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EFFECT OF COOPERATIVE LEARNING ON SENIOR SECONDARY ONE STUDENTS' INTEREST AND PERFORMANCE IN READING COMPREHENSION IN FAGGE LOCAL GOVERNMENT AREA OF KANO STATE

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Abstract

This research work examined the Effect of Cooperative Learning on Senior Secondary One Students' Interest and performance in Reading Comprehension in Fagge Local Government Area of Kano State. Two research questions and two hypotheses guided the study, the study used quasi-experimental non-equivalent group design of pre-test and post-test of the experimental and control group. The study has a population of 2272 Senior Secondary One students. A sample of 120 students was drawn from the population for the study. The subjects were randomly assigned into three feedback groups. The data collected were analysed using descriptive statistics of frequencies

and percentages, mean and standard deviations to answer the research questions, ANCOVA test of alpha level of P≤ 0.05 was conducted to test the research hypotheses. The results of data analysis indicated the significant difference in the mean performance scores between the experimental and the control group. The experimental group outperformed the control group in each task. This indicated that there was a positive effect of cooperative on students' performance using cooperative teaching method than the form-based approach. The students exposed to STPD cooperative learning method had higher than performance gains that those exposed to form-based approach, this implied that STPD had a significant effect on students' performance in reading comprehension. The students exposed to Think-Pair-Share cooperative learning method had higher mean performance gains that those exposed to the form-based approach in performance in reading comprehension. Therefore, it was recommended among other things, teachers should use to STPD and Think-Pair-Share cooperative learning methods to teach reading comprehension as this will enhance students' performance in reading comprehension through active participation on the learning process.

Introduction

Reading is an indispensable skill for formal education as the education as the central goal of formal education is to make people literate and reading is considered the pivot of literacy (Onukaogu & Moh, 2008). Without reading, there is no formal education. Unfortunately, a reading culture is poorer and poor interest lower in Nigeria and this affects students. A study carried out by Henry (2004) as cited in Aina, Ogungbeni & Adigun (2011) shows that an average Nigerian reads less than one book per year and that about 30 million Nigerians have graduated from schools with poor reading skills. Muodumogu (2012) also asserts that an alarmingly high percentage of learners in public schools in Nigeria are unable to read and those who do are unable to use reading as a tool for learning. This calls for an urgent attention.

Many experts have tried to define the term reading. Goodman (2009) defines reading as a psycholinguistic process involving the interaction of language and thought, the interpretation of language and making of meaning. Fong (2008) defines reading as a complex process that requires mental capacity, perception and an individual's previous experience. The two definitions emphasize the role of a reader as an active, not a passive participant in reading.

People have differing motives for reading which includes: to gain more knowledge, to obtain information, to satisfy one's curiosity, for pleasure and to pass examination. No matter what motivates a person to read, the central goal of reading is to make sense of a written text and this is referred to as comprehension. Kimberly (2015) defines comprehension as an interactive process which occurs largely within a socio-cultural context and is shaped by the reader's background

knowledge and experience, purpose for reading, information available in the text and the context in which the reading occurs. The author further asserts that comprehension is the heart and soul of reading.

Students who can read will most likely perform better in school than those who cannot read. Muodumogu and Ajegena (2011) explain that for excellence to be achieved in academics, learners need to be good readers who can read and comprehend texts in their various disciplines. It is nearly impossible for learners who cannot read to summarize their notes, write class assignments, extract meaning from recommended textbooks and write examinations. The better reader a learner is, the more learning he/she acquires.

Since reading plays a central role in education, all students need to know how to read and also have interest in reading. The reverse is however the case in Nigeria. Research has shown that many Nigerian students do not have much interest in reading thus they prefer more pleasurable activities like watching television and playing video games to reading (Adhuze, 2008; Baja, 2003). This affects their achievement in school. Lack of interest in reading portends danger to Nigeria because a nation of illiterates will remain uniformed.

Teachers must find ways to increase and sustain students' interest in reading. Hidi (2013) defines interest as a relatively long-lasting predisposition to reengage with particular objects and events. If students are interested in reading, it will be easier for teachers to teach them any subject area. If the reverse is the case, teachers may find it very hard to teach. However, Fisk (2013) explains that unless you spark students' interest in reading, they will continue to avoid it and opt for other more pleasant activities.

