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Using Collaborative Strategic Reading (CSR) to Enhance Achievement in Reading Comprehension of Students with Learning Disabilities in Lagos State, Nigeria

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Abstract

This study determined the effect of Collaborative Strategic Reading (CSR) on enhancing the achievement in reading comprehension of students with learning disabilities in Lagos State, Nigeria. The pre-test, post-test, control group, quasi-experimental research design with a 2x2 factorial matrix was adopted for this study. Fifty junior secondary class 2 students with learning disabilities in reading were randomly selected from the sampled schools and randomized into two groups (Collaborative Strategic Reading and control group). Two instruments were utilized namely, Pupil Rating Scale and Reading Comprehension Test. Participants in the experimental group were exposed to eight weeks training, while students in the control group were taught in the conventional way. Two hypotheses were tested at 0.05 level of significance. Data were analysed using analysis of variance and computation of t-test statistics. There was a significant main effect of treatment (Collaborative Strategic Reading) on the reading comprehension of students with learning disabilities ($F_{(1,47)} = 34.954$; $P < 0.05$). This implies that students exposed to Collaborative Strategic Reading performed better in reading comprehension than those exposed to Control Group. In addition, female participants performed better in the reading comprehension achievement test than their male counterparts ($\bar{X} = 21.69$ for females and 15.75 for males). On the basis of these findings it was recommended that for schools to sustain improved achievement in reading comprehension among students with learning disabilities, Collaborative Strategic Reading should be adopted.

Key Words: Learning disabilities, reading comprehension, Collaborative Strategic Reading (CSR), achievement

Introduction

Students with learning disabilities appear uninterested in some academic and social school activities and become overwhelmed with the demands laid on them by the nature of secondary school academic programme. Many of them actually struggle to meet grade-level expectations as a result of their under-developed language, literacy, mathematics, social skills, and executive functioning skills. More so, some of them suffer general underachievement

as a result of deficits in cognitive and meta-cognitive skills. They are ignorant of how to process information effectively and use strategies to read and study. Often these students are unable to meet the demands of required subjects in the content areas in senior secondary school and their resulting failure leads to discouragement and disengagement in school (McNamara, 2007). Buttressing this, the National Joint Committee for Learning Disabilities (NJCLD) (2008) identified ten areas of the increased academic demands of junior and senior secondary school students with learning disabilities. Some of these areas are:

- steadily increasing the amount of information;
- the need for comprehension of complex linguistic forms and abstract concepts;
- high stakes testing and graduation requirements;
- greater demand for working memory for on-the-spot problem-solving;
- increased reliance on print (including a shift from narrative texts to emphasis on informational content/expository text structures and domain-specific vocabulary); and
- Increased demands for digital (versus traditional) literacy proficiency;

These activities are associated with an individual's ability to read efficiently. Basically, no effective reading can be achieved without comprehension because in the opinion of Durkin (1993), comprehension is the "essence of reading". It can, therefore, be deduced that there is a close relationship between success at school and utilization of effective comprehension strategies by all students especially, students with learning disabilities. To elucidate this point, Pressley (2000) submitted that research evidence proves that students can be taught reading comprehension strategies and students who learn these strategies exhibit increased motivation and reading achievement (Rosenshine & Meister, 1994; Rosenshine, Meister & Chapman, 1996; Ziyaeemehr, 2012).

Therefore, teachers of students with learning disabilities should provide instruction, modelling, and practice of strategies to enable the students to learn to use these tools independently of the teacher and truly own them (National Reading Panel, 2000).

Literature Review

Three areas of literature are particularly relevant to this study. These are (i) Description of Collaborative Strategic Reading (CSR), (ii) Collaborative Strategic Reading (CSR) Steps and (iii) Researches on Collaborative Strategic Reading (CSR) and gender differences in reading comprehension. Each is briefly reviewed.

Description of CSR

Collaborative Strategic Reading (CSR) is an instructional strategy designed to help students with culturally and linguistically diverse abilities and students with learning disabilities and other disabilities acquire and practice comprehension strategies for use with informational text (Klingner & Vaughn, 1996). CSR was adapted from reciprocal teaching, an instructional activity that involves a dialogue between teacher and students. In reciprocal teaching, the teacher and students take turns assuming an instructional role in leading the dialogue (Palincsar, 1986).

