

# **THE EFFECT OF COLLABORATIVE STRATEGIC READING (CSR) ON READING COMPREHENSION SKILL OF STUDENTS ACROSS DIFFERENT LEARNING STYLES**

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## **Abstract:**

This research was to measure the effect of Collaborative Strategic Reading (CSR) on students' reading comprehension skills. There were two variables during this research; the independent variable was Collaborative Strategic Reading (CSR) strategy, the moderating variable was students' different learning styles, namely active and reflective learning styles, and the dependent variable was students' reading comprehension skill. From the finding of the data, it can be concluded that the implementation of CSR at SMP PGRI 01 BATU could improve students' reading comprehension skills. Therefore, the researcher suggested the English teachers use CSR in teaching reading comprehension in the EFL context. For the future researcher, it is highly suggested to use the result of this research as an alternative reference to conduct further research.

**Keyword:** Effect, Reading comprehension, Collaborative Strategic Reading (CSR)

## **INTRODUCTION**

Reading comprehension is incredibly complex and multifaceted. due to this, readers don't develop the power to understand texts quickly, easily, or independently. Reading comprehension strategies must be taught over an extended period by teachers who have knowledge and knowledge using them. Reading comprehension strategies must be refined, practiced, and reinforced continually, through life. Even high school teachers have to continue helping their students develop reading comprehension strategies. As their reading materials become more diverse and challenging, students must learn new tools for comprehending these texts. Content areas like textbooks and newspapers, magazines, and also journal articles or by accessing the web pose different reading comprehension strategies. The development of reading comprehension is a lifelong process that changes base on the depth and breadth of texts the person is reading. Reading comprehension in the target language especially English is more complicated than in the Indonesian language ( Sunggingwati and Nguyen, 2013:81). For instance, students who learn English as a foreign language context will find it difficult to understand the passage, because it differs from their mother tongue. Thus, they try to translate the passage to make it easier for them to understand the passage. So they try to figure out what the flow is. If they interpret the passage wrongly they may misinterpret the passage.

The demand of the literacy challenges also applies to Indonesian students. Since English is stated to play an important role in the global interaction (Elucidation on Government Regulation of the Republic of Indonesian

Number 32 the Year 2013 Article 77K Verse 2c), the students should prepare themselves to face the literacy challenges related to EFL. In the Indonesia context, the teaching of reading has been inserted in the English curriculum with the integration of the teaching of other skills (speaking, listening, and writing) from secondary to tertiary level. According to the English curriculum for the secondary level (Kemendikbud, 2013a; Kemendikbud, 2013b; Kemendiknas, 2006), the teaching of reading is directed to enable students to read effectively to achieve reading comprehension. Regarding the demand of the literacy challenges, the teaching of reading in Indonesia is also supposed to provide students with reading strategy instruction and help them become strategic readers as what Cahyono and Widiati (2011:67) suggest for the development of EFL reading instruction in this country.

Since conventional teaching strategy does not seem promising in helping the student to develop their ability in using reading strategies, the pedagogical implication requires teachers to implement an appropriate teaching strategy which facilitates student with reading strategy instruction. One suitable teaching strategy for such a purpose is Collaborative Strategic Reading (CSR). Collaborative Strategic Reading was developed and designed to facilitate reading comprehension for students with learning, reading, and behavior problems included in general education classrooms (Vaughn, Klingner, and Bryant, 2001 in Karabuga and Kaya, 2013). Investigated the effects of CSR on reading comprehension and reading problems of prep-class undergraduate students in the Turkish context. The finding showed there was a significant difference in reading comprehension between the control groups and the experimental groups and that CSR also helped the student to overcome vocabulary related problems and affective factors. Kassem (2013) examined the relative effect of CSR and ISR (individual Strategic Reading) on reading comprehension and reading self-efficacy of EFL learners majoring in English in the Egyptian College of Education. Based on his research finding, CSR and ISR groups scored higher than the control group while no significant difference was found in reading achievement between CSR and ISR groups. Also, Klingner and Vaughn (1996) stated that the goals of collaborative strategic reading (CSR) are to improve reading comprehension skills for students with learning disabilities and increase conceptual learning in ways that maximize the student's involvement. Another study by Fan (2009) focused on student's collaborative behaviors while applying CSR in reading tasks and demonstrated that the behaviors indicated joint effort for meaning construction, elaboration for clarification, assistance when encountering content and linguistic problems, prompt for task engagement and corrective feedback. Fan (2009) also discovered that collaborative scaffolding in CSR helped the student to demonstrate active reading through the learning process. Finding a similar pattern of collaborative behaviors, Klingner and Vaughn's (2000) study revealed that the students had a high level of task engagement in group work and assisted each other. These two studies confirm that collaboration and communication in CSR lead to task engagement and active reading for comprehension.