A teacher can help to increase students' interest in reading by administering an Interest in Reading Inventory (IRI) on them. IRI is used to ascertain the disposition of students towards reading, that is, whether they like to read or not. Knowing the extent to which students are interested in reading can give the teacher direction on where to begin the reading lessons. It will also help the teacher to plan the reading lessons in a way that the individual needs of students can be addressed.

Comprehension makes reading meaningful, interesting and worthwhile. Adequate knowledge of vocabulary used in the text. If the individual words do not make sense to the reader, text comprehension will be impossible.

Comprehension occurs at three levels; literal, inferential and critical (Lasisi, 2003). Literal level involves understanding what is stated explicitly. Inferential and critical levels require the readers to think deeper, using their background knowledge. Students are considered efficient readers if they are able to read critically. However, Brummit-Yale (2008) explains that because reading

comprehension is incredibly complex and multifaceted, readers do not develop the ability to comprehend texts quickly and independently.

The complex nature of reading comprehension is an indication that students need to be taught how to read. Muodumogu (2012) argues that the general assumption that reading is 'caught' and not taught, and that children learn to read in the course of schooling must be avoided. Teachers need to teach reading as a separate subject. Due to the multifaceted nature of reading comprehension, teachers require effective teaching strategies if they are to succeed in teaching it. Muodumogu (2005) suggests that teachers should consider what will make the reading lesson as interactive as possible because reading is an active process.

Although learner-centred teaching methods are preferable in today's classrooms, the traditional teaching method which is teacher-centred has persisted in most Nigerian schools. The traditional method refers to a teaching strategy which involves an oral presentation of lessons by the teacher (Paris, 2014). As many Nigerian classrooms are arranged to portray 'the talking teacher and the listening learners', the arrangement gives the teacher opportunity to 'dish out' knowledge to the 'ignorant' students. The traditional lecture/teaching method is considered a teacher-controlled method of teaching because the teacher alone dictates the direction of the lesson, what kind of information is delivered and how it is delivered.

The traditional method of teaching makes students passive. It also gives them little or no opportunity to make their personal inputs. Even if a student does not agree with the teachers' point of view, he/she may not be able to voice it out, especially if the student is shy or afraid of the teacher. Students' lack of active participation can lead to boredom, loss of interest, inability to think critically and these could hinder comprehension (Paris, 2014). Reading lessons require a teaching strategy which will make learners as active as possible.

Cooperative learning has been considered by many as an effective teaching method and an alternative to the traditional teaching method. Cooperative Learning (CL) refers to a teaching strategy in which small teams, each with students of different levels of ability use a variety of learning activities to improve their understanding of a subject (Rahvard, 2010). It is considered a practical, dynamic and an effective method of teaching. CL has five essential elements: positive interdependence, face to face interaction, individual accountability, collaborative skills and group processing (Johnson, Johnson & Holubec, 1994). Through group discussion and sharing, learners become actively involved in the lesson. Active involvement helps to sustain learners' interest. According to Slavin and Cooper (1999), the intent of cooperative learning groups is to enhance the achievement of students by providing them with increased opportunity for discussion, learning from each other and for encouraging each other to excel.

Cooperative learning has many strategies which have been developed over time. Tzu-Pu (2009) lists the following strategies: Student Teams-Achievement Division (STAD), Think-Pair-Share, Jigsaw II and Numbered Heads. Each of these strategies has been used to teach different subject areas, students of different levels of education, gender and age groups. According to Rahvard (2010), cooperative learning strategies promote students' learning and academic performance, increase students' retention, enhance their satisfaction with their learning experience and help them develop oral communication and social skills.

Student Teams-Performance Division (STPD) is a CL strategy developed by Robert Slavin and his colleagues. STPD has five components: class presentation, team study, test, individual improvement scores and team recognition (Slavin, 1999). Students are assigned to 4 or 5-member learning teams. Each team represents a cross-section of the class in terms of academic performance, sex and race or ethnicity (Utami, 2010). The teacher presents a lesson and then poses some questions. Students work within their respective teams to help team members understand the lesson and then respond to the questions. Students also take individual tests. Through their test scores, students earn points for their teams on the basis of the degree to which they meet or exceed their earlier individual performances. The team with the highest individual improvement scores receives recognition. Team recognition is a form of reinforcement which can challenge students to make greater efforts to learn.

