

Collaborative Instructional Strategy on Students' Performance in English Language in Bayelsa State.

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Abstract

The study investigated the Effect of Collaborative Instructional Strategy on Students' Academic Performance in English Grammar in Bayelsa State. This study adopted a Pre-test Post-test quasi-experimental design. Purposive sampling technique was used to get a sample size of 35 students from three secondary schools in Bayelsa State. Two research questions and one hypothesis guided the study. The instrument for data collection was a teacher made test titled "English language performance test". The instrument was validated by three subject matter experts and two experts in measurement and evaluation. Pearson Product Moment was used to calculate the reliability of the instruments at 0.81 reliability index. Mean and standard deviation were used to answer the research questions while analysis of co-variance (ANCOVA) was used to test the Hypothesis. The result in research question one indicated that students taught English grammar using collaborative instructional strategy performed better (Pretest; $\bar{x}$ = 43.88, SD = 4.81, Post-test; $\bar{x}$ = 58.85, SD = 4.13, mean gain = 14.97). The result in research question two indicated that the gender difference in the performance of students taught English Grammar using collaborative instructional strategy revealed that male students performed better with Pretest; $\bar{x}$ = 40.58, SD = 11.43, Post-test; $\bar{x}$ = 58.58, SD = 11.20, mean gain = 18.11, than their female counterparts Pretest; $\bar{x}$ = 45.61, SD = 13.16, Post-test; $\bar{x}$ = 59.00, SD = 12.00, mean gain = 13.39. Therefore, students who were exposed to collaboration instructional strategy demonstrated higher levels of academic performance in English grammar compared to those who were not. It is therefore recommended that Teachers should incorporate collaboration instructional strategy when teaching English grammar to enhance student' academic performance, due to its effectiveness in improving the learning outcomes. More attention should be paid on the female gender to boost their performance.

Keywords: Collaborative, Instructional Strategy and Academic Performance.

Introduction

To communicate effectively and meaningfully, you must be familiar with the use of language skills of listening, speaking, reading and writing. The four language skills are very important for communication. In the academic environment, listening, speaking, reading, and writing are important tools for teaching, learning, effective communication between teachers, learners, and academic excellence. Among the users of the English Language, an effective communication process would involve knowing all the components of the morphological, syntactic, semantic and phonological ideas of the language and maintaining the rules that govern them otherwise, the competence and performance of the users would be violated (Eke, 2021). Grammatical

rules should be consciously taught by English teachers to help students acquire proficiency in English.

The need for competence in English Grammar calls for a change in teaching method and classroom organization. There are various methods that teachers can employ to improve students' language skills and Academic Performance. Teachers' teaching strategies play an important role in improving student's performance. Hence, there is need for teachers to use appropriate pedagogical approach to enhance creativity and innovation to meet the needs of the 21st century students who are digital natives. The integration of Collaborative Instructional Strategy into language teaching has helped to improve the quality of teaching and learning of English Language and students' proficiency. Collaborative Instructional Strategy enhances communication, critical thinking, creativity and team work. Education is not static, therefore there is need to move with the dictates of time in the methods/approaches of imparting knowledge on the learners (Eke, 2021).

In the modern educational landscape, the integration of technology and innovative teaching methods has significantly transformed traditional classroom settings. One such transformation has been the incorporation of Collaborative Instructional strategies to enhance students' learning experiences and outcomes. This research aims to ascertain the effect of Collaborative Instructional strategies on students' academic performance in English grammar in secondary schools.

Collaborative Strategy

Collaborative strategy in education refers to a teaching approach that encourages students to work together to achieve a common learning goal. Collaborative learning has been used for promoting learning achievement and encourages socialization and positive interaction among students. It creates an enabling environment for students that increase their academic performance as they learn social skills and enhances the active participation of students (Niyonsaba, Nkurunziza, & Hakizimana, 2022). It involves cooperative learning activities where students actively engage with one another to solve problems, complete tasks, or create projects. Collaborative learning helps students to have active control over their own learning. This is a perceived skill of knowledge acquisition developed by self and the evaluation of classroom experience in team learning in educational technology. Collaborative learning has its base on the need to change the acquisition of knowledge from fixed information transfer to preparing students on self-acquisition of knowledge (Ohia, Isaac & Ochuba, 2015). Collaborative learning is an approach in which small groups of students of different levels of

ability work together whereby each member in the group is expected not only to learn what is being taught by the teacher, but one student helps group mates' study (Abdulwahab, 2016). However, collaborative strategy emphasizes teamwork, communication, and shared responsibility among students. It is based on the principles of active participation, mutual respect, and collective achievement.