Investigation on CSR has also been conducted in the Indonesian setting. Paramita, Tantara, and Artini (2013), Novita (2012), and Annisa (2010) examined the effect of CSR on tertiary level students reading comprehension. They uncovered that the students in the experimental group scored higher than their peers in the control group. Rosalina (2014) also confirmed the positive influence of CSR on the Senior High School student's reading comprehension. These studies are all in favor of the effect of collaborative strategic reading on student's reading comprehension in the Indonesia EFL context.

By referring to the reviewed reading concept and CSR components, two types of learning styles in Honey and Mumford's model (1992) which is categorized in the layer of information processing according to Curry's Onion Model (Cassidy, 2004: 422) were selected, namely learning style of activist and reflector. Honey and Mumford model of learning styles was chosen since it was listed by Coffield, Mosely, Hall, and Ecclestone (2004) as one of the thirteen most influential models and instruments of learning style based on their project

This study aimed to explore whether (1) The understudies instructed through CSR have superior perusing comprehension ability than those instructed utilizing routine educating techniques. (2) There is an interaction between educating techniques and the students learning styles, (active and reflective).

## **METHOD**

This study was conducted in an experimental design. And this research used quasi-experiments in which random assignments to treatment groups was not used since the technical constraints, this research could not select the subjects into the groups randomly. A quasi-experimental design was utilized because of some factors which made the researcher impossible to use true experimental design.

In addition to the quasi-experimental design, the factorial design was also applied in this study. The reason for using factorial design was because attempted to investigate the independent and simultaneous effect of the two types of teaching strategies and learning styles on reading comprehension. By using factorial design, the researcher was able to assess the effect of the treatment in the form of the teaching strategy at different levels of learning styles on student's reading comprehension. And the design of this research was called a two by two factorial design is written  $2 \times 2$  to indicate the levels involved at each independent variable.

There were two factors in this research, independent and dependent variables. The independent variable was the major variable to investigated. This variable was chosen, manipulated, and measured by the researcher. Meanwhile, two independent variables and one dependent variable were involved. The independent variable was CSR and the dependent variable was reading comprehension skill. Active and reflective learning styles were as moderator variables. Instruments of data collection used in the current study included:

- Reading comprehension test

Reading comprehension test was the primary instrument in this research. From those indicators, the researcher developed the test that consists of two kinds of tests; pretest and post-test. The test was in the form of objective tests that were multiple choices. The test was developed from K13 and syllabus which was used by SMP PGRI 01 Batu and seeing the standard competence. After knowing the standard competence, the researcher developed some indicators that must be reached by the students.

- Questionnaire to identify learning styles

The next instrument utilized in this research as the secondary instrument was a questionnaire developed by Honey and Mumford (2006). The learning style questionnaire was administered to both groups of control and experimental groups. The concept of these learning styles was referred to learning style model divided into two,

activist and reflector learning styles. The questionnaire consisted of 30 items in which 15 items related to activist and the other 15 items related to a reflector. The final version of the learning style questionnaire is shown in the appendix. The students were classified into activists and reflector groups based on the answer of analysis that given to the students in the questionnaire. The questionnaire item was given a tick scored 1 which means 'yes' while the student answers 'no' she/he would be scored 0. Scores from the items of activist dimension and those from the items of reflector dimension were quantified respectively. The identification of learning styles was based on the highest total score, either activist or reflector. Thus, for example, a student who scored 10 in activist style and 8 in reflector style would be classified as an activist.

- Questionnaire to identify students' perception toward CSR

The questionnaire about student's perceptions toward the implementation of CSR in this research was managed to students in the experimental group. It consisted of 15 items. Moreover, the items were in Bahasa Indonesia to avoid any language problems the students would face in comprehending the questionnaire. In the questionnaire, the answer toward the questionnaire item was in the form of five categories, namely 'strongly agree', 'agree', 'undecided', 'disagree', and 'strongly disagree'.

Before that treatment, the learning style questionnaire was administered to both groups by using the scoring system, the students were classified into two groups, namely students with active learning styles and students with reflective learning style. The scoring process.

The treatment of CSR was conducted to the experimental group after the identification of student's learning styles. The lesson plans used during the treatment were already reviewed and discussed with the teacher before the treatment to ensure that both the teacher and the researcher had the same and equal perception and understanding of the education of the lesson plans. In implementing CSR in the experimental group and conventional teaching strategy in the control group for 6 meetings, teaching alternation between the teacher and the researcher was applied.