In teaching reading comprehension using STPD strategy, Utami (2010) explains that the teacher will first read the text aloud to the students. The students in turn work in their respective groups. This is followed by the other components of STAD. Student Teams-Achievement Division is considered as one of the simplest forms of cooperative learning strategies and an effective model to begin with for teachers who are new to cooperative learning (Utami, 2010). Studies have suggested that STAD leads to improved academic performance, higher-order thinking skills, communication and social skills (Adolph & Prieto, 2011).

Think-Pair-Share is another type of cooperative learning strategy. Rahvard (2010) describes Think-Pair-Share as a cooperative learning strategy which gets its name from the three stages of student action, with emphasis on what they are expected to do at each stage. The teacher provokes students to 'think' by asking them a question. Students reflect on the question for few minutes and then 'pair' with one or more students to share and discuss their individual answers and then select the answer they consider most appropriate. The teacher calls a student from each pair to share their answers with the rest of the class.

Think-Pair-Share gives students time to reflect so that they make individual efforts to learn. Sharing and discussion helps to deepen students' understanding. Afan, Marhaeni and Dantes (2013) consider Think-Pair-Share as a smart teaching technique for promoting critical thinking

and articulating communication in the classroom. Using this strategy to teach reading comprehension could help students to deepen their understanding of what they read as well as to sustain their interest.

Since gender is a sensitive issue in the society, it should be taken into consideration in the reading classroom. Gender refers to socially constructed roles and socially learned behaviours and expectations associated with males and females (Nwagbara, 2011). As a social category, gender is related to literacy, interest and academic achievement. Muodumogu & Ajegena (2011) attribute students' performance in reading to sex difference.

Since reading comprehension is important to every student, the teacher should promote gender equality in the classroom. That is so say, all learners should receive equal treatment and attention, should have equal opportunities to learn, and should be exposed to teaching methods that are free of stereotypes and gender bias (Popoola, 2011). Think-Pair-Share and STAD have been used to teach students of both sexes. The two strategies equally emphasis the need for mixed grouping of students (heterogenous teams). Gender, therefore is an important variable that should be considered when forming the learning teams.

Given that reading comprehension has continued to pose a problem to many students, reading lessons can no longer be taken for granted. The traditional method of teaching has not been effective in the teaching of reading. Teachers need to find alternative teaching methods that will make students more active and help to sustain their interest. Earlier studies have shown that students who are exposed to cooperative tasks may develop greater comprehension and that the method could be used to sustain their interest in learning (Adb-Rahim, Jusoff, & Roslan, 2011). STAD and Think-Pair-Share cooperative learning strategies have been used to teach different subject areas. This research therefore, intends to investigate the effect of cooperative learning on students' interest and achievement in reading comprehension.

Over the years, Nigerian secondary school students have been performing poorly in their external examinations like the Senior School Certificate Examination (SSCE). Sometimes, students are not able to read the instructions that guide the examination questions. The WAEC Chief Examiner's report of 2019 on English Language shows that students' overall performance was worse than the previous years. Students' failures are often ascribed to spelling errors, poor understanding of the demands of the questions, inability to understand questions that demand high level of thinking, as well as giving shallow answers due to poor command of English (Dike, 2007). These factors, when carefully examined are all related to students' lack of comprehension at the critical level. Given the centrality of reading to everything that goes on in the school, inability to students to read is a serious problem that deserves urgent attention.

The inability of students to read effectively is often traced to the way reading comprehension lessons are handled in schools. Reading comprehension is in fact, taken for granted and teachers who care to teach it lack the proper teaching strategy that will produce the desired effects on students. The traditional teaching method (which most teachers are fond of using) have not been effective as indicated by Muodumogu (2012), who noted that this strategy de-emphasizes the concept of reading as an interactive, purposeful and constructive process of meaning making. Because of the defect in this strategy, students do not benefit much from the reading comprehension lessons.

