

EFFECT OF COLLABORATIVE LEARNING INSTRUCTIONAL STRATEGY ON SOCIAL SKILL DEVELOPMENT OF PRIMARY SCHOOL PUPILS

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Abstract

Collaborative learning is an instructional strategy in which learners team together to explore a significant question or create a meaningful project. A group of learners discussing a lecture or learners from different schools working together over the internet on a shared assignment are both examples of collaborative learning. Collaborative Learning Strategy (CbLS) is a set-up in which students or learners are given the opportunity to cooperate and construct a consensus to an open-ended activity. This learning strategy shares many of the same traits as cooperative learning strategy. The major difference is of its being more student-centered than teacher-centered. Collaborative instructional strategy provides the driving force for social constructivism where students are in control of their own learning and ultimately, the outcome of their learning. Collaborative learning is best suited to an arrangement of groups where students can freely interact with one another and construct their ideas together. This study was therefore carried out to determine the effect of collaborative instructional strategy on primary school pupils' social skill development. The study was guided by two research questions and three null hypotheses. The study adopted a quasi-experimental research design. The population of the study was 19,677 primary five pupils. The sample for the study was 130 pupils from four intact classes. A rating scale developed by the researchers on social skills development was used as instrument for data collection. The instrument was validated by two experts in childhood education and one expert in measurement and evaluation. The reliability of the instrument using Cronbach's alpha was 0.82. Mean and Standard deviation were used to answer the research questions while Analysis of Covariance (ANCOVA) was used to test the null hypotheses at 0.05 level of significance. The result of the study, among others revealed that collaborative learning instructional strategy enhanced primary school pupils' social skills development more than the conventional lecture method. It was also found that gender had no significant influence on primary school pupils' social skills development. The result also showed that the difference between the social skills development of the groups taught using collaborative instructional strategy and lecture method was statistically significant ($p < 0.05$). Based on these findings, the researchers recommended among others that workshops and conferences should be organized for the training of primary school teachers on the use of collaborative learning instructional strategy in primary school classroom instruction. This will enable teachers to acquire innovative pedagogical capability with respect to handling issues concerning primary school pupils' social skills development.

Keywords: Collaborative Learning, Gender, Primary School, Pupils, Social Skills.

1 INTRODUCTION

Primary education's main goal is to get children ready for a purposeful life and subsequent academic endeavors. Primary education, as defined by the Federal Republic of Nigeria in her National Policy on Education, is the education provided in a facility for young people between the ages of six and eleven [1]. Primary education is crucial to the success or failure of the entire educational system since it serves as the foundation for all subsequent stages of education. This is because children's overall development is determined by the quick changes that take place during primary education. According to Nigeria's National Policy on Education, the primary education's objectives of primary education are to "inculcate permanent literacy, numeracy, and the ability to communicate effectively; to lay a solid foundation for scientific and reflective thinking; to provide citizenship education as a basis for effective participation in and contribution to the life of the society; to mould the child's character and develop sound attitude and morals; to develop in the child the ability to think critically and reflectively, including preparation for trades and crafts of the locality".

Primary education is the foundation of a child's fundamental education, and it is a highly important part of the nation's educational system that should be handled with great care and prudence since that level of education also contributes in nation building. Given the numerous advantages and benefits of primary

education to children's growth and development especially in developing social skills of children, it is disheartening to see that pupils in primary schools have struggled to build their social skills over time. Research have demonstrated that the teacher-centered teaching technique, such as the traditional lecture method of instruction, is to blame for the inadequate and underdeveloped social skills of pupils in primary schools [2] & [3]. The poor and underdevelopment of social skills of primary school pupils may be enhance when a learner centred instructional strategy such as collaborative instructional strategy is used during classroom instruction.