In this case, the researcher uses the Cornbrash Alpha formula to find the reliability of the test and the researcher uses SPSS 20 to make it easy. Then, to know that criteria of reliability of the test can be consulted to the interpretation coefficient correlation table. The researchers conducted reliability tests for 5 instruments, they are, the CA for the pre-test (control group) with a CA value of 0.643, the second CA for the post-test (control group) with a value of 0.703, and the CA pre-test (Experimental Group) with a value of 0.602, and CA post-test (Experimental Group) score of 0.706, and the last CA score for the CSR questionnaire was 0.813. Because all Cronbach alpha values for each instrument were higher than 0.60, the test instrument used to get data was considered reliable. It means that the test has adequate reliability

Data analysis was done to answer the research problems. The student's scores of reading comprehension and the result of the student's learning style questionnaire were used for this purpose. The data were analyzed quantitatively. Then, the researcher used one-way ANOVA to analyze the data. Based on the result of one-way ANOVA, when the p-value is lower than .05 level of significant ( $p\text{-value} < \text{sig}.05$ ), this indicates that the result of the ANOVA was statistically significant. Then, it can be concluded that the students taught by using CSR significantly gain better reading comprehension skills than those taught by using conventional teaching strategy.

## RESULTS AND DISCUSSION

The result of the posttest from the control groups and experimental groups was tabulated and analyzed using descriptive statistics to organize and describe the student's reading comprehension achievement scores. The scores of students in the experimental group ranged from 40 to 100 with the standard deviation (SD) of 17.49302, while the scores of students in the control group ranged from 35 to 90 with a standard deviation of 18.77. Moreover, the mean scores from the experimental and the control groups were 70.16 and 59.83 respectively. The difference in the mean score from the control and experimental groups was 10.33 points. It was concluded that the mean score of the experimental group was higher than the mean score of the control group.

Learning styles of the students' in the control and the experimental groups were investigated by administering the learning style questionnaire in both groups on March 02, 2020. Based on the analysis of the data from the questionnaire, 14 students in the experimental group had active learning styles and 16 students had a reflective learning style. In the control group, there were 13 students with an active learning style and 17 students with a reflective learning style. It could be concluded that the number of students with active and reflective learning styles was nearly equal in each group. In this research, an active and reflective learning style was the moderating variable investigated in addition to teaching strategies as the independent variable. Accordingly, the student's reading comprehension scores across the learning styles in the control and the experimental groups were analyzed.

The result of statistics descriptive showed the mean score of the students with active learning styles taught using CSR strategy was 68.21 with SD of 17.93, while the mean score for students with reflective learning style taught using CSR. was 71.87 with SD of 17.5. Moreover, the mean score for students with active learning styles taught using conventional teaching strategy was 58.84 with SD of 17.69, and the mean score for students with reflective learning style taught using conventional teaching strategy was 60.58 with SD 20.06. Based on the result of mean scores, it can be concluded that the mean score for students with reflective learning styles has a higher score than the mean score for students with an active learning style in each group.

To test the first hypotheses related to the problem, the difference between student's reading comprehension scores in the experimental groups and those in the control groups was analyzed used parametric statistics since the data satisfied homogeneity and normality assumptions. Based on the result of one-way ANOVA analysis shown in table 4.4, the obtained F value of 11.229, with  $df = 1$ , resulted in a p-value of .001, the p-value was lower than .05 level significant ( $p\text{-value} < \text{sig}.05$ ), which indicated that the p-value of .001 was statistically significant.

To test the second hypothesis related to the research problem, the posttest scores of active students from both groups were compared to those of reflective students using parametric statistics as the data fulfilled the statistical assumption on homogeneity normality assumptions. The result of the analysis of comparison of the posttest scores between the active and reflective students in both the control and the experimental group showed that the optional F value was .022 with one degree of freedom and the p-value was .882. The p-value was not statistically significant as it was greater than the .05 level of significance ( $p\text{-value} > \text{sig}.05$ ).

The research examined the effect of CSR compared to the conventional teaching strategy on reading comprehension of students as observed from the active and reflective learning style. As regards, the first

formulated research problem, this research, revealed that the student taught using CSR beat those instructed utilizing the ordinary educating methodology. This evidence from the result of the first hypothesis testing which indicated that the mean difference in posttest between the students taught using CSR and those taught using the conventional strategy was statistically significant in favor of the class receiving CSR treatment. This evidence is also supported by the difference of 10.33 points on the mean scores of reading comprehension post-test between experimental and control groups in which mean scores from the experimental groups were higher (70.16) than the mean scores from the control groups (59.83). Thus, it is argued that CSR is confirmed by this research as a more effective strategy than the conventional teaching strategy in enhancing student's reading comprehension in the EFL context. This finding is related to the review by Grabe (2009:233) asserting that CSR is a favorable strategy to improve reading comprehension in the L2 context.