If teachers are to help students become critical and creative readers who love to read, they must change their teaching strategy. Cooperative learning is becoming very popular among educators as an alternative to the traditional method of teaching. Studies such as Rahvard (2010) and Dotson (2001) have shown that many cooperative learning strategies have been successfully used to teach different kinds of school subjects. It is based on this that this research intends to investigate if using two cooperative learning strategies (Student Teams-Achievement Divison and Think-Pair-Share strategies) would increase students' interest and achievement in reading comprehension.

The following research questions guided the study:

1. What effect will Student Teams-Performance Division cooperative learning strategy have on students' interest in reading comprehension?

2. How would Think-Pair-Share cooperative learning strategy affect students' interest in reading comprehension?

The following hypotheses were tested at 0.05 level of significance in the study:

1. There is no significant difference in the mean interest scores of students exposed to Student Teams-Performance Division strategy and the form-based approach in developing interest in reading.

2. There is no significant difference in the mean interest scores of students exposed to Think-Pair-Share strategy and the form-based approach in developing interest in reading.

Method

The study employed a non-randomized control group, pretest-posttest quasi-experimental design. Intact classes were used in order not to disrupt the normal classroom schedules. Experimental and control conditions were randomly assigned to the classes. There were two experimental groups, one for Student Teams-Achievement Division and one for Think-Pair-Share and one control group.

The study was carried out in Fagge Local Government Area of Kano State. The target population for this study comprised of all the Senior Secondary II students in all the 30 Secondary Schools in Fagge Local Government with a total population of 2,272. Purposive sampling technique was used to select 3 out of the 30 secondary schools in Fagge Local Government Areas of Kano State. Hat and draw method was used to select one class in each school. Each of the selected schools was mixed school and government approved. The total number of students in each selected class was not less than 20 and the numbers of male versus female students were relatively proportionate. There were 24 students in the experimental group I (STPD), 24 students in the experimental group II (Think-Pair-Share) and 30 students in the Control Group (CG) respectively.

The Reading Comprehension Performance Test (RCPT) was adopted and 30-item test developed by the researcher to test the reading comprehension achievement of students. It contained 2 sections 'A' and 'B'. Section 'A' contained the bio data of students. Section 'B' contained two reading comprehension passages adapted from the New Oxford Secondary English Course for Senior Secondary Schools Book One. The titles of the reading comprehension passages were removed and some words were changed. (The SS1 classes in the selected schools do not use the New Oxford Secondary English Course as their recommended textbook).

The instruments were pilot tested in one co-educational secondary school. The Reading Comprehension Performance Test (RCPT) and Interest in Reading Inventory (IRI) were administered on 52 SS1 students (27 males and 25 females). The purpose of the pilot study was to ascertain the reliability of the research instruments.

The reliability of the RCAT was calculated using Pearson Product correlation coefficient. This yielded a reliability coefficient of 0.784. The IRI was also calculated using Cronbach Alpha which yielded a reliability of 0.981. The values showed that the instruments had high internal consistency because the closer Cronbach's Alpha coefficient is to 1.0, the greater the internal consistency of the items in the scale (Gliem & Gliem, 2003). All the research questions were answered using mean and standard deviation. The hypotheses were tested at 0.05 levels of significance using Analysis of Covariance (ANCOVA). ANCOVA was used because it removes the bias or likelihood that the intact groups are not homogenous (Emaikwu, 2019).

Analysis and Interpretation

Research Question 1

What effect would Student Teams-Performance Division cooperative learning strategy have on students' interest in reading comprehension?

Table 1: Mean and standard deviation of interest in reading comprehension of students exposed to Student Teams-Performance Division cooperative learning strategy and those taught using the form-based approach.

Group	N	Pre-Test		Post-Test		Mean gain
		- x	δ	- x	Δ	
EG1 (STPD)	24	20.91	7.26	39.61	5.47	18.7
Control group	30	17.92	5.56	33.69	6.68	15.77
Mean difference				5.92		

Table 1 indicates the mean interest score of experimental group at pre-test as 20.91 with a standard deviation of 7.26, while that of control group was 17.92 with a standard deviation of 5.56. The mean interest score of the experimental group at post-test was 39.61 and a standard deviation of 5.47. On the contrary, students in the control group had the mean of 33.69 and a standard deviation of 6.68 after treatment. The mean gain of the experimental and control groups are 18.7 and 15.77 respectively. The mean difference of the two groups was 5.92 in favour of the experimental group. The implication of this result is that Student Teams-Performance Division strategy has significant effect on students' interest in reading comprehension.