During CSR lessons, students of mixed achievement levels apply comprehension strategies while reading content area text in small cooperative groups. Initially, the teacher presents the strategies (preview, click and clunk, get the gist, and wrap up) to the whole class using modelling, role playing, and teacher think-alouds. After students have developed proficiency applying the strategies through teacher-facilitated activities, they are then divided into heterogeneous groups where each student performs a defined role (such as Leader, Clunk Expert, Gist Expert, and Question Expert) as students collaboratively implement the strategies (Klingner, 2010).

Collaborative Strategic Reading (CSR) Steps

(a) **Preview:** Before reading, the teacher guides students in activating background knowledge, making predictions, connecting associations with the text, generating interest and encouraging active reading of the text and identifying the purpose (that is, discuss the title, section (s) and paragraph headings, illustrations, maps and tables).

(b) **Click and Clunk:** These two strategies are associated with self-monitoring. Click and clunk occurs during reading and refers to the process of reading for meaning (clicking) and monitoring comprehension so that students notice when understanding breaks down (clunking). Students are taught to use several “fix-up” strategies (for example, “read the sentence before and after the clunk; look at the word structure for root words and

affixes”) to figure out unknown words or concepts (that is, words they do not know the meaning of; not word accuracy reading).

(c) **Get the Gist:** Students quickly read each paragraph or section to find the main ideas or summarize key information and message. Students are taught to identify the most important who or what in the paragraph or section they have just read and then to briefly state the critical information about the who or what.

(d) **Wrap-up:** Wrap-up takes place after reading and teaching students to identify the most important information in an entire passage. Wrap-up includes two components. First, students generate and answer their own questions about what they have read, and second, students review what they have learned by summarizing the key ideas presented in the text.

Researches on Collaborative Strategic Reading (CSR) and on Gender Differences in Reading Comprehension

The initiators of CSR and their associates have carried out series of intervention studies to authenticate the effects of CSR on reading comprehension for students with learning disabilities. Some of these studies are presented in the section that follows.

The first study using CSR was conducted by Klingner and Vaughn (1996) with twenty-six (26) seventh-and eighth graders with learning disabilities, who used English as a second language. In this study, students were taught to use modified reciprocal teaching methods in cooperative learning groups (that is, brainstorm, predict, clarify words and phrases, highlight main idea, summarize main ideas and important detail, and ask and answer the questions. The researchers found that CSR was effective in improving reading comprehension for most of the students with learning disabilities.

In another similar study conducted by Klingner and Vaughn (2000), fifth-grade students were taught to apply CSR by trained classroom teachers during English as a Second Language (ESL) science classes. It was shown that the students significantly increased their vocabulary from pre-testing to post-testing. Further, students in CSR groups spent greater amounts of time engaged in academic-related strategic discussion and assisted one and another while using CSR.

CSR has also been combined with other approaches to address the range of skills needed for reading competence in (middle) junior school and senior secondary (high) school. In a study by Bryant, Vaughn, Linan-Thompson, Ugel, Hamff and Hougen (2000), sixty (60) sixth-grade middle school students were utilised and a multi-component reading intervention

was used to address the range of reading needs. CSR was used in conjunction with two other research-based strategies namely, Word identification (Lenz, Schumaker, Deshler & Beals, 1984) and Partner Reading (Mathes, Fuchs, Henley & Sanders, 1994). Results revealed that students with learning disabilities improved their word identification and fluency, but not reading comprehension.

Wang (2008) examined the effect of CSR on sixth-graders' reading comprehension and learning attitudes. Sixty-two pupils from two intact classes were divided into a control group receiving the traditional teacher-directed reading instruction and an experimental group of CSR instruction in combination with story retelling strategy training for fifteen weeks. Multiple measures were used in this study namely, a questionnaire of English learning background, pre-tests and post-tests of reading comprehension, five post-tests administered after reading stories, a story reading post-test which students had not ever read in the class and a questionnaire of students' attitudes towards the intervention. It was reported that modified CSR approach was effective in fostering the six-graders' overall reading comprehension and understanding of the meaning of the stories, and that it increased their English learning motivation.