In addition to the comprehension strategies of CSR, the principle of scaffolding and collaborative approach in CSR are advantageous in helping the students comprehend the given texts using CSR. In the treatment of this research, the teacher scaffolding the students in practicing the strategies from several meetings until the students were able to do independent practice in groups. Moreover, collaboration was observed in each group of students in which the students helped each other to do each strategy. Both teacher's scaffolding acts and student's collaboration in CSR play pivotal stakes in reading activity as Klingner and Vaughn (2002) posit that students who are exposed to CSR and get assistance from the teacher, peers, or both while reading gradually improve their ability to apply comprehension strategies and construct knowledge.

The finding focusing on the effect of CSR toward student's reading comprehension in this research conforms not only to the theory underlying CSR, but it is also similar to the findings of the previous studies. The finding of this research is similar to Rosalina's (2014) research involving the same school level and grade of the students (i.e. eleventh graders of Senior high school) which demonstrated that the students received CSR instruction outperformed those in the control group. This research also similar results to the past ponders conducted by Boardman et al. (2015) and by Vaughn et al (2011) who took middle school students (6-12 grades) as the samples. Furthermore, the empirical evidence confirming the effect of CSR on student's reading comprehension in this research is by the finding from other previous studies involving college students as the samples (Khonamri & Karimabadi, 2015; Karabuga&Kaya, 2013; Kassem, 2013; Paramita et al;2013; Novita,2012; Annisa,2010). It can be inferred that CSR improves not only reading comprehension of students from the college level and middle school as demonstrated by the previous studies but also enhances the reading comprehension of senior high school students.

To sum up, the significant effect of CSR compared to conventional teaching strategy on students reading comprehension skills in this study is consistent with the majority of the previous studies. as a more effective teaching strategy than the conventional one in enhancing reading comprehension, CSR can facilitate students to cope with the demand of literacy challenges (Goldman, 2012;90) and reinforce collaboration as well as communication, as two out of the four major 21st-century skills, among students.

The second research problem regarding the effect of learning styles on students reading comprehension skills was answered by the last hypothesis testing which yielded dissimilar results to the first hypothesis testing. The statistical analysis showed that there was no significant difference in reading comprehension between

students with active learning styles and those with reflective learning styles despite the differences in the mean scores between the students with active learning styles (71.63) and those with reflective learning style (70). Further statistical comparison of the mean scores between active students and reflective students in each group also yielded insignificant differences. It can be inferred that both students with active, reflective learning styles demonstrated equal gains.

The finding out of this study is in line with the finding of wichadee's (2011) study which demonstrated that there was no significant difference in reading comprehension among four groups of students with different learning style, namely activists, reflectors, theorists and pragmatists after the treatment of the self-Directed Learning Instructional model. In the same way, as this present study provided the logical explanation model. In the same way, as this present study provided the logical explanation, Wichadee (2011) posited that the model facilitates the four parties equally. Due to the lack of previous studies investigating the effect of learning styles in information processing domain, especially in active-reflective types of learning style, the more comprehensive analysis with previous studies is unlikely to provide, Nevertheless, the present study has added the empirical evidence of the effect of active and reflective learning styles on reading comprehension. The present study also gave a new contribution to the field by providing further analysis of the percent contribution of the learning style involved in the study toward reading comprehension, whereas Wichadee's (2011) study did not provide a similar analysis.

## **CONCLUSION**

The first conclusion is there was a significant difference in the reading comprehension skill between students taught using CSR and those students taught using the conventional teaching strategy. The students who taught using CSR had better reading comprehension skill progress than those students taught using the conventional teaching strategy. The treatment fidelity or the quality of the CSR instruction was believed as a contributive factor to the positive effect of CSR on students reading comprehension skills.

The second conclusion is that there was no significant difference between students with an active learning style and those with reflective learning style in reading comprehension. Students with active learning styles and those with reflective learning styles got benefits from the teaching strategies in different ways. The learning experience of active students was enhanced by brainstorming, group work, discussion, and the use of cue cards, while the learning experience of reflective students was enhanced by reading, explicit instruction and modeling in CSR, the use of learning log, and the procedural strategies.

