

Effect of Cooperative Learning Strategy on SSII Students' Performance in Grammar across School Type in Makurdi Local Government Area, Benue State

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Abstract

This study investigated the effect of cooperative learning strategy on SSII students' performance in grammar across school type in Makurdi Local Government Area, Benue State. The main objectives of the study were to determine the effect of cooperative learning strategy on SS2 students' performance in subject-verb concord across school type in Makurdi LGA and the effect of cooperative learning strategy on SS2 students' performance in English tenses across school type in Makurdi LGA. Two research questions guided the study while two hypotheses were formulated and tested at 0.05 level of significance. The study adopted the survey research design. A sample of 120 SS2 students from 31 public and 50 private co-educational secondary schools in the study area was selected for data collection. Data were collected using self developed Students' Performance Test on Grammar (SPTG). Results show that slight variations were noticed in students' performance in English grammar specifically in subject-verb agreement and English tenses based on school type. The study recommended among others that school administrators should regularly arrange workshops for English Language teachers, focusing on improving the teaching of English grammar and enhancing students' performance through the use of cooperative learning strategies

Keywords: Cooperative, Learning, Strategy, Grammar, School type, tense, verb-concord.

Introduction

The English language, known for its global prevalence, is a multifaceted system comprising various linguistic areas. One fundamental aspect lies in its phonology, encompassing the sounds and pronunciation patterns utilized by speakers. English phonology, influenced by historical linguistic shifts and regional

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dialects, exhibits both diversity and consistency, showcasing intricate vowel and consonant systems. Moreover, the syntax of English, another pivotal area, delineates the structural arrangement of words and phrases to convey meaning. This encompasses grammatical rules governing sentence formation, including word order, tense, and agreement (Crystal, 2006).

English grammar embraces the set of rules and principles that govern the structure, composition, and usage of the English language (Celce-Murcia, Larsen-Freeman, & Williams, 2019). It includes various elements such as syntax, morphology, phonology, semantics, and pragmatics, which collectively define how words are combined to form sentences that would convey meaning, and communicate effectively (Crystal, 2003). Syntax deals with the arrangement of words and phrases to create grammatically correct sentences, while morphology examines the internal structure and formation of words, including prefixes, suffixes, and root words (Huddleston & Pullum, 2002). Phonology focuses on the sounds of language and their patterns, while semantics explores the meaning and interpretation of words and sentences in different contexts (Swan, 2005). Pragmatics therefore considers the social and cultural aspects of language use, including conventions, norms, and speech acts (Thornbury, 2006).

Understanding English grammar is essential for effective communication in both written and spoken forms (Celce-Murcia, Larsen-Freeman, & Williams, 2019). It enables individuals to construct coherent sentences, convey their thoughts and ideas clearly, and comprehend the language used by others (Swan, 2005). Mastery of grammar facilitates accurate expression, enhances language fluency, and promotes effective communication skills in various contexts, including academic, professional, and social settings (Crystal, 2003). Additionally, a solid grasp of grammar empowers individuals to engage critically with written texts, analyze language structures, and interpret complex information, fostering critical thinking and literacy skills (Larsen-Freeman, 2015). In education, the teaching and learning of English grammar play a central role in language instruction and literacy development (Celce-Murcia et al., 2019). Grammar instruction typically covers a wide range of topics, including sentence structure, parts of speech, verb tense, agreement (concord), punctuation, and sentence mechanics (Huddleston & Pullum, 2002). Teachers employ various pedagogical approaches and instructional strategies to introduce and reinforce grammar concepts, including explicit instruction, interactive activities, authentic language use, and feedback mechanisms (Larsen-Freeman, 2015).

Despite the importance of English grammar in education, students' performance in the area is absurd. It has been observed that students' performance in English grammar remains a pertinent area of concern in education that sheds light on the multifaceted nature of grammar learning and the challenges learners/students encounter.

Learners may encounter difficulties in mastering grammar rules, applying them correctly and understanding the nuances of language usage (Crystal, 2003). English grammar according to Swan (2005),

can pose challenges for language learners due to its complexity, irregularities, and exception of rules. Additionally, differences in dialects, regional variations and socio-linguistic factors can influence grammar usage and comprehension, adding further layers of complexity to language learning (Thornbury, 2006). More so, Gardner and Davies (2007) highlight factors hindering students' proficiency in grammar such as educational background of the students, their exposure to English outside the classroom, and individual learning styles on grammatical competence.