Research Question 2

How would Think-Pair-Share cooperative learning strategy affect students' interest in reading comprehension?

Table 2: Mean and standard deviation of interest in reading comprehension of students exposed to Think-Pair-Share cooperative learning strategy and those taught using the form-based approach.

Group	N	Pre-Test		Post-Test		Mean gain
		- x	δ	- x	δ	
EG2 (Think-Pair-Share)	24	2.18	.44	7.30	3.25	5.12
Control group	30	2.27	0.40	5.17	2.12	2.9
Mean difference				2.13		

Table 2 shows that the mean interest scores of students in the experimental and control groups at pre-test were 2.18 and 2.27 with standard deviations of 0.44 and 0.40 respectively. The mean interest scores of the experimental and control groups after treatment were 7.30 and 5.17 with corresponding standard deviations of 3.25 and 2.12 respectively. The mean gain of the students taught reading comprehension using Think-Pair-Share cooperative learning strategy is 5.12. On the contrary, the mean gain of the students taught reading comprehension using the form-based approach was 2.9. The mean difference between the groups was 2.13 in favour of the experimental group. This shows that Think-Pair-Share strategy has significant effect on students' interest in reading comprehension.

Hypothesis 1

There is no significant in the mean interest scores of students exposed to Student Teams-Performance Division and those taught using the form-based approach.

Table 1: ANCOVA of mean interest scores of student exposed to Student Teams-Performance Division and those exposed to the form-based approach.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	247.144[a]	2	123.572	16.340	.000
Intercept	310.860	1	310.860	41.105	.000
Pre-STPD Interest	99.736	1	99.736	13.188	.001
Group	103.935	1	103.935	13.743	.001
Error	385.689	51	7.563		
Total	9681.000	54			
Corrected Total	632.833	53			

a. R Squared = .391 (Adjusted R Squared = .367)

Table 1 reveals that $F_{(1, 51)} = 13.743$, P=0.001. Since P value (.001) is less than the alpha level (0.05), the null hypothesis is not accepted. This means that Student Teams-Performance Division cooperative learning strategy has significant effect on students' interest in reading comprehension.

Hypothesis 2

There is no significant difference in the mean interest scores of students exposed to Think-Pair-Share strategy and those taught using the traditional teaching strategy.

Table 2: ANCOVA of interest in reading of students exposed to Think-Pair-Share cooperative learning strategy and those taught using the form-based approach.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	9.369[a]	2	4.685	64.600	.000
Intercept	.069	1	.069	.951	.334
Pre-TPS Interest	7.344	1	7.344	101.269	.000
Group	1.307	1	1.307	18.018	.000
Error	3.698	51	.073		
Total	351.542	54			
Corrected Total	13.068	53			

1. R Squared = .717 (Adjusted R Squared = .706)

Table 2 reveals that F (1, 51) = 18.018; P=.000. Since p-value (.000) is less than the alpha level (0.05), the null hypothesis that there is no significant difference in the mean interest scores of students exposed to Think-Pair-Share strategy and those taught using the form-based approach is not accepted. The implication of this result is that Think-Pair-Share cooperative learning strategy has significant effect on students' interest in reading.

Discussion of Findings

The study examined the effect of cooperative learning on students' interest and achievement in reading comprehension. It also examined gender as it relates to students' achievement in reading comprehension. The discussion of findings is based on the variables of the study which were guided by research questions and hypotheses.

Effect of Student Teams-Performance Division (STPD) and Think-Pair-Share Cooperative Learning Strategies on Students' Achievement in Reading Comprehension

The finding of this study reveals that cooperative learning (CL) has significant effect on students' achievement in reading comprehension. Table 1 and 2 show that the Experimental Groups 1 and 2 who were exposed to the STPD and Think-Pair-Share CL strategies respectively scored higher than those in the control group (CG) who were exposed to the form-based approach in the Reading Comprehension Performance Test (RCPT). This means that the two CL strategies, STPD and Think-Pair-Share were more beneficial to students in their reading comprehension. This finding agrees with a research carried out by Wichadee (2005) which showed that students taught with STPD strategy obtained higher reading comprehension scores. Similarly, Robertson (2006) found that exposing students to Think-Pair-Share leads to increased understanding and deeper insight. When students discuss what they read, they could have better insights than when they read alone.