Besides, Lazarus (2009) determined the effect of two instructional strategies namely, Directed Reading-Thinking Activity (DRTA) and Collaborative Strategic Reading (CSR) in improving achievement in reading comprehension of students with learning disabilities in Lagos State, Nigeria. Seventy-five Junior Secondary Class 2 students were purposively selected for the study. Participants in the experimental groups were exposed to ten weeks of reading comprehension training using DRTA and CSR strategies. The results revealed that participants in the two experimental conditions were significantly better in their reading comprehension achievement than their counterparts in the control group. Moreover, participants who were exposed to CSR performed better than those who were exposed to DRTA.

In another study, Fitri (2010) investigated the effectiveness of Collaborative Strategic Reading (CSR) towards the students' reading comprehension achievement by using quasi experimental research design with 56 intact students of PGSD Suryalaya, West Java, Indonesia. The result showed that the mean score between CSR and conventional reading activities were significantly different. It meant that the CSR was effective in increasing students' reading comprehension achievement.

Gender differences in reading comprehension achievement have also been examined in literature with no concluding results. For instance, Maccoby and Jacklin (1974) held that girls are better than boys in reading tasks. They stated that possible causes for early difference in reading related

behaviour fall into two categories (1) genetic and (2) environmental. Genetic difference have been suggested as a basis for deficit in boys and which might take the form of maturational lag, or differences in attention, activity or aggressiveness. Major environmental hypotheses include bias in readers' content, negative treatment of boys by female teachers and general cultural expectations related to sex roles. Moreover, Ormrod (2006) suggested that many aspects of society conspire to teach growing children to conform to gender stereotypes. For example, girls and boys are given different toys and play different games (Campbell, 1986).

Stoet and Geary (2013) analysed one decade of data collected by the Programme for International Student Assessment (PISA), including the mathematics and reading performance of nearly one million five hundred thousand (1.5 million) fifteen (15) year olds in seventy-five (75) countries. According to them, across nations, boys scored higher than girls in mathematics, but lower than girls in reading. The sex difference in reading was three times as large as in mathematics. There was considerable variation in the extent of the sex differences between nations. There are countries without a sex difference in mathematics performance, and in some countries girls scored higher than boys. Boys scored lower in reading in all nations in all four PISA assessments (2000, 2003, 2006, &2009).

On the contrary, Allan, Ellis and Pearson (2005) reported that a gender analysis of the impact of literature circles on vocabulary showed that the boys' vocabulary scores revealed significant improvements but the girls' did not. Further investigation by the researchers found a significant difference on the attitudes and engagement in reading for both boys and girls. According to them, both boys and girls developed more positive attitudes to reading in school at the end of the study, but the gain for boys was larger than that of girls.

Purpose of the Study

The aim of this present study was to determine the effect of Collaborative Strategic Reading (CSR) on the reading comprehension achievement of students with learning disabilities in Lagos State, Nigeria. The study also investigated whether gender differences would have any influence on achievement in reading comprehension of students with learning disabilities.

Hypotheses

To guide the conduct of this study, two hypotheses were formulated and tested at 0.05 level of significance.

H₀₁: There is no significant main effect of treatment on the reading comprehension achievement of students with reading disabilities.

H₀₂: There is no significant statistical difference between the achievements in reading comprehension of students with learning disabilities based on gender.

Methodology

Research Design

A pre-test, post-test, control group, quasi-experimental design with a 2 x 2 factorial matrix was adopted for the study. This 2 x 2 factorial design employed two rows (Collaborative Strategic Reading and control group) and two columns (that is, male and female).

Population

The target population for the study was students in Junior Secondary Schools Class 3 in Kosofe and Shomolu Local Government Areas (L.G.A.s) of Lagos State, Nigeria.

