rationale behind selecting ANCOVA is that it was effective in mitigating the initial disparity between the two groups.

3. RESULTS AND DISCUSSION

Research question 1

What are the mean achievement scores of students taught Economics using reflective teaching strategy and lecture methods?

The data for answering research question 1 is presented in Table 1

Table 1: Analysis of mean and standard deviation on the impact of Reflective teaching strategy on students' achievement in Economics

Group	Number of Students	Pre-test		Post-test		Mean Gain
		Mean	S	Mean	S	
Reflective teaching strategy	81	46.67	4.81	54.19	4.43	7.52
Lecture method	80	42.19	4.88	46.20	4.01	

N = Number of Students, S = Standard Deviation

Data in Table 1 show that the students taught reflective teaching strategy had a Pretest mean of 46.67 with a standard deviation of 4.81 and a Posttest mean of 54.19 with a standard deviation of 4.43 while the lecture method had a Pre-test mean of 42.19 with a standard deviation of 4.88 and a posttest mean score of 48.20 with the standard deviation of 4.86. The result also shows that the reflective teaching strategy had a mean gain of 7.52 while those of the lecture

method group had a mean gain of 4.01. The table showed that the reflective teaching strategy had a higher and increasing mean impact of 3.15 on the students' academic achievements in Economics. This showed that students taught Economics using a reflective teaching strategy had higher mean achievements than those taught using the lecture method.

As a result of the observed difference, hypothesis 1 was tested at 0.05 to ascertain if the observed difference was significant

Hypotheses 1

There is no significant difference between the mean achievement scores of students taught Economics using reflective teaching strategy and lecture method.

The data for testing hypothesis 1 is presented in Table 2

Table 1: Analysis of Covariance (ANCOVA) of impacts of reflective teaching strategy on senior secondary school students mean achievement scores in Economics

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	438.091 ^a	4	109.523	3.078	.009
Intercept	8721.404	1	8721.404	245.142	.000
PRETEST	84.21	1	84.21	2.367	.000
METHOD	34.088	1	34.088	0.958	.000
Error	5621.090	158	35.577		
Total	454213.090	161			
Corrected Total	5074.901	160			

a. R Squared = .066 (Adjusted R Squared = .047)

The data presented in Table 2 shows a p-value of .000 which is less than the alpha value of .05. This indicates that there was a statistically significant impact of reflective teaching strategy on the senior secondary school students' achievement in Economics in Yobe State. Therefore, the hypothesis of no significant impact of reflective teaching strategy on the senior secondary school students' achievement in Economics in Yobe State was rejected.

Research Question Two

What are the mean achievement scores of male and female students taught Economics using a reflective teaching strategy?

The data for answering research question 2 is presented in Table 3

Table 3: Analysis of mean and standard deviation of the Impact of Reflective teaching strategy on male and female senior secondary school students mean achievement scores in Economics

Gender	Number of students	Pre-test		Post-test		Mean gain
		X	SD	X	SD	
Male	42	43.99	4.17	57.97	4.55	13.98
Female	39	43.08	4.15	56.24	4.56	13.16

The data presented in Table 3 showed that male students exposed to the reflective teaching strategy had a pretest mean score of 43.99 and a standard deviation of 4.17 and a posttest mean score of 57.97 and a standard deviation of 4.55 with a mean gain of 13.98 while female students had a pretest mean score of 43.08 and standard deviation of 4.15 and a posttest mean score of 56.24 and standard deviation 4.56 with a mean gain of 13.16. Therefore, from the data analyzed, the reflective teaching strategy had a more positive impact on male students than their female counterparts on senior secondary students' achievement in Economics. As a result of the observed difference, hypothesis 2 was tested at 0.05 to ascertain if the observed difference was significant

Hypotheses 2

There is no significant difference between the mean achievement scores of male and female students taught Economics using a reflective teaching strategy

The data for testing hypothesis 2 is presented in Table 4

Table 4: Analysis of Covariance (ANCOVA) significant impacts of reflective teaching strategy on male and female senior secondary school students mean achievement scores in Economics