The result of this research supports the earlier study by Bilesanmi-Awoderu and Oludipe (2012) who reported that cooperative learning strategies were more effective in enhancing students' academic performance than the form-based approach. The finding is also in line with the views of several other researchers like Dotson (2001), Ferrer (2004), Martins-Umeh (2009), Jallilifar (2008) and Zarei (2012) which explain that cooperative learning could improve students' achievement. The finding of this study is also a confirmation of Slavin's (2010) assertion that cooperative learning is an alternative to the traditional teaching strategy. There is an indication that students in the Experimental Group 1 and 2 understood the reading comprehension passages better as reflected in their higher mean gains.

The result of this study supports the views of Utami (2001) that STAD is one of the simplest CL strategies which can be effectively used by teachers who are new to cooperative learning. Think-Pair-Share is also very simple to us. The higher mean achievement scores recorded by students exposed to both STAD and Think-Pair-Share in spite of the fact the research assistants had not used the strategies previously gives credence to the above assertions.

The findings of this study is also in line with an earlier research carried out by Ofodu and Lawal (2011) which showed that Think-Pair-Share is an effective teaching strategy which can be beneficial to all categories of learners (high, medium and low achievers). The same effect can be said of STAD. In both STAD and Think-Pair-Share, learning teams are formed using mixed ability as the major variable. This allows for those who are high achievers to help the medium and low achievers to improve in their learning. However, personal effort of each student remains vital in the learning process.

The result of this study is also in tandem with Ugwu (2016) and Ochogwu (2012) whose in their studies indicated that teaching reading comprehension with interactive methods like Directed Reading and Thinking Activities (DRTA) and Know-Want-to Know-Learn (KWL) improve learners' achievement more than using the traditional strategy of teaching. One important aspect

of Think-Pair-Share and STAD is that they make classroom interaction among students possible. In the view of Muodumogu (2005), for reading instruction to be effective, the classroom procedures should be purposeful and task-based. The guided questions and peer interaction that take place in Think-Pair-Share and STAD classrooms help students to give a purpose for reading and also keep them active. These activities enhance comprehension.

It is interesting to note that all the students in the Control Group and the Experimental Groups 1 and 2 actually improved in their mean achievement scores after being taught reading comprehension. Their improvements were irrespective of the strategies used. This shows that it is very important for teachers to teach reading comprehension. This agrees with the views of Muodumogu (2012) that teachers should do away with the assumption that reading is 'caught' and not taught, and that children learn to read in the course of schooling. If these students were not taught, they may not have improved in their mean achievement scores.

Findings in this study are also in line with the assertion of Muodumogu (2005) that students' inability to read is not due to lack of innate intelligence but because they are not taught to be strategic in their reading. The positive effect of STAD and Think-Pair-Share in improving comprehension as shown by this study is an indication that the strategy can help learners become strategic readers. Students in cooperative learning groups are able to boost their intrinsic motivation through the personal efforts they make to understand what they read, share their insights and even difficulties. Through these, they could become more strategic in their reading.

Effect of Student Teams-Achievement Division and Think-Pair-Share Cooperative Learning Strategies on Students' Interest in Reading Comprehension

This study revealed that both Student Teams-Achievement Division and Think-Pair-Share cooperative learning strategies have significantly effects on students' interest in reading comprehension. It is evident from the result of this study that students exposed to STAD and Think-Pair-Share developed higher interest in reading comprehension. This finding supports Korb's (2011) view that if students work cooperatively and engage in group discussion, they will be deeply involved in the lesson and that their interest could be sustained. Similarly, Elliott, Kratochwill, Cook and Travers (2000) explain that in order to sustain students' interest, teachers should allow them to participate in meaningful projects with connections to the world outside of the classroom. The different stages of STAD and Think-Pair-Share pave the way for students to be actively involved during the learning process. As they give and receive peer feedbacks, record their insights and report to the entire class, students are able to increase and sustain their interest during lessons.