The term collaborative learning refers to a learning method in which learners work collectively in small groups toward a common goal [3]. This implies that the learners are accountable for their own learning as well as one another's. Working collaboratively involves respecting each person's perspective on the accomplishment of goals while working in groups to achieve the specified objectives. Collaborative learning is one of the best learning strategies for enhancing social skills [4]. This perhaps means that through collaborative learning technique, social skills may be enhanced. Collaborative instructional strategy also involves a fact-to-face interaction, which may improve and increase social skills development in learners. [5] noted that weak social skills can result in the following: low academic performance, absence of friends, rejection, anxiety, and depression. It is therefore important that the social skills of primary school pupils be enhanced to promote performance.

Social skill development of primary school pupils involves several interrelated areas of development, including social interaction, emotional awareness, and self-regulation [6]. As children develop socially, they learn to take turns, help their friends, play together, and cooperate with others. Feelings of trust, confidence, pride, friendship, affection and humor are all a part of a child's social skill development. A child's positive relationship with trusting and caring adults is the key to successful social skill development.

In addition, pupils are also required to have the initiative in expressing and defending opinions. In other words, pupils must actively interact with their friends to understand the material and solve problems in a case related to everyday life. Social interaction is a situation in which the behavior of one actor is consciously rearranged by, and influences the behavior of another actor, and vice versa. In this case, social skills are needed by pupils. Social Skill is a form of adaptive behavior which consists of skills to initiate and maintain social relationships, contribute to developing a positive peer relationship, give consideration to what other people want in the social sphere, and overcome problems that may occur. [7]. Primary school pupils are required to have good social skills because as they grow older, they will need the ability to adapt and build relationships with other people around them especially their peers.

Nowadays, there is a huge need for individuals with high social skills needed and able to adapt to changes in the work environment and social life they live [8]. Social skills can be interpreted as behaviors that include skills such as empathy, communication, joining group activities, cooperation, negotiation, and problem solving that improve the individual's relationship with the environment in a positive way [9]. The social skill development of primary school pupils may be influence by gender of the learner.

Gender in this case is described as the subjective feeling of being a male or female irrespective of one's sex. Gender involves the societal expectations about the characteristics and likely behaviours of men and women (masculinity and femininity) [10]. Gender is also described as the socially constructed roles, learned behaviours and the expectations that are associated with females and males in the society. Gender involves both psychological and socio-cultural dimensions of being a man or woman [11].

Operationally however, gender as used in this study could be seen as the roles and functions ascribed to male and females. As such, gender describes the individual's personal traits, roles and behaviours. It is of course the underlying reason why females view themselves as weaker vessels (feminine in nature) while males equally feel much stronger and more influential (masculine or manly in nature). This variable may influence the development of social skills of primary school learners when collaborative instructional strategy is used.

However, results of existing empirical works on the interaction effect of instructional strategy and gender on pupils' achievement in primary school subjects had been no consensus among researchers. For instance, while [12], [13] and [14] in their independent investigations revealed that, instructional strategy and gender had no statistical significant interaction effect on male and female students' achievement and interest in school subjects, other scholars like [15] and [16] revealed in their respective studies that, there was significant interaction effect of instructional method and gender on students' academic achievement. The above observations indicate that, instructional strategy and gender can influence students' academic achievement. Meanwhile, there are no research evidence on the effect of gender

on primary school pupils' social skills development when using collaborative instructional strategy during classroom instruction in the study area. The gap in literature is what informed this study.

Therefore, the general purpose of this study is to investigate the effect of collaborative learning instructional strategy on primary school pupils' social skills development in Cross River State, Nigeria. Specifically, the present study addresses the following research questions.

Research Questions

- 1 What is the effect of collaborative learning instructional strategy on pupils' social skills development?
- 2 What is the influence of gender on pupils' social skills development?

Hypotheses

The following hypotheses are also tested at 0.05 level of significance.

- 1 There is no significant difference between the mean rating score of social skills development of pupils taught using collaborative learning instructional strategy and those taught using conventional lecture method.
- 2 There is no significant influence of gender on pupils' social skills development.
- 3 There is no significant interaction effect of instructional strategy and gender on pupils' social skills development.