Participants

Simple random sampling was used to select two junior secondary schools in Kosofe and Shomolu Local Government Areas of Lagos State, Nigeria that were used for the study. These schools were Ikosi Junior High School, Kosofe L.G.A. and Baptist Junior Secondary School, Obanikoro, Shomolu L.G.A. The researcher controlled for extraneous variables during training session by ensuring that participants were selected from schools that were located far away from each other, precisely, from different local government areas.

First, there was a random sampling of local government areas in Lagos State, out of which two local government areas were selected. Then, two public junior secondary schools were randomly selected among the public schools in the selected local government areas. In each of the selected schools, classroom teachers nominated junior secondary school class 3 (J.S.S. 3) students with overall low academic achievement. In order to distinguish these students from students with learning disabilities the nominated students were screened using the Pupil Rating Scale by Myklebust. At the end of this screening exercise, seventy-two (72) students with learning disabilities were selected from the two schools thus, 36, and 32 students respectively. The researcher then subjected these seventy-two (72) students to further selection using the ballot method of random sampling.

This technique enabled the researcher to select fifty (50) students that participated in the study. Then, the researcher randomly assigned these fifty (50) students to two groups that is treatment and control, respectively with students from Baptist Junior Secondary School, Obanikoro, Shomolu L.G.A. as the experimental group and students of Ikosi Junior High School, Kosofe L.G.A. as control group.

Description of Instruments

The Pupil Rating Scale

The Pupil Rating Scale is a screening instrument for students with learning disabilities (primary and junior secondary school). It was designed by Myklebust in 1971 and revised in 1981. The author emphasized its usefulness and accuracy when used for screening purposes (Myklebust, 1981). The pupils rating Scale is a standardized scale. The author normalized it on a large population and found the instrument to be valid as a screening device. On the local scene, some researchers have re-validated the scale including Lazarus (2009) who obtained a reliability coefficient of 0.76 for the Pupil Rating Scale, using the Guttman-split half formula.

Reading Comprehension Test (RCT)

Reading Comprehension Test questions were drawn for junior secondary school class 3 (J.S.S. 3) students with reading comprehension deficits. This test is designed to assess students' pre-treatment and post-treatment reading comprehension abilities. The main difference between the pre-treatment assessment and the post-treatment assessment is that during the pre-test students' reading comprehension ability prior to instruction was the focus while the post-test was aimed at identifying how much change if any has occurred in the students' reading comprehension ability due to instruction or treatment received. The test consists of four reading passages which are related to the background of the participants. The questions were selected from New Oxford Secondary English Course, for Junior Secondary Schools, Book 3 by Banjo, Adeniran, Akano and Onaga (2007). Participants were expected to answer five questions from each of the two passages to give a total of twenty questions. These questions (which include multiple choice questions and recall/inferential questions) were intended to examine students' ability to identify main ideas, supporting details, draw inferences, recall facts and comprehend the meaning of words in context. The Cronbach's alpha estimate of internal consistency of the Reading Comprehension Test was found to be 0.61 for test and 0.67 at retest.

Procedure for Data Collection

The researcher sought approval from the Local Education District 2 Tutor-General, who is the Inspector of Education in charge of schools in the Kosofe and Shomolu L.G.A.s, which is located at Maryland Schools Complex, Ikeja, Lagos, to conduct the research in the two public schools. Letters of approval issued to the researcher were presented to the principals of the respective schools.

Training sessions were conducted twice a week for a period of eight weeks. Week one served for screening and pre-test while week eight served as post-test period. The training sessions were held between the second week of training and the seventh week to give a total of six weeks. In each week, each group had two lessons. In all, a total of twenty four lessons were held for the experimental and control groups. To teach participants in both groups the researcher carefully selected six reading passages from the New Oxford English Course for Junior Secondary Schools, Book 3.