The result of this study confirms an earlier work by Erschabek (2010) who discovered that students who read collaboratively through participation in a book club had higher interest in reading than

those who engaged in private reading. Participating in book club gave students opportunities to engage in group discussion. Group discussion is an essential aspect of both STAD and Think-Pair-Share strategies because students are obliged to pair and then share with their peers. The positive effect of exposing students to CL strategies as shown by this study and participation in a book club as shown by Erschabek's (2010) study is an indication that the more students talk about what they read, the more they would want to read. This could be because talking about what they read gives room for questions, answers, more inputs and clarifications by team members as well as the teacher.

This study also supports the view of Onukaogu (2003) that connecting reading lessons with students' experiences outside of the classroom would help to sustain their interest. STAD and Think-Pair-Share enable students to be in charge of their learning by building on their previous experiences. Collaborative tasks enable students to discover the relationship between what they read and what they already know. Shy students who ordinarily would not want to share their insight with the entire class could find their small learning teams as friendly environment and fertile ground to come out from their shells. This is because cooperative learning thrives on individual accountability, an element of CL that mandates each team member to contribute to the group success.

The findings of this study is an answer to the concern raised by Issa, Aliyu, Akangbe and Adedeji (2012) who investigated the reading interest and habits of male and female students. The researchers discovered that although developing interest in reading is a necessity for attaining academic success, a great majority of students do not enjoy reading and in fact, have very low interest in reading. They concluded that teachers must find ways to increase students' interest in reading. The positive effects of STAD and Think-Pair-Share CL strategies as shown in this study indicate that if teachers adopt these strategies in their classrooms, it could boost students' interest in reading.

There is also a positive connection between the findings of this study and the views of Elliott, Kratochwill, Cook and Travers (2000) that in order to improve students' interest in learning, teachers should allow them to evaluate their own work. Similarly, Osokoya (2011) explains that giving of immediate feedback helps to sustain students' interest. Think-Pair-Share and STAD strategies enable students to give and receive peer and teacher evaluation as well as immediate feedbacks. When students receive positive feedback, they are able to see the progress they are making and also what they are not doing well. It is therefore, not surprising that students who were exposed to the two CL strategies in this study recorded higher mean interest score than those who were exposed to the traditional teaching strategy.

Since reading comprehension is a challenge to many students, it is important that teachers assist them to develop more interest in it by using effective teaching strategies like STAD and Think-Pair-Share.

Effect of Student Teams-Achievement Division and Think-Pair-Share Cooperative Learning Strategies on Male and Female Students' Achievement in Reading Comprehension

The result of this study showed that gender has no significant effect on students' achievement in reading comprehension. Table 5 and 6 reveal that both male and female students who were taught reading comprehension using the STAD and Think-Pair-Share strategies improved in their mean achievement scores. The two Tables also show that while male students who were exposed to reading comprehension using STAD scored higher that the female students (Table 5), female students who were exposed to Think-Pair-Share scored higher than the male students (Table 6). However, ANCOVA analysis of these two results (Tables 11 & 12) revealed that the differences are not statistically significant. This indicates that both STAD and Think-Pair-Share CL strategies are effective in improving students' achievement in reading comprehension irrespective of their gender.

The finding of this study is in agreement with an earlier work by Amosun and Isokpehi (2009) who discovered that male and female students taught with cooperative learning strategies performed better than those taught with the traditional teaching strategy. When the results of male and female students were compared, the positive effect of the strategy did not differ across gender. The result of this study is also in consonance with the work of Ochogwu (2012) which revealed that although interactive learning leads to higher achievement, it has no significant effect across gender.

Similarly, the results of this study agree with that of Peklaj (2003) who investigated students' achievement in cooperative learning based on their gender, abilities and cognitive style. Just as in the present study, Peklaj's (2003) study showed that although boys who were exposed to the cooperative learning strategy scored higher than their female counterparts, the different was not statistically significant. This also means that both STAD and Think-Pair-Share strategies can be effective in teaching both genders.