2 METHODOLOGY

The study adopted a pretest-posttest quasi-experimental research design. The study was carried out in Gboko Local Government Area (LGA) of Benue State, Nigeria. The study population was 2,586 pupils which comprised all the primary five pupils in public primary schools in the LGA for the 2022/2023 academic year. Primary five pupils were chosen because they were at the age that collaborative instructional strategy can be applied during classroom instructions. The sample of the study was made up of 130 (57 male and 73 female) pupils, in four intact classes in two different primary schools whose pupils were not homogeneous in terms of social skill development. The use of intact classes was to avoid disruption of normal school activities in the schools involved in the study. The conditions for selecting a school were that the school were based on the following: (1) at least one teacher with a minimum qualification of Nigerian Certificate in Education (NCE) in Primary Education and three years of teaching experience, (2) that the school authority was willing to permit the involvement of the pupils, and the use of the school facilities for the study, and (3) that the teachers are willing to use collaborative instructional strategy during classroom instructions. Two streams of the intact classes were selected in each of the schools for the experiment. Two of the intact classes selected in one primary school were randomly assigned to the experimental group (62 pupils) while the other two intact classes in another primary school were assigned to the control group (68 pupils).

The instrument for data collection was a Social Skill Rating Scale (SSRS) developed by the researchers. The SSRS consisted of sections A and B. Section A elicited personal information of the pupils such as pupil's gender, class identification number, school code), while section B contained fifteen (15) items on pupils' social skill development. The ratings for each of the items ranged from 1- 4 depicting "very low" (1 point), "moderate" (2 points), "high" (3 points), and "very high" (4 points). Three experts, one each from Primary Education, Educational Psychology, and Measurement and Evaluation carried out the face validation of the instrument (SSRS) and the lesson plan prepared for lesson delivery using collaborative instructional strategy. The research instrument was trial tested on 20 primary five pupils in one of the public primary schools in Makurdi LGA which was not among those used for the actual study but met the criteria for the study. Cronbach Alpha method was used in estimating the reliability of the SSRS based on the scores generated from the trial test, and a reliability index of 0.87 was obtained. The reliability index obtained showed that the instrument was reliable for the study.

2.1 Procedure

Before commencement of the experiment, the researchers sought informed consent and permission of the authorities of the sampled schools, which was granted to the researchers. The regular classroom teachers for the selected intact classes of the two sampled schools were used as research assistants. The research assistants were adequately informed and well-orientated about the objectives of the study

and method of lesson presentation. They were also taught on how to rate the pupils using social skill rating scale for the purpose of data collection.

The experiment lasted for a duration of six weeks. In the first week, pre-test of SSRS was carried out in order to determine the level of pupils' social skill before the commencement of the experiment (the use of collaborative instructional strategy). The rating of the pupils' social skills development was done by the teachers in both experimental and control groups. Afterwards, the actual experiment lasted for four (4) weeks for both experimental and control groups. The experiment was conducted during the normal school periods following the schools' timetable for the four weeks of 35 minutes per lesson period daily. Two sets of lesson plans, with the same content, specific objectives, duration, and evaluation were developed for the two groups, except that the experimental group was taught using collaborative instructional strategy, while the control group was taught using the normal chalkboard teaching approach. At the sixth week, the same SSRS was also used to rate the pupils as post-test in order to determine the effect of collaborative instructional strategy on the pupils' social skills development. The rating of the pupils was also done by the same teachers. Data generated from the pretests and posttests were used for analysis. Data were analyzed using mean ratings and standard deviations to answer the research questions while the hypotheses were tested using analysis of covariance (ANCOVA) at 0.05 level of significance.

3 RESULTS

Research Question One: What is the effect of collaborative learning instructional strategy on pupils' social skills development?

Table 1: Mean and Standard deviation of pretest and posttest rating of the effect of collaborative learning instructional strategy on pupils' social skills development.