## REFERENCES

- Boardman, A.G., Klingner, J.K., Buckley, P., Anna MMA, S., & Lasser, C.J. 2015. Efficacy of Collaborative Strategies Reading in Middle School Science and Social Studies Classes. *Reading and Writing: An Interdisciplinary Journal*, 26(7)
- Cahyono, B. Y. And Widiati, U. 2006. The Teaching of Reading in Indonesian Context: The State of Art. *TEF LIN Journal*, 19 (1): 1-15.
- Cassidy, S. 2004. Learning Styles: An Overview of Theories, Models, and Measures. *Educational psychology*, 24(4): 419-444.
- Fan, Y. 2009. Implementing Collaborative strategic Reading (CSR) in an EFL Context in Taiwan. Dissertation for Doctor of Education in Applied Linguistics and TESOL. Leicester: The University of Leicester.
- Honey, P. & Mumford, A. 1992. Learning Style Questionnaire, (Online), <http://dspace.bhos.edu.az/xmlui/bitstream/handle/123456789/241/Learning%20Styles%20questions.pdf?sewuence=1>, retrieved in March 2020
- Karabuga, F. & Kaya, E. S. 2013. Collaborative strategic Reading Practice with Adult EFL Learners: A Collaborative and Reflective Approach to Reading. *Procardia-Social and Behavioral Sciences*, 106:621-630.
- Kassem, H. M. 2013. The Effect of Collaborative Versus Individual strategic Reading on College EFL. Learner's Reading Comprehension and Self-Efficacy. *Asian EFL. Journal*, 60: 4-38.
- Kementrian Pendidikan dan Kebudayaan. 2013a. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 69 Tahun 2013 tentang Kerangka Dasar dan Struktur Kurikulum Sekolah Menengah Atas/Madrasah Aliyah. Jakarta: Kementrian Pendidikan dan Kebudayaan.
- Kementrian Pendidikan dan Kebudayaan. 2013b. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 68 Tahun 2013 tentang Kerangka Dasar dan Struktur Kurikulum Sekolah Menengah Pertama/Tsanawiyah. Jakarta: Kementrian Pendidikan dan Kebudayaan.
- Dick, Walter, and Carey, Lou and James O. 2001. *The Systematic Design of Instruction, 5<sup>th</sup> Edition*. New York: Addison-Wesley Educational Publishers Inc.
- Klingner, J. K & Vaughn, S. 2000. The Helping Behaviors of Fifth Graders While Using Collaborative strategies Reading During ESL Content Classes. *TESOL QUARTERLY*, 34(1):69-98.
- Klingner, J.K, Vaughn, S., & Boardman, 2007. *Teaching Reading Comprehension to Students with Learning Difficulties*. London: The Guilford Press.
- Khonamri, F & Karimabadi, M. 2015. Collaborative Strategic Reading and Critical Reading Ability of Intermediate Iranian Learners. *Theory and Practice in Language Studies*, (Online) 5(7): 1375-1382, (<http://dx.doi.org/10.17507/tpls.0507.09>), retrieved on December 2019.
- Novita, D. 2012. The Effectiveness of Collaborative Strategic Reading (CSR) for Teaching Reading Comprehension at Muhammadiyah University of Sidoarjo. *Educate Jurnal Pendidikan Bahasa dan Sastra*, 1(1):1-12.
- ParamitaDarmayanti, P. A., Tantra, D. K., & Artini, L., P. 2013. The Effect of Modified Collaborative strategic Reading and Vocabulary Mastery on the Reading Competency of the Second Semester Students of

- Rosalina, A. 2014. The Influence of Collaborative Strategic Reading (CSR) Technique on Student's Achievement in Reading Comprehension of Narrative Text. Unpublished Thesis. Jakarta: Syarif Hidayatullah State Islamic University.
- Sunggingwati, D. & Nguyen, H. T. M. 2013. Teachers' Questioning in Reading Lessons: A Case Study in Indonesia. *Electronic Journal of Foreign Language Teaching*, 10910: 80-95.
- Borg, Walter R. and Gall, Meredith D., and Joyce P. 2003. *Educational Research*, 7th Edition. New York: Pearson Education, Inc.
- Vaughn, S., Klingner, J.K., Swanson E. A., Boardman, A. G., Roberts, G., Mohammed, S.S., & Stillman-Spisak, S.J 2011. Efficacy of Collaborative Strategic Reading with Middle School Students. *American Educational Research Journal* Month XXXX, XX(X): 1-27.
- Wichadee, S. 2011. Developing the Self-Directed Learning Instructional Model to Enhance English Reading Ability and Self-Directed Learning of Undergraduate students. *Journal of College Teaching & Learning*, (Online), 8(12): 42-52, (<http://www.cluteinstitute.com/ojs/index.php/TLC/article/viewFile/66620/6685>), retrieved on January 8, 2020.