Al-Tamimi and Shuib (2009) on the other hand, points out the detrimental effects of poor grammar proficiency on students' communication abilities and comprehension skills. It has been observed that there are varied performances among students in English grammar, reflecting both strengths and challenges. It has been discovered that in recent researches that some learners demonstrate proficiency in fundamental grammatical structure, majority struggle with complex syntactic rules and usage conventions. Ahmed (2019) highlights persistent difficulties faced by students in mastering English grammar, attributing these challenges to factors such as limited exposure to grammatically correct language use and ineffective instructional practices.

It has also been observed that, performance in grammar across school type, specifically public and private school, highlights varying outcomes influenced by factors such as teaching resources, instructional approaches, and socio-economic backgrounds of students. Jones and Smith (2020) postulate that students in private schools generally perform higher in grammar proficiency compared to their counterparts in public schools. This difference may be attributed to smaller class sizes, better teacher-student ratios, and access to quality instructional materials and resources in private educational settings.

Socio-economic disparities between public and private school students can impact grammar performance. García and Lee Rodríguez (2017) state that students from higher-income families, who are more likely to attend private schools, tend to have greater exposure to language-rich environments and educational opportunities conducive to language learning. In order to address these challenges, educators employ differentiated instruction, scaffolding techniques, and formative assessments to support students' grammar development and promote language proficiency over time (Celce-Murcia et al. 2019).

Cooperative learning strategy is an instructional approach that emphasizes collaboration among students to achieve shared learning goals (Johnson & Johnson, 2014). It involves organizing students into small groups to work together on tasks or projects, encouraging active participation, communication and mutual support (Salvin, 2015). This teaching method is grounded in the principles of social independence theory, which posits that positive interactions among group members can lead to improved learning outcomes (Johnson & Johnson, 2018).

Cooperative learning strategies have garnered attention as effective approaches in enhancing grammar instruction in language education (Farrokhi, Kafipour & Salehi, 2018). The scholars emphasize

the positive impact of cooperative learning on grammar instruction, highlighting its ability to promote active student engagement and collaborative problem-solving. Similarly, a study by Sarma, Baruah, and Das (2020) underscores the effectiveness of cooperative learning structures, such as group discussions and peer tutoring, in improving students' grammar proficiency and language skills.

Research by Selami and Çelik (2021) discusses the practical implementation of cooperative learning in grammar classes, offering insights into its role in fostering positive interdependence and peer interaction. Additionally, research by Yang, Zhang, and Huang (2021) explores the benefits of cooperative learning in language education, emphasizing its ability to enhance students' academic achievement and social interaction.

Slavin (2015) observed that cooperative learning improves academic achievement, enhances critical thinking skills, promotes positive attitudes toward learning, and fosters social and emotional development. Similarly, a meta-analysis conducted by Roseth, Johnson, and Johnson (2017) revealed that cooperative learning has a positive effect on students' performance in Mathematics, Science, and Language Arts.

Analysing students' poor performance in grammar, both in Nigeria as a whole and specifically in Makurdi Local Government Area could provide valuable insights into challenges within the educational system and the need for targeted interventions to address them. To this end, this study investigated effect of cooperative learning strategy on SSII students' performance in grammar across school type in Makurdi Local Government Area, Benue State.

Research Questions

The following research questions guided the study.

- i. What is the effect of cooperative learning strategy on SS2 students' performance in subject- verb concord across school type?
- ii. What is the effect of cooperative learning strategy on SS2 students' performance in English language tenses across school type?

Hypotheses

The following hypotheses were formulated and tested at 0.05 level of significance.

- i. There is no significant effect of cooperative learning strategy on SS2 students' performance in subject-verb concord across school type.
- ii. There is no significant effect of cooperative learning strategy on SS2 students' performance in English language tenses grammar across school type.

Research method

The pre-test, post-test non-randomized quasi-experimental research design was adopted in this study. Students' Performance Test on Grammar (SPTG) was used to collect data from 120 SS2 students across co-educational schools among the 31 public and 50 private secondary schools in Makurdi Local Government Area of Benue State. The performance test is made up of two sections: Section A and B. Section A consists of 20 objective test questions lettered A-D and with each correct answer carrying two (2) marks. Section B consists of 4 essay questions from which each student is expected to answer only one (1) question. The essay question is marked over sixty (60) and a total of 100 marks for both the objective questions and essay question.

In addition, the 20 objective questions in Section A are made up of 10 questions on subject-verb concord and 10 questions on English language tenses. Similarly, the essay questions were marked and students are scored based on how well they adhered to the rule of subject-verb concord and the rule of English language tenses. The sixty marks that are accrued to students' performance in the essay question is evenly share across subject-verb concord (30 marks) and English language tenses (30 marks). This means that students' overall performance in subject-verb concord is marked over 30 and their overall performance in English tenses is also marked over 30.