SN	Instructional Mode	N	Pretest		Posttest		Mean Gain
			\bar{X}	SD	\bar{X}	SD	
1	Collaborative Instructional Strategy	62	35.39	6.86	55.32	3.79	19.93
2	Conventional lecture Method	68	39.24	5.83	45.57	3.36	6.33

Table 1 shows that the experimental group taught using collaborative instructional strategy had a social skill development mean gain score of 19.93, while the control group taught using conventional method had a mean gain score of 6.33 on social skills development. This is an indication that collaborative instructional strategy had more effect on preschoolers' social skill development than the conventional lecture method.

Research Question Two: What is the influence of gender on pupils' social skills development?

Table 2: Mean and Standard deviation of pretest and posttest rating of the influence of gender on pupils' social skills development.

SN	Gender	N	Pretest		Posttest		Mean Gain
			\bar{X}	SD	\bar{X}	SD	
1	Male	57	36.12	6.66	49.35	6.06	13.23
2	Female	73	38.40	6.44	50.90	5.98	12.50

Table 2 shows that the male pupils had a social skill development mean gain score of 13.23, while the female pupils had a mean gain score of 12.50 on social skills development. This result shows that the male pupils developed more social skills during the experiment than their female counterparts.

3.1 Hypotheses testing

3.1.1 Hypothesis One

H0₁: There is no significant difference between the mean rating score of social skills development of pupils taught using collaborative learning instructional strategy and those taught using conventional lecture method.

Table 3: ANCOVA of the difference between the mean rating score of social skills development of pupils taught using collaborative learning instructional strategy and those taught using conventional lecture method.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Remark
Corrected Model	3200.945 ^a	4	800.236	65.914	0.00	0.678	
Intercept	7361.014	1	7361.014	606.309	0.00	0.829	
PretestSo	62.023	1	62.023	5.109	0.02	0.039	
Group	2922.482	1	2922.482	240.718	0.00	0.658	S
Gender	27.279	1	27.279	2.247	0.13	0.018	NS
Group * Gender	5.194	1	5.194	.428	0.51	0.003	NS
Error	1517.586	125	12.141				
Total	332625.000	130					
Corrected Total	4718.531	129					

Note: S = Significant, NS = Not Significant. $\alpha = 0.05$

Result in Table 3 shows the analysis of covariance of the significant difference between the mean rating score of social skills development of pupils taught using collaborative learning instructional strategy and those taught using conventional lecture method. Result shows that the p-value of 0.00 was obtained which is less than 0.05 set as level of significance for testing the hypothesis. This means that the result is significant, implying that hypothesis one is rejected. Inference drawn therefore is that the difference between the mean rating score of social skills development of pupils taught using collaborative learning instructional strategy and those taught using conventional lecture method is statistically significant. The result further showed the effect size (partial eta squared) of 0.658 which implies that 65.8 percent variation in pupils' social skill development is attributed to the treatment alone (i.e. collaborative instructional strategy).

3.1.2 Hypothesis Two

H0₂: There is no significant influence of gender on pupils' social skills development.

The finding of the study as presented in Table 3 also shows the influence of gender on pupils' social skill development. Result shows that an f-ratio of 2.247 was obtained with an associated probability value of 0.13. Since the probability value is greater than 0.05 set as level of significance, this means the result is not significant, implying that hypothesis two is not reject. Inference drawn is that gender has no statistically significant influence on pupils' social skills development. This also means that both male and female pupils were able to develop their social skills equally during the experiment.

3.1.3 Hypothesis Three

H0₃: There is no significant interaction effect of instructional strategy and gender on pupils' social skills development.

The result in Table 3 shows that an F-ratio of 0.428 and the associated probability value of 0.51 were obtained with respect to the significant interaction effect of instructional strategies and gender on pupils' social skills development. Since the associated probability value of 0.51 is greater than 0.05 set as level of significance, the null hypothesis is not rejected. Thus, the inference drawn is that the interaction effect of instructional strategy and gender on pupils' social skills development is not statistically significant. This result is further explained using an interaction graph below which shows that there was no significant interaction effect of instructional strategies and gender on pupils social skills development. This is evidenced in the graph as the lines representing instructional strategies and gender did not intercept at a point as shown in the graph below.