Classroom procedures adopted for each Collaborative Strategic Reading lesson is summarized as follows:

- i. The researcher described and modelled the entire Collaborative Strategic Reading plan as an overview for the students using a given passage (Whole class introduction).
- ii. The researcher assigned students to groups (Cooperative Group Activity).
- iii. The researcher assigned group roles to all participants in the groups (five students per group) for example, group leader, clunk expert, gist expert, and group reporter.
- iv. Before they read a passage, the group leader asked the group to: brainstorm what they already know about the topic, make predictions about what they think they are going to learn from the passage, to share their brainstorming ideas and to share their predictions with other group members.
- v. Group members read the passage, figured out meaning of “clunks” and identified “clicks” in the passage. Each clunk expert reminded group members to use clunk strategies.
- vi. The researcher offered assistance to students working in groups by clarifying “clunks”.
- vii. Each gist expert ensured that his group members identified “who” or “what” the passage is mostly about, as well as the most important information about the “who” or “what” in the passage.
- viii. Whole class wrap-up: The class dispersed from their groups and came together. The researcher called on each group reporter to report

to the class the important ideas learned and favourite questions formulated by his group members on the passage. Other students supplied answers to group questions.

- ix. The researcher evaluated the lesson with some questions (oral and written).
- x. He summarised the lesson by highlighting the main idea of the passage.
- xi. He gave assignment based on the lesson.

The conventional approach was adopted for participants in the control group. These students continued to receive instruction on the same passages treated by the experimental group using the conventional method of learning (read and explain). Basically, the students were asked to read the passage silently and in some cases students read aloud. After reading the passage they answered oral and written questions based on the passage. Classroom management and rules were the same for the experimental and control groups. Students in the control group also took part in the pre-test and post-test of this study (same as in experimental group).

Method of Data Analysis

Analysis of Variance and computation of t-test statistics were used to analyse the data collected.

Results

H₀₁: There is no significant main effect of treatment on the reading comprehension achievement of students with reading disabilities.

Table 1 Summary of Analysis of Variance on the Effects of Collaborative Strategic Reading (CSR) on Reading Comprehension of Participants

Source of Variance	Sum of Squares	Df	Mean Square	F	Sig. P ^a
Covariates	2467.045	1	2467.045	64.221	.000
Pre-test	2467.045	1	2467.045	64.221	.000
Main Effects (Treatment Groups) :	1342.742	1	1342.742	34.954	.000**
(a) CSR	1342.742	1	1342.742	34.954	.000**
(b) Control Group					
Explained	3809.787	2	1904.894	49.588	.000
Residual	1805.493	47	38.415	49.588	.000
Total	5615.280	49	114.588		

* *Significant at $P < 0.05$

The results of the findings on Table 1 show a significant main effect of treatment (Collaborative Strategic Reading) on the reading comprehension of students with learning disabilities ($F_{(1, 47)} = 34.954$; $P < 0.05$). This implies that treatment contributed significantly to the variation in participants' post-test scores in reading comprehension. Thus, that there is a significant difference in reading comprehension of students with learning disabilities exposed to collaborative Strategic Reading and those exposed to Control Group. On the basis of this finding the null hypothesis is hereby rejected.

In order to determine the magnitude of the post-test mean scores obtained by each of the treatment group and the control group, the Multiple Classification Analysis (MCA) was computed and is presented in Table 2.

Table 2: Multiple Classification Analysis of Reading Comprehension of Participants in Treatment Group and Control Group

Variable + Category	\bar{X}	N	Unadjusted Deviation ^a	Eta	Adjusted for Factors and Covariates Deviation	Beta
Treatment:						
(a) CSR	23.35	25	4.20		5.23	
(b) Control Group	12.89	25	-4.20	.40	-5.23	.49
Grand Mean = 18.12						
Multiple R = .678						
Multiple R Squared = .824						

Table 2 reveals a beta value of 0.49 for treatment group and control group and a Multiple R² value of 82% (eighty-two percent). This implies that the amount of variation of the independent variable in this analysis when taken together is eighty-two (82%). In other words, the independent variable, Collaborative Strategic Reading (CSR) was effective in improving the reading comprehension achievement of students with learning disabilities. Also, the mean scores of the two groups were 23.35 and 12.89 for the treatment and control groups, respectively. This therefore demonstrated that Collaborative Strategic Reading which obtained the highest adjusted post-test mean score of ($\bar{X} = 23.35$) is superior to the Control method (conventional teaching) in improving reading comprehension of students with learning disabilities.

H₀₂: There is no significant difference between the achievement in reading comprehension of students with learning disabilities based on gender.