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	677.418 ^a	4	169.355	0.0226	.009
Intercept	3913.052	1	3913.052	31.752	.000

Pretest	11.294	1	11.294	0.092	.000
METHOD * GENDER	313.514	1	313.514	2.544	.112
Error	9612.494	78	123.237		
Total	874179.000	81			
Corrected Total	10289.912	80			

The data presented in Table 4 shows a p-value of .112 which is greater than the alpha value of .05. This indicates that there was no statistically significant impact of reflective teaching strategy on male and female senior secondary school students' mean achievement scores in Economics. Therefore, the hypothesis of no significant impact of reflective teaching strategy on male and female senior secondary school students' mean achievement scores in Economics in Yobe State was not rejected.

Research Question Three

What is the interaction impact of gender and teaching strategies on students' achievement in Economics?

Table 5: Interaction Impact of Gender and Teaching Strategies on students' achievement in Economics

Group	Gender	N	Pre-test		Post-test	
			\bar{X}	SD	\bar{X}	SD
Reflective Teaching Strategy	Male	42	43.99	4.17	57.97	4.55
	Female	39	43.08	4.15	56.24	4.46
	Differences		0.09	0.02	1.73	0.09
Lecture method	Male	42	43.91	4.12	46.99	4.42
	Female	38	43.23	4.09	46.24	4.97
	Differences		0.68	0.03	0.75	-0.55

E₁ Experimental group 1 E₂ Experimental group 1

Table 5 shows that male and female students taught Economics using the reflective learning strategy had pretest mean achievement scores of 43.99 and 43.08 with standard deviations of 4.17 and 4.15 respectively while their corresponding posttest mean achievement scores were 57.97 and 56.24 with a standard deviation of 4.55 and 4.46 respectively. More so, male and female students for the control group (lecture method) had pretest mean achievement scores of 43.91 and 43.23 with a standard deviation of 4.12 and 4.09 respectively whereas their posttest mean achievement scores of 46.99 and 46.24 with a standard deviation of 4.42, and 4.97. Consequently, the analyzed data indicated that male and female students exposed to treatment (reflective learning strategy) had higher posttest mean achievement scores than their counterparts in the control group.

Meanwhile, the male students in the reflective learning strategy performed better than their female counterparts. male and female students taught Economics using the reflective learning strategy and had greater mean achievement scores than those taught with the lecture method. The implication of this showed that irrespective of teaching strategy, there is no interaction of the impact of strategies and gender in the mean achievement of students in Economics

Hypothesis 3

There is no interaction impact of gender and teaching methods on students' mean achievement in Economics

The data for testing hypothesis 8 were analyzed with ANCOVA and the results are presented in Table 6:

Table 6: Analysis of Covariance (ANCOVA) of Interaction Impact of Methods and Gender on Students' Academic Achievements in Economics

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	30006.214 ^a	4	7501.554	411.449	.000
Intercept	4081.373	1	4081.373	223.858	.000
Pretest	5639.902	1	5639.902	5309.341	.000
Methods * Gender	60.001	3	20.000	1.097	.201
Error	4321.002	237	18.232		
Total	531003.009	240			
Corrected Total	41009.924	239			

From Table 6, it could be observed that a probability value of .201 was obtained. Since this P-value is greater than 0.05 level of significance, the null hypothesis was upheld. Hence, there is no significant interaction impact of gender and methods on students' academic achievements in Economics. This implied that the gender of the students did not combine with strategies to influence their academic achievement in Economics.

According to the results, students who were taught Economics through reflective teaching strategies performed on average better than those who were taught through lectures. According to the matching hypothesis, Yobe State senior secondary school pupils' achievement in Economics was statistically significantly impacted by reflective teaching practices. These results are consistent with that of [19] who confirmed that the use of reflective teaching strategies fosters constructivism and metacognition in students, both of which are necessary for better academic performance and the retention of concepts. In a similar vein, [19] research revealed that the use of reflective learning strategies guarantees that students develop the adaptability and creativity necessary to pursue lifelong learning. The results showed that students instructed in Economics utilizing Furthermore, according to [20] research, reflective teaching practices help students convert stimulus materials into responses that call for them to reorganize, clarify, and comprehend to perform better.