However, the result of this study gives no indication that more women read more books than men as claimed by Jude, Etudor-Eyo and Afangideh (2011). Again, this study seems to negate the position held by Nippold (2005) that girls are generally more likely to engage in reading than boys. Since both boys and girls who were exposed to the STAD and Think-Pair-Share strategies improved in their mean achievement scores, there is rather an indication that both would engage meaningfully in reading comprehension if they are properly guided.

On the other hand, the findings of this study are contrary to the views of Muodumogu and Ajegena (2011) who discovered that students' performance in reading is due to sex differences. Similarly, the result of this study contradicts the assertion of Chen (2007) that many times, boys avoid reading because it is considered a feminine hobby. The findings rather indicate that if students are exposed to reading comprehension using cooperative learning strategies like STAD and Think-Pair-Share, they would benefit from the lessons irrespective of their gender differences.

The positive effect of the two cooperative learning strategies used in this study gives credence to the assertion of Popoola (2011) and Santrock (2011) that teachers should try to promote gender equality in the classroom so as to enhance students' achievement. By using Think-Pair-Share and STAD, all the students had equal opportunity to learn and received equal treatment and attention. Students were paired across gender, thus removing bias and stereotyping in the classroom. Since some scholars like Muodumogu & Ajegena (2011) and Chen (2007) identified gender as a determinant to achievement in reading, it can be said at Think-Pair-share and STAD could be a solution to their identified problem since their positive effect across gender has been established by this study.

The findings from this study equally uphold Dotson's (2001) research which asserts among the numerous studies carried out on the effectiveness of cooperative learning, results of most of them show that the strategy could improve academic achievement of students of all grades and genders. Think-Pair-Share and STPD have therefore, shown to be among the effective cooperative learning strategies. It is therefore, imperative for teachers to use Think-Pair-Share and STAD in teaching reading comprehension so as to help learners become more effective readers and to boost their interest in reading.

Conclusion

This study has revealed that cooperative learning is effective in increasing the academic achievement of students. Since all the students who were exposed to STPD and Think-Pair-Share CL strategies improved in their mean achievement scores, it implies that using the two strategies to teach reading comprehension will help students to better comprehend what they read. When students are engaged in cooperative learning activities, they are able to make personal inputs and also listen to the inputs of their peers. In doing this, they are able to think critically and arrive at a deeper level of comprehension.

This study has also shown that using cooperative learning to teach helps to boost and sustain students' interest in reading. This means that teachers should encourage students to engage in cooperative activities during lessons as this would help to make them develop more interest in reading. One salient feature of STPD and Think-Pair-Share is that they are activity based. Activity-based learning helps to remove boredom in the classroom. When students are active, it is easier to

sustain their interest because they are carried along in the teaching-learning activities. It is therefore important for teachers to help students utilize the different benefits inherent in cooperative learning so as to make students like to read and read with enthusiasm.

It is evident from this study that STPD and Think-Pair-Share cooperative learning strategies are beneficial to all students irrespective of their gender. The positive effect of the two strategies on students' interest and achievement as shown by this study implies that cooperative learning is a better alternative to the traditional teaching strategy. Teachers who find it difficult to teach reading comprehension and those looking for ways to either revive for sustain students' interest in reading comprehension will find cooperative learning strategies useful and effective. This study has also shown that when students support one another to learn through cooperative activities, their Zone of Proximal Development are likely to improve.

Recommendations

Based on the findings of this study, the following recommendations are made:

i. Parents and teachers should encourage students to discuss what they read with their peers and siblings.

ii. Students who show great interest in reading should be given positive reinforcement so as to motivate them and also entice other students to read. For example, students who read more books within a term could be given prizes at the end of the term or academic year.

iii. Teachers should use STPD and Think-Pair-Share cooperative learning strategies to teach reading comprehension as this will make students active and help to sustain their interest.

iv. Teachers should emphasise more on collaborative instead of individualized or competitive learning strategies. This will make students to utilize their potentials and to support one another to learn.

v. Reading clubs and drama groups should be established in schools. Teachers should encourage students to use these avenues to discuss what they read and also dramatize them. These will help students to discover the social aspects of reading, the relationship between reading and real life experiences and equally make reading interesting and fun.

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