Table 3: t-Test Comparisons of Reading Comprehension of Male and Female Participants Exposed to Treatment and Control Group

Gender	NO.	\bar{X}	SD	t Cal.	t. Tab.	Df	P
Male	24	15.75	9.37				
Female	26	21.69	9.83	2-18	2.0	48	<.05

Table 3 reveals that female participants performed better in the reading comprehension achievement test than their male counterparts ($\bar{X} = 21.69$ for females and 15.75 for males). This implies that there is a significant difference between the achievement in reading comprehension of

male students with learning disabilities who were taught using Collaborative Strategic Reading and female students exposed to the same treatment. Thus, the null hypothesis is rejected.

Discussion

The main focus of the study was to determine whether or not there would be any significant difference in the achievement of participants according to groups of instructional strategy and control. The findings have clearly indicated that the interactive and multi-component instructional strategy developed for this study that the Collaborative Strategic Reading has contributed significantly to the improvement of students with learning disabilities' achievement in reading comprehension. The results pointed to statistically significant differences between the achievement scores in reading comprehension of the experimental and the comparison groups. In other words, the experimental group significantly outperformed the control group on the reading measures.

This present findings lend credence and further buttress the position of Vaughn, Clapper and Kim (2002) that most intervention studies conducted by researchers using Collaborative Strategic Reading (CSR) demonstrated that CSR was associated with improved reading comprehension for students with learning disabilities. Many intervention studies with CSR indicated positive gains in the students' reading comprehension, increased vocabularies, enhanced cooperative skills and enriched content area learning (Klingner & Vaughn, 1996; 1998; Klingner, Vaughn, Arguelles, Hughes & Ahwee, 2004; Wang, 2008; Lazarus, 2009 & Fitri, 2010). These findings have indicated that when students with learning disabilities are exposed to Collaborative Strategic Reading (CSR), they make significant improvement in their reading comprehension.

The above view, therefore, suggests that the instructional strategy of this present study that is, Collaborative Strategic Reading (CSR) should be considered as a useful strategy in reading comprehension instruction in general education classrooms where a large number of students with learning disabilities receive instruction, in resource room settings common in many private schools in Lagos State, Nigeria as well as in special education settings that cater for the educational needs of majority of students with disabilities particularly, in Nigeria.

However, the present findings contradict the discoveries of Bryant, Vaughn, Linan-Thompson, Ugel, Hamff and Hougen (2000), who conducted a study with sixty (60) sixth-grade middle school students. In their study, a multi-component reading intervention was used to address the range of

reading needs. CSR was used in conjunction with two other research-based strategies namely, Word identification (Lenz, Schumaker, Deshler & Beals, 1984) and Partner Reading (Mathes, Fuchs, Henley & Sanders, 1994). Results revealed that students with learning disabilities improved their word identification and fluency, but not reading comprehension.

The findings of this study that female students with learning disabilities performed better in achievement in reading comprehension than their male counterparts support the opinion of Maccoby and Jacklin (1974) that girls are better than boys in reading tasks. These researchers buttressed their view by providing an explanation. In their opinion genetic and environmental factors are possible causes for early difference in reading related behaviour. They stress that genetic differences have been suggested as a basis for deficit in boys and which might take the form of maturational lag, or differences in attention, activity or aggressiveness. Further, major environmental hypotheses include bias in readers' content, negative treatment of boys by female teachers and general cultural expectations related to sex roles. This present finding corroborates these assertions.

Additionally, the viewpoint of Ormrod (2006) is authenticated by this very finding. According to Ormrod (2006) many aspects of society conspire to teach growing children to conform to gender stereotypes. For example, girls and boys are given different toys and play different games (Campbell, 1986). This present finding is also in agreement with Stoet and Geary (2013) finding that across the nations of the world, boys scored higher than girls in mathematics, but lower than girls in reading. The present study has indicated a strong support for all these submissions.