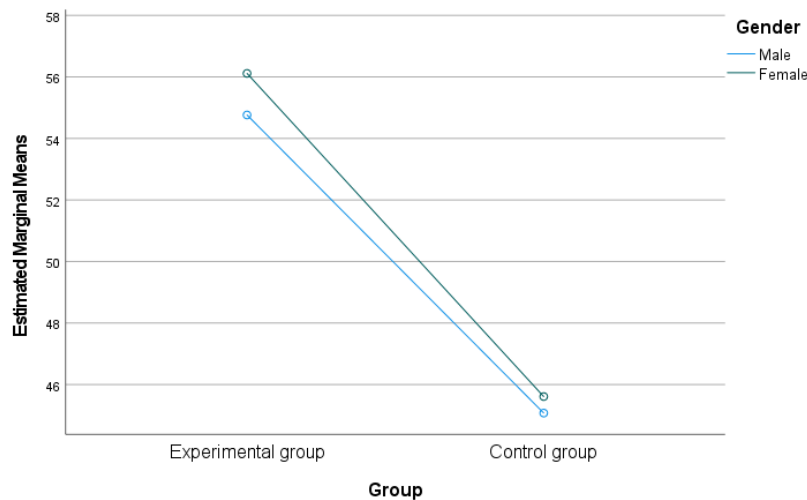


Fig 1: Graph showing the interaction effect of instructional strategy and gender on pupils' social skills development.

3.2 Discussion

Result from research question one which dwelt on the effect collaborative instructional strategy on social skills development of primary school pupils showed that collaborative instructional strategy had more effect on primary school pupils' social skill development more than the conventional lecture method. Result from the test of hypothesis one equally showed that there was a statistically significant difference between the mean rating score of social skills development of pupils taught using collaborative learning instructional strategy and those taught using conventional lecture method. This implies that collaborative learning instructional strategy is more effective in developing primary school pupils' social skills. This result is consistent with [4] who found among others that collaborative learning instructional strategy is effective in enhancing pupils' social skill development. This result is not surprising because in collaborative learning, learners interact freely and learn from each other instead of depending on the teachers' knowledge and explanations. This, no doubt sustains pupils' interest and develop their social skills during classroom instructions.

On the influence of gender on pupils' social skills development, result showed that there was no significant influence of gender on pupils' social development. This implies that gender is not a significant factor in determining primary school pupils' social development. This means that both male and female primary school pupils have the tendency to develop their social skills irrespective of the instructional strategy used during classroom instructions. This may be the reason why results on the interaction effect of instructional strategy and gender on pupils' social skills developed showed no interaction effect. The result of the study is consistent with [12], [13] and [14] who in their separate studies found that, instructional strategy and gender had no statistically significant interaction effect on male and female students' achievement and interest in school subjects. However, other scholars like [15] and [16] revealed in their respective studies that, there was significant interaction effect of instructional strategy and gender on students' academic achievement. The finding from the current therefore showed that gender is not a significant factor that can influence primary school pupils' social skills development.

4 CONCLUSIONS/ RECOMMENDATIONS

Based on the findings of the study, it is therefore concluded that collaborative learning instructional strategy is very effective in developing primary school pupils' social skills. It is also concluded that gender is not a significant factor in determining pupils' social skills development.

Based on the results of the study, it is therefore recommended that.

- 1 Workshops, seminars, and conferences should be organized for the training of primary school teachers on the use of collaborative learning instructional strategy in primary school classroom instruction.
- 2 Head teachers and school proprietors should supervise primary school teachers regularly to ensure that the use of learners' centered method of teaching is always used during classroom instruction, this will help to develop the social skills of pupils.

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