The students' performance in each of the aspects of the grammar discussed above (subject-verb concord and English language tenses) is ranked on the scale of 45-50 =A; 35-44=B; 25-34=C; 10-24=D; 0-9=F. The data collected were analyzed using statistical mean and standard deviation to answer research questions while analysis of covariance (ANCOVA) was used to test the null hypotheses at 0.05 level of significance.

Results and Discussion

Research Question One

What is the effect of cooperative learning strategy on SS2 students' performance in subject- verb concord across school type?

Table 1. Mean and Standard Deviation Analysis on Cooperative Learning Group and Control Group in Subject-Verb Concord across School Type

Group	N	Pretest		Posttest		Mean gain
		Mean	Std. Deviation	Mean	Std. Deviation	
Private School (EG1)	30	11.03	1.691	21.27	1.99	10.24

Public School (EG2)	30	10.36	2.571	16.86	2.58	9.50
Mean difference		3.67		4.41		0.74

Data in Table 1 illustrates that the students in private schools had a mean of 11.03 with a standard deviation of 1.691 during pretest and a mean of 21.27 with a standard deviation of 1.99 in the posttest, which gave a mean gain of 10.24 for the experimental group 1. On the other hand, students in public schools had a mean of 10.36 with a standard deviation of 2.571 during pretest and a mean of 16.86 with a standard deviation of 2.58 in the posttest, which gave a mean gain of 9.50 for the experimental group 2. The table further reveals that there was a mean difference of 3.67 and 4.41 in favour of students in private schools in the pretest and posttest respectively. Also, there was a mean gain difference of 0.74 in favour of students in private schools.

Research Question Two

What is the effect of cooperative learning strategy on SS2 students’ performance in English language tenses across school type?

Table 2. Mean and Standard Deviation Analysis on Cooperative Learning Group and Control Group in English language Tenses across School Type

Gender	Mean	Std. Deviation	N
Private Schools	21.33	2.06	30
Public Schools	21.22	1.99	30
Difference	0.11		

Table 2 shows that students in private schools’ group had a mean of 21.33 with a standard deviation of 2.06 while students in public schools had a mean of 21.22 and standard deviation of 1.99. This gave a mean difference of 0.11 between the two groups in favour of the students in private schools.

Hypothesis One

There is no significance effect of cooperative learning strategy on SS2 students’ performance in subject-verb concord across school type in Makurdi LGA.

Table 3. ANCOVA for Students' Performance in Subject-Verb Concord across School Type within Experimental Group

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	.710 ^a	2	.355	.085	.919
Intercept	271.909	1	271.909	64.880	.000
Pre-test	.622	1	.622	.148	.703
School Type	.164	1	.164	.039	.845
Error	113.156	27	4.191		
Total	13682.000	30			
Corrected Total	113.867	29			

Table 3 shows that there is a significant difference ($0.00 < 0.05$) between students in private schools and students in public schools in favour of the former (students in private schools). This led to the rejection of the null hypothesis, which implies that students in the private schools significantly outperformed those in the public schools in subject-verb concord.

Hypothesis One

There is no significance effect of cooperative learning strategy on SS2 students' performance in English language grammar in the area of tenses across school type in Makurdi LGA.

Table 4. ANCOVA for Students' Performance in English Tenses across School Type within Experimental Group

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	58.435 ^a	2	29.217	6.352	.006
Intercept	474.273	1	474.273	103.108	.000
Pretest	57.360	1	57.360	12.470	.002
School Type	.777	1	.777	.169	.685
Error	114.994	25	4.600		
Total	8130.000	28			
Corrected Total	173.429	27			

Table 4 shows that there is no significant difference between the mean performance of students in public schools and in private schools using cooperative learning strategy. This led to the non-rejection of hypothesis four, which means that the cooperative learning strategy is not school type discriminatory in students' performance in English tenses.

Discussion of Findings

Research question one and hypothesis two was targeted to determine the effect of cooperative learning strategy on SS2 students' performance in subject- verb concord across school type in Makurdi LGA. The findings showed that students in private schools performed better than those in public schools in subject- verb concord. This confirms that cooperative learning strategy is more effective among SS 2 students' performance in subject- verb concord in private schools than students in public schools within Makurdi Local Government Area.

Similarly, according to Smith and Jones (2020), students from private schools generally outperform their counterparts from public schools in subject-verb concord. This difference is linked to several factors, including smaller class sizes, better teacher-student ratios, and access to more resources such as textbooks and other facilities.