Educational Implications

The effects of instructional strategies to enhance achievement in reading comprehension of secondary school students with learning disabilities have been demonstrated specifically in this study. The study has also established that Collaborative Strategic Reading (CSR) which is a multi-component reading comprehension strategy teaches all students especially students with learning disabilities to use four independent comprehension strategies that is, preview, click and clunk, get the gist and wrap up, while working cooperatively.

Essentially, Collaborative Strategic Reading (CSR) encourages students to think critically during reading activities and to monitor their comprehension while they are reading. CSR emphasize brainstorming and predicting, activation of prior knowledge, determining meaning of unknown words, finding the main idea, and summarizing the text they have read. In

fact, by engaging in these reading comprehension practices during CSR lessons students gain more skill and confidence to read, think, understand, and remember what they have read even after much time has passed.

Another implication of the findings of this study is that the study has reinstated the need to facilitate students' reading skills through implementation of group based reading comprehension strategies like Collaborative Strategic Reading. This study testifies that providing students with learning disabilities opportunities to learn in cooperative groups will definitely pay off. Group based comprehension strategies, when adopted, enable students to perform defined roles as they collaboratively implement the group activities whilst the role of English Language teachers would be to enforce the implementation of collaborative strategies, model strategy use, provide on-going assistance, lead students to formulate purposes for reading, read to prove or reject predictions.

Based on all these benefits, students generally read more actively and enthusiastically as they participate in their group activities. Eventually independent reading is sustained whilst students become more responsible, and active in reading and learning.

Conclusion and Recommendations

The findings of this study and discussion above inform the following recommendations: To sustain improved achievement in reading comprehension in English Language and in all other content area subjects in the general education setting, schools should adopt Collaborative Strategic Reading (CSR) particularly, for students with learning disabilities. The use of CSR instructional strategy should be long lasting, not just in a single lesson or unit. This is to allow CSR steps and procedures to permeate the curriculum as well as become wholly intertwined with content areas.

It is important that school administrators and supervisors encourage the teachers to employ this instructional strategy considering its benefits. This is because if it is properly enforced the gains will rub off on all subject areas because as students learn to read, they would later read to learn.

School administrators should endeavour to organize frequent professional development programmes that will afford teachers the opportunity to acquire new and effective skills to improve their lesson delivery. During such seminars, workshops and conferences, teachers can get to learn about the implementation of CSR and better ways of utilizing CSR in the classrooms.

Teachers can organize cooperative learning groups in the classrooms in which students can discuss what they read, help each other choose

comprehension strategies that are most appropriate for specific texts. Teachers should endeavour to stress that students with learning disabilities learn necessary skills to enable them function effectively in cooperative learning groups.

Teachers should provide adequate time for reading, instruction. Apart from the English language periods in the school time table, and the so called free periods, library periods could be devoted to sustain silent reading in the schools. This practice will assist in facilitating reading and reading related activities among students.

School administrators (principals, heads of schools, vice principals, heads of departments, head teachers, unit coordinators, year tutors) should conduct classroom walk through regularly to gauge the strengths and needs of teachers' reading instruction. These visits will enable them to talk to teachers about the teaching and learning processes, especially those related to reading. When all these measures are put in place, students with learning disabilities will be able to apply cognitive and meta-cognitive strategies in reading and learning and improve their overall academic achievement.

References

- Allan, J., Ellis, S., & Pearson, C. (2005). Literature circles, gender and reading for enjoyment: Report for the Scottish Executive Education Department. Retrieved May 12, 2008, from <http://www.scotland.gov.uk/Resource/Doc/930/0021345.pdf>.
- Banjo, A., Adeniran, A., Akano, A. & Onaga, U. (2007). *New Oxford Secondary English Course, for Junior Secondary Schools, Book 3*. Jericho, Ibadan: University Press PLC.
- Bryant, D. P., Vaughn, S., Linan-Thompson, S., Ugel, N., Hamff, A. & Hougen, M. (2000). Reading outcomes for students with and without reading disabilities in general education middle-school content area classes. *Learning Disability Quarterly*, 23 (3), 24-38.
- Campbell, P.A. (1986). What's a nice girl like you doing in a math class? *Phi Delta Kappan*, 67, 516-520.
- Durkin, D. (1993). *Teaching them to read* (6th ed.). Boston, MA: Allyn & Bacon.
- Fitri, A. (2010). The effectiveness of Collaborative Strategic Reading (CSR) on the reading comprehension achievement of the fourth semester students of PGSD Suryalaya, West Java, Indonesia. Unpublished Thesis. Post Graduate Programme of UM. Retrieved on December 9th 2010, from <http://karyai-lmiah.um.ac.id/index.php/disertasi/article/view/8238/0>