When it came to senior secondary students' achievement in Economics, male students benefited more from reflective teaching strategies than their female counterparts. The results showed that senior secondary students' achievement in Economics was positively impacted by reflective teaching strategies, with male students benefiting more than female students. According to the matching hypothesis, there was no statistically significant difference in the mean achievement scores in Economics between male and female senior secondary school students who used reflective teaching strategies. This result is consistent with the [21] study, which found that although there was no significant difference on the test of significance, male students had higher mean scores in the electronic work trade achievement than female students exposed to the reflective learning method. Additionally, when he reaffirmed that pupils exposed to reflective learning strategies outperformed those exposed to conventional methods, [22] concurred with the findings. Furthermore, [23] reported that students who were taught reflective learning strategies outperformed students in the control group who were exposed to a lecture approach in terms of achievement, but there was no significant difference in the performance scores of male and female students.

The mean achievement of students in Economics does not exhibit an interplay between gender and the impact of techniques.

The study discovered that there is no interaction between gender and the influence of methods on students' mean achievement in Economics. On the other hand, the corresponding hypothesis suggested that there is no discernible link between gender and teaching style and students' academic success in Economics. These results are consistent with those of [24] who found that there was no significant difference in the performance of male and female students taught Economics using computer-assisted instruction, but that there was a significant difference in the post-test performance scores of students taught Economics using computer-assisted instruction when compared with those taught using the traditional method of instruction considering computer-assisted training in addition to the lack of a gender-gender interaction impact. The results also corroborate the claims made by [25] who claimed that there was no discernible interaction between gender and techniques and students' mean accomplishment scores. Therefore, there is no discernible interaction between gender and method that affects students' economic achievement. This indicates that a student's gender had no bearing on their academic achievement. The results of [26] also showed that students who were taught using traditional methods did not have the same mean achievement levels in Economics as those who were exposed to reflective and reciprocal procedures. However, the observed improvement is more a result of the instructional strategy used than of gender.

4. CONCLUSIONS

The study's findings suggested that enhancing students' academic performance in Economics was a beneficial impact of implementing reflective teaching practices. This is a student-centered teaching method. The results of this investigation led to the following conclusions:

- i. The academic success of students in Economics was improved by the reflective teaching method.
- ii. There was no discernible link between gender and teaching strategies and students' academic success in Economics.

The study's conclusions and findings led to the formulation of the following recommendations:

1. Teachers of Economics should employ reflective teaching strategies to improve their students' academic performance.

2. Through in-depth seminars and workshops on the efficient applications of reflective teaching, the government should arrange training and retraining programs for Economics teachers.