In affirmation, (Gisbert, 2018) posits that collaborative learning as a teaching and learning strategy is based on the active and main role of learners. Byusa et al. (2020), stressed that some of the techniques that involve active learning include conceptual changes strategies, collaborative/cooperative learning, technology-enhanced learning, inquiry-based learning, discovery learning, and think-pair-share or peer instruction. Innovative teaching strategies such as inquiry-based learning, problem solving, collaborative learning, and demonstration methods are better than traditional methods of teaching and learning (Niyonsaba, Nkurunziza, & Hakizimana, 2022). Collaborative learning helps students to have active control over their learning and create both academic and social relationships and to accomplish common goals (Molla & Muche, 2018). Collaborative learning is a learning environment that allows active participation in the learning process (Niyonsaba, Nkurunziza, & Hakizimana, 2022). Collaborative learning gives students the opportunity to reason over challenging problems which will promote active discussion in class among students. It is a process in which two or more people learn something together or in a nutshell, a joint problem solving.

Collaborative Instructional Strategy is generally defined as a teaching arrangement in which small groups of students work together to achieve a common goal. Students encourage and support each other, assume responsibility for their own and each other's learning, employ group related social skills, and evaluate the group's progress. The basic elements are positive interdependence, equal opportunities, and individual accountability. Humans as we are, tend to be cooperative by nature in all aspects of our lives. Therefore, it follows that cooperative learning groups in schools should be used as a logical teaching method (Kagan, 2001). Collaboration facilitates interaction, communication, and cooperation among students and teachers. It fosters an environment that encourages teamwork, critical thinking, and active engagement. In the context of English grammar learning, digital collaboration can involve physical or virtual classrooms, collaborative writing platforms, discussion forums, and video conferencing tools.

Benefits of collaborative instructional strategy:

1. Promotes critical thinking: Collaboration fosters discussion and exchange of ideas, leading to deeper understanding and critical analysis of concepts.
2. Encourages engagement: Collaborative activities make learning more interactive and enjoyable, increasing student motivation and participation.
3. Social Interaction: Collaboration encourages communication, teamwork, and peer learning, enhancing social skills and fostering a sense of community.

Challenges of Collaborative instructional strategies:

Collaborative instructional strategies can face several challenges, including:

1. Communication barriers: Differences in communication styles, language proficiency, or personality clashes can impede effective collaboration.
2. Assessment: Designing fair and meaningful assessments that evaluate both individual contributions and group achievements.
3. Time constraints: Planning and coordinating collaborative activities within the constraints of the curriculum and class schedule.
4. Motivational disparities: Varying levels of commitment and motivation among collaborators can affect the quality and pace of work.

Principles of collaborative instructional strategy:

1. Active Participation: Students are actively engaged in the learning process through discussions, group activities, and hands-on tasks. This encourages them to take ownership of their learning and become more invested in the material.
2. Shared Responsibility: In collaborative learning, students share the responsibility for their own learning as well as the success of the group. This promotes accountability and encourages students to support each other in achieving their goals.
3. Peer Learning: Collaborative instructional strategies leverage the expertise and knowledge of peers within the group. Through peer teaching and feedback, students can deepen their understanding of the material and develop important critical thinking and communication skills.

By incorporating these principles into instructional design and classroom practices, educators can create engaging and effective learning experiences that promote collaboration, critical thinking, and lifelong learning skills among students.

Concept of Academic Performance.

The aim of every teacher is for his/her students to perform well academically. Students are being evaluated either by assessment, interview or by observation to determine the students' academic performance. According to Madden, (2014), the summation or numerical way of finding out how well a student has performed is the recent discovery that is used along with teachers' assessment of the students. Today, irrespective of the criticism, determination of students' performance is on-going because it fulfils a good number of purposes. Performance is the measurement of students' success in academics. It is done to find out how well the students meet the standards set for them by the teacher, local government and institution itself. Performance is the completion of task with application of knowledge, skills and abilities (Vizeshfar, & Torabizadeh, 2018). Performance according to Vizeshfar, and Torabizadeh, is divided into two: contextual and task performance. Contextual performance is the type of performance that is value base; has to do with the person's personality and behaviour. It has nothing to do with description on the person's job but has to do with the roles that are related with organisational performance. Task performance on the other hand is the kind that is related to job descriptions of individual and cognitive ability. Performance is said to be an achievement or an outcome of set objectives. According to Nuhu, (2015), performance is an observable and a measurable change of person in an experimental situation. This shows that performance indicates part of behaviour that he observed at a particular point in time. Usman and Madudili (2019) defined performance as a mental test used to check what an individual has done rather than said. Al-Tameemi, Johnson, Gitay, Abdel-Salam, Al Hazaa, Ahmed, and Romanowski, (2023) defined Academic performance as the extent to which an institution, a teacher, or a student achieves long- or short-term educational goals and the academic achievement of performance is usually measured by continuous assessments and overall cumulative grade point average (CGPA) achieved by the student. Again, it is a kind of test which throws an idea to handle things in a proper way rather than symbols (Usman, & Madudili, 2019).