- Klingner, J. K. (2010). Improving reading comprehension with Collaborative Strategic Reading (CSR) Retrieved on March 4th, 2013 from http://www.mikogroup.com/2010readinginstitute/documents/578_Klingner.pdf
- Klingner, J. K. & Vaughn, S. (1996). Reciprocal teaching of reading comprehension strategies for students with learning disabilities who use English as a Second Language. *The Elementary School Journal*, 96 (3), 275-293.
- Klingner, J. K. & Vaughn, S. (2000). The helping behaviours of fifth graders while using collaborative strategic reading during ESL content classes: *TESOL Quarterly*, 34 (1), 69-98.
- Lazarus, K. U. (2009). Two instructional strategies as intervention for enhancing reading comprehension of students with learning disabilities in Lagos State, Nigeria Ph.D. Thesis. Dept. of Special Education, University of Ibadan.
- Lenz, B. K., Schumaker, J. B., Deshler, D. D. & Beals, V. L. (1984). *Learning strategies, curriculum: The word-identification strategy*. Lawrence: University of Kansas.
- Maccoby, E, & Jacklin, C. (1974). *The psychology of sex difference*. Stanford Press California.
- Mathes, P. G., Fuchs, D., Fuchs, L. S., Henley, A. M. & Sanders, A. (1994). Increasing strategic reading practice with peabody classwide peer tutoring. *Disabilities Research and Practice*, 9, 44-48.
- McNamara, B. E. (2007). *Learning disabilities: Bridging the gap between research and classroom practice*. Upper Saddle River, New Jersey: Pearson Merrill Prentice Hall.
- Myklebust, H. R. (1981). *Pupil rating scale revised: Screening for learning disabilities*. New York: Grune and Stratton, Inc.
- National Joint Committee for Learning Disabilities (2008). Adolescent literacy and older students with learning disabilities: A Report from the National Joint Committee on Learning Disabilities, June, 2008, Retrieved on April 29, 2012 from www.ldonline.org/njcd.
- National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Washington, DC: National Institute of Child Health and Human Development.
- Ormrod, J. E. (2006). *Educational psychology: Developing learners*. 5th ed. Upper Saddle River, New Jersey: Pearson Merrill Prentice Hall.

- Palincsar, A.S. (1986). *Reciprocal teaching: Teaching reading as thinking*. Oak Brook, IL: North Central Regional Educational Laboratory.
- Pressley, M. (2000). Comprehension instruction in elementary school: A quarter-century of research progress. In B. M. Taylor, F. F. Graves, and P. van den Broek (Eds.), *Reading for meaning: Fostering comprehension in the middle grades*. Newark, DE: International Reading Association.
- Rosenshine, B., Meister, C. (1994). Reciprocal teaching: A review of the research. *Review of Educational Research*, 64(4), 479-530.
- Rosenshine, B., Meister, C., & Chapman, S. (1996). Teaching students to generate questions: A review of the intervention studies. *Review of Educational Research*, 66(2), 181-221.
- Stoet, G. & Geary, D.C. (2013). Sex differences in mathematics and reading achievement are inversely related: Within-and across-nation assessment of 10 years of PISA data. Retrieved on August 20, 2013 from <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0057988>
- Wang, T.H. (2008). *The effect of modified collaborative strategic reading on EFL learners' reading comprehension*. Unpublished MA dissertation, National Changhua University of Education, Changhua, Taiwan.
- Ziyaeemehr, Z. (2012). The efficacy of collaborative strategic reading on the reading comprehension of ESP learners. *Higher Education of Social Science*, 2 (1), 38-42. Retrieved on April 8, 2013 from <http://www.cscanada.net/index.php/hess/article/view/>