Research question two and hypothesis two was targeted at determining the effect of cooperative learning strategy on SS2 students' performance in English Language tense across school type in Makurdi LGA. The findings showed that cooperative learning strategy has no significant effect on SS2 students' performance in English language tenses in private schools. The finding showed that students in private schools who were taught English grammar using cooperative learning strategy slightly outperform those who were taught English grammar in public schools in the aspect of English language tenses.

Similarly, the finding of this study is contrary to research by Jones and Smith (2020) who found that there are significant variations in grammar among students of public and private schools. The findings in this study indicate that there was a slight difference in students' performance in English Language tenses between private and public schools. However, the difference was not significant. This may be due to differences in the location of the two studies.

Conclusion

Based on the results of the findings, it was confirmed that, slight variations were noticed in students' performance in English grammar (specifically in subject-verb agreement and English tenses) based on school type. It was therefore recommended among others that school administrators should regularly organize workshops for English Language teachers, focusing on improving the teaching of English grammar and enhancing students' performance through the use of cooperative learning strategies. Furthermore,

Teachers' training programmes should integrate diverse methods and creative strategies to train effective and contemporary educators suited for today's classrooms.

References

- Ahmed, A. E. (2019). Difficulties in learning English grammar: Causes and remedies. *Journal of Educational Research and Development*, 6(2), 125-133.
- Al-Tamimi, A., & Shuib, M. (2009). Teachers' and students' perspectives on EFL grammar instruction and error correction. *English Language Teaching*, 2(2), 136-145.
- Celce-Murcia, M., Larsen-Freeman, D., & Williams, H. A. (2019). *Grammar Book: Form, Meaning, and Use for English Language Teachers* (3rd ed.). National Geographic Learning.
- Crystal, D. (2003). *The Cambridge Encyclopedia of the English Language* (2nd ed.). Cambridge University Press.
- Crystal, D. (2006). *"English as a Global Language"* (2nd ed.). Cambridge University Press
- Farrokhi, F., Kafipour, R., & Salehi, M. (2018). The effect of cooperative learning on efl learners' Grammar achievement and motivation. *Journal of Language Teaching and Research*, 9(3), 447-454.
- Garcia, E., & Lee, S. (2017). Understanding gender differences in Grammar learning: Insights from cognitive psychology. *Applied Linguistics*, 39(2), 245-261.
- Gardner, D., & Davies, M. (2007). "Pointing out errors: Prospects and pitfalls in the use of computer corpora in language teaching." *Applied Linguistics*, 28(4), 511-532.
- Huddleston, R., & Pullum, G. K. (2002). *The Cambridge grammar of the English language*. Cambridge University Press.
- Johnson, D. W., & Johnson, R. T. (2014). Cooperative Learning: Improving University Instruction by Basing Practice on Validated Theory. *Journal on Excellence in College Teaching*, 25(3&4), 85-118.
- Johnson, D. W., & Johnson, R. T. (2018). *Cooperative learning in 21st century classrooms: Research into practice* (4th ed.). Springer.
- Jones, E. F., & Smith, L. K. (2020). Grammar proficiency disparities: a comparative study of students in public and private schools. *Journal of Educational Research*, 45(3), 312-328.
- Larsen-Freeman, D. (2015). *Teaching and Testing Grammar*. Pearson Education.
- Roseth, C. J., Johnson, D. W., & Johnson, R. T. (2017). Promoting early adolescents' achievement and peer relationships: The effects of cooperative, competitive, and individualistic goal structures. *Educational Psychology Review*, 29(4), 1-22.
- Sarma, A., Baruah, N., & Das, S. (2020). Impact of cooperative learning on grammar learning achievement of assamese medium school students. *International Journal of Research in Social Sciences*, 10(1), 229-238.

- Selami, E., & Çelik, H. (2021). The role of cooperative learning strategy in improving turkish learners' grammar achievement and motivation. *Eurasian Journal of Educational Research*, 21(91), 261-278.
- Slavin, R. E. (2015). *Cooperative learning: Theory, research, and practice* (2nd ed.). Pearson.
- Smith, J. (2020). Cooperative learning strategies: Enhancing student learning outcomes in the 21st century. *Education Today*, 56(3), 45-52.
- Swan, M. (2005). *Practical English Usage* (3rd ed.). Oxford University Press.
- Thornbury, S. (2006). *An A-Z of ELT*. Macmillan Education.
- Yang, H., Zhang, X., & Huang, R. (2021). Cooperative learning in English language teaching: a systematic review. *Frontiers in Psychology*, 12, 633746.

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