Educators should be able to recognize the crucial factors that positively contribute to the student's academic performance including the learning and teaching styles, environment, resources, technology, their level of knowledge, financial stability, personality and other influencing factors.

Statement of the problem.

Language learners encounter various problems in their quest for proficiency in English language ranging from vocabulary misuse, grammatical errors, spelling, capitalization,

punctuation and some others when writing academic texts in English. Students' poor performance in English language is a major challenge affecting candidates in securing admission into tertiary institutions.

The quest for competence and performance in English grammar among secondary school students is a great concern to the researcher. Could the poor performance of students and the difficulty experienced in observing grammatical rules be as a result of inappropriate use of teaching strategies by the teachers during the instructional delivery? Could Students' academic performance in English grammar be enhanced using collaborative Instructional Strategy in secondary school, Yenagoa L.G.A of Bayelsa State. Hence, the problem and thrust of this study.

Research Questions.

In order to achieve the objectives of this study, the following research questions were formulated to guide the study.

1. What is the effect of Collaborative Instructional strategy on students' mean performance scores in English Grammar?
2. What is the difference in the mean performance scores of male and female students taught English grammar using collaborative Instructional strategy?

Hypothesis

1. There is no significant effect of collaborative Instructional strategy on students' mean performance score in English Grammar compared to their pre-test post-test.

Methodology.

This study adopted a Pre-test Post-test quasi-experimental design. Purposive sampling technique was used to get a sample size of 35 students from three secondary schools in Bayelsa State. The instrument for data collection was a teacher made test titled English language performance test. The instrument was validated by three subject matter experts and two experts in measurement and evaluation. Pearson Product Moment was used to calculate the reliability of the instruments at 0.81 reliability index. Mean and standard deviation were used to answer the research questions while analysis of co-variance (ANCOVA) was used to test the Hypothesis.

Result and Discussion.

Research Question 1: What is the effect of Collaborative Instructional strategy on students' mean performance score in English Grammar?

Table 1: The effect of collaborative Instructional strategy on students' mean performance score in English Grammar.

Test	N	Mean	Std. D	Mean Gained
Pretest	35	43.88	4.81	
Post test	35	58.85	4.13	14.97

The mean scores increased significantly from the pretest to the post-test, indicating a positive impact of the collaborative instructional strategy on students' performance. The result indicated that students taught English grammar using collaborative instructional strategy performed better (Pretest; $\bar{x} = 43.88$, SD = 4.81, Post-test; $\bar{x} = 58.85$, SD = 4.13, mean gain = 14.97). This suggests the sustained effectiveness of the collaborative approach.

Standard deviations provide insights into the variability of scores within each phase.

Research Question 2: What is the difference in the mean performance scores of male and female students taught English grammar using collaborative Instructional strategy?

Table 2: Mean score and standard deviation of the difference in the mean performance scores of male and female students taught English grammar using collaborative Instructional strategy.

Instructional Strategy	Gender	N	Pretest		Posttest		Mean Gain
			$\bar{x}$	SD	$\bar{x}$	SD	
Collaborative	Male	12	40.58	11.43	58.58	11.20	18.00
	Female	23	45.61	13.16	59.00	12.00	13.39

Table 2 shows the difference in the mean performance scores of male and female students taught English grammar using collaborative Instructional strategy. The result indicated that the gender difference in the performance of students taught English Grammar using collaborative instructional strategy revealed that male students performed better (Pretest; $\bar{x} = 40.58$, SD =

11.43, Post-test; $\bar{x}$ = 58.58, SD = 11.20, mean gain = 18.11), than their female counterparts (Pretest; $\bar{x}$ = 45.61, SD = 13.16, Post-test; $\bar{x}$ = 59.00, SD = 12.00, mean gain = 13.39).

Hypothesis 1: There is no significant effect of collaborative Instructional strategy on students' mean performance score in English Grammar compared to their pre-test post-test.

Table 3: Analysis of Covariance (ANCOVA) of the effect of collaborative Instructional strategy on students' mean performance score in English Grammar compared to their pre-test post-test.

Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^b
Corrected Model	81.955 ^a	2	40.977	39.880	.000	.395	79.760	1.000
Intercept	23.276	1	23.276	22.653	.000	.157	22.653	.997
Collab	3.205	1	3.205	3.119	.080	.025	3.119	.418
Pre-test Post-test	56.599	1	56.599	55.084	.000	.311	55.084	1.000
Error	125.357	67	1.028					
Total	1967.000	70						
Corrected Total	207.312	69						

a. R Squared = .395 (Adjusted R Squared = .385)

b. Computed using alpha = .05

Above displays the effect of Collaborative Instructional strategy on students' mean performance scores in English Grammar compare to their pre-test post-test. In the results, the Intercept and Pre-test Post-test have observed powers of 1.000 and 0.997, respectively, indicating very high confidence in detecting differences. However, the observed power for Collab. is 0.418, suggesting lower confidence in detecting an effect at ($F=3.119$, $df = 67$, $p .000 < .05$).