6. REFERENCES

- [1]. Gotip, N. W., Enem, U. E., Wilfred-Bonse K. U., Bahago, S. B., & Sa'aondo M. (2023). Effect of Internet-Based Instructional Strategy on Students' Academic Achievement in Economics: Counselling and Curriculum Inference. *ETDC Indonesian Journal of Research and Educational Review*. 2(3) 01-13
- [2]. Oleabhiele E.O. & Oko, N.O. (2018). Economics curriculum implementation at the senior secondary education level. *Journal of the International Association for Economics Educators* 1(3), 10-20.
- [3]. Yusuf, A. (2013). Economics Education. Retrieved from <http://www.musero.org.ng>
- [4]. Gotip, N. W., Ede, M. O : Oleabhiele, E. O. (2020). Vision and Mission of Economics Education in the 21st Century. *Journal of Economics and Environmental Education*. 4(1), 79-87. PDF) *Vision and Mission of Economics Education in the 21st Century*. Available from: https://www.researchgate.net/publication/343686241_Vision_and_Mission_of_Economics_Education_in_the_21st_Century [accessed Jan 20, 2024].
- [5]. Ande, C. E. (2012). *Essential Economics for Senior Secondary Schools*. Lagos: TONAD Publishers Limited
- [6]. Oko, N.O. (2021). Effects of futures-wheel instructional method on secondary school student's academic achievement and retention in Economics in Ebonyi State. An *Unpublished Ph.D. Dissertation*, Michael Okpara University of Agriculture, Umudike
- [7]. Oleabhiele, E.O. & Ede, M.O. (2015). Cognitive constructivist instructional model on students' learning achievement in Economics. *Journal of Research and Theory in Education*. 6(3), 85-94.
- [8]. NERDC
- [9]. Oselebe, A. (2016). Critical thinking and transformative learning. *Journal of Environmental Studies*. 4(1), 214-223.
- [10]. Ojelabi, A.S. (2014). *Developing objectives and skills in Economics instruction*. Ibadan: Kanton Ltd.
- [12]. Richards, J. C. & Lockhart, C. (2015). *Reflective teaching in second language classrooms*. London: Cambridge University Press
- [13]. Cruickshank, D. (2013). *Reflective teaching: The preparation of students for teaching*. Reston VA: *Association of Teacher Educators*
- [14]. Ashraf, H. & Zolfaghari, S. (2018). Teachers' assessment literacy and their reflective teaching. *International Journal of Instruction*. 11(2), 425-436.
- [15]. Boud, D. (2015). *Enhancing learning through self-assessment*. London: Kogan Page
- [16]. Gupta, T., Abha, S. & Mishra, L. (2019). Reflective teaching strategy for effective instruction. *International Journal of Education and Applied Social Sciences*. Retrieved from <https://www.researchgate.net/application/342330128>
- [17]. Gotip, N. W., Onuoha, J. C., Iorliam, E. I. V. (2021). Effects of Infographics Instructional Strategy on Students' Achievement in Senior Secondary School Economics in Pankshin Local Government Area of Plateau State, Nigeria. *International Journal of Economics Education Research*. 4(1) 142-157. Retrieved online from <https://iafee.org/wp-content/uploads/2021/07/GOTIP-et-al-vol-4-issue-1-2021-pp-141-157.pdf>
- [18]. Oleabhiele, E.O. (2012). Effects of individualized and cooperative learning methods on senior secondary school students' achievement in Economics. *Unpublished Ph.D. Dissertation*, Ebonyi State University.
- [19]. Hinett, K. (2016). *Developing reflective practice in legal education*. UK Centre for Legal Education: University of Warwick
- [20]. Cocker, C.V. & Banbdel, O. (2011). Learning about reflection from the student. *Active Learning in Higher Education* 6, 201-217.
- [21]. Owodunni, A.S. & Ogundola, I.P. (2013). Gender differences in the achievement and retention of Nigerian students exposed to concepts in electronic works trade through reflective inquiry instructional technique. *British Journal of Education, Society and Behavioural Sciences* 3(4), 589-599.
- [22]. Brown, M.D. (2014). Effect of Reciprocal Teaching strategy on secondary school students' achievement in Chemistry in Orlu Two Education Zone, Imo State. *Journal of Educational Research*. 2(2), 113-119.
- [23]. Pressley, Z. (2012) Effect of reciprocal peer-tutoring on academic achievement of ninth-grade students in Mathematics in California. *Journal of Psychology*. 5(8), 466-475.
- [24]. Alasoluyi, O. E. (2015). *Effect of Computer Assisted Instruction (CAI) on students' performance in Economics in senior secondary schools in Ekiti State, Nigeria*. Unpublished Master's Thesis, Educational Foundations and Curriculum Department, Ahmadu Bello University, Zaria.

- [25]. Sangowawa, J. A. (2019). *Effects of scaffolding instructional strategy on attitude retention and performance in Ecology among senior secondary school students of Giwa education-zone, Kaduna state, Nigeria*. Unpublished Ph.D Thesis, Department of Science Education, Faculty of Education, Ahmadu Bello University, Zaria, Nigeria.
- [26]. Okoye, (2013). *Fundamentals of teaching practice*. Enugu: Fourth-Dimension Pub. Co.

Cite authors such as: Obayi, A. U., Oleabhiele, E. O., Suleiman, A. S, Gotip, N. W., Shugaba, M & Kalu, C. U. (2024). Impact of Reflective Teaching Strategy on the Academic Achievement of Senior Secondary School Students in Economics in Yobe State, Nigeria