The ANCOVA analysis shows significant differences for the Intercept and Pre-test Post-test factors while controlling for other variables, but no significant difference for the Collab factor. The effect sizes (Partial Eta Squared) and power values indicate a strong effect of the collaborative strategy. The null hypothesis is therefore rejected therefore; there is a significant effect of Collaborative Instructional strategy on students' mean performance scores in English Grammar compare to their pre-test post-test.

Discussion and Finding

The result in research question six showed that students would perform better if taught English grammar using collaborative Instructional strategy, as compared to the conventional lecture method. Furthermore, the result hypothesis six showed that there is significant difference in the mean performance scores of students taught English grammar using collaborative Instructional strategy, and Conventional Lecture method. This finding is in consistent with the findings of Ochulor (2012) who investigated the effect of active teaching strategies on secondary school Academic Performance in Organic Chemistry. The result shows that both collaborative teaching strategies enhances students' academic achievement more than the conventional methods, with the male performing better than girls in collaborative teaching strategies. Babalola, and Agbaje (2019) conducted a study to examined the effect of collaborative teaching on students' academic achievement in English language in Ekiti State. The major findings show that the students taught with Collaborative Teaching Strategy (CTS) achieved significantly better outputs than those of the control group. The study also discovered that there was no significant gender difference in the students' achievement in English language. The findings of this study revealed that collaborative teaching strategy is more effective to teaching of English Language at the Junior Secondary School levels. This finding tallies with Ishaq (2015) which discovered a significant difference between students' academic achievement when learning under collaborative learning strategy and conventional teaching method. This finding is in line with Mutai (2015) who found that collaborative, as a teaching strategy, affects the performance of students in English language. Yusuf, (2018), who found that students taught using collaborative instructional strategy had enhanced performance which made the students different and to outscore their counterparts in the other groups. The finding of this study contradicts the study of Telima and Omeodu, (2017) they reported that conventional instructional strategy was superior to collaborative instructional strategy in laboratory work.

The result in research question two shows the gender difference in the performance of students taught English Grammar using collaborative instructional strategy. It revealed that male students performed better than their female counterparts. The finding disagrees with Iji, Ochu, Adikwu and Atamonokhai, (2017) which reported that collaborative instructional strategy increased the achievement scores of both male and female students but favoured female students' more in the classroom. The result of this study is in agreement with Busola, (2011) who reported that male students achieved higher than their female counterparts in Chemistry.

However, there was no significant difference between the academic achievement mean scores of male and female students taught Chemistry using collaborative learning strategy. This implies that, collaborative learning strategy is not gender sensitive in relation to students' academic achievement. This finding is in agreement with Nkechinyere and Ordu, (2018) who discovered that there is no significant difference in the academic achievement mean scores of male and female students taught Chemistry using the collaborative learning strategy. Furthermore, the result of hypothesis eight showed that there is no significant difference in the mean performance scores of male and female students taught English grammar using collaborative Instructional strategy. Adolphus, and Omeodu, (2015) carried out research on the effects of gender and collaborative learning approach on students' conceptual understanding of electromagnetic induction in secondary schools in Nigeria. The results of data analysis revealed that collaborative instructional strategy affects students' understanding of magnetic induction; however, there was no significant difference in gender in the understanding of electromagnetic induction when taught with collaborative strategy.

Conclusion

The study investigated the effect of collaborative instructional strategies on secondary school students' academic performance in English grammar in Yenagoa L.G.A of Bayelsa State. Consequently, the findings of this study showed that students who were exposed to collaborative instructional strategy demonstrated higher levels of academic performance in English grammar compared to those who were not. Additionally, the collaborative instructional strategy played a significant role in enhancing students' learning outcomes in the subject. Based on the outcome of this study, it can be deduced that incorporating collaborative instructional strategy in teaching English grammar in secondary schools can lead to improved academic performance among students.

Recommendations

1. Teachers should incorporate Collaborative instructional strategy when teaching English grammar to enhance student cooperation and knowledge sharing when learning.
2. Teachers should incorporate Collaborative instructional strategy when teaching English grammar to enhance student performance, due to its effectiveness in improving learning outcomes.
3. Curriculum developers should consider incorporating Collaborative instructional strategy to improve male and female students' performance in English Grammar, due to the proven effectiveness of the strategies in enhancing learning outcomes.

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