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**THE EFFECTIVENESS OF COLLABORATIVE STRATEGIC READING (CSR) TO TEACH
CONTENT AREA READING COMPREHENSION VIEWED FROM STUDENTS'
INTELLIGENCE**

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ABSTRACT – *This research aims at revealing: (1) whether or not Collaborative Strategic Reading (CSR) strategy is more effective than lecturing strategy in teaching content area reading comprehension; (2) whether the students who have high intelligence have better content area reading comprehension ability than those who have low intelligence; and (3) whether there is an interaction between teaching strategies and intelligence in teaching content area reading.*

This experimental research was carried out in MAN 1 Bojonegoro in the academic year of 2012/2013 from September to November 2012. The population was the first semester of Rintisan Madrasah Bertaraf Internasional (RMBI) students in the academic year of 2012/2013. The number of population was three classes (72 students) that consisted of XI-Bilingual 1, XI-Bilingual 2, and XI-Bilingual 3. The samples were XI-Bilingual 2 as the experimental group and XI-Bilingual 3 as the control group. Each group consisted of 24 students. The experimental group was treated by using Collaborative Strategic Reading (CSR) Strategy, while the control group was treated by using Lecturing Strategy. The post-test was conducted in form content area reading comprehension test. Before the content area reading comprehension test was administered to the both groups, it was firstly tried out to non-sample class to know the validity and the reliability of the test. Then, the data from the post-test were described using descriptive statistics and were tested their normality and homogeneity. It was found out that the data were in normal distribution and homogeneous. After that, the data were analyzed using ANOVA and Tukey test.

The data analysis shows that: (1) Collaborative Strategic Reading (CSR) Strategy is more effective than Lecturing Strategy in teaching content area reading; (2) Students with high intelligence have better content area reading comprehension ability than those having low intelligence; and (3) There is no interaction between teaching strategies and intelligence in teaching content area reading.

Collaborative Strategic Reading (CSR) is an effective strategy in teaching content area reading for both high and low intelligence students. Therefore, it is recommended that: (1) teachers should be well-trained in using Collaborative Strategic Reading (CSR); (2) the students need to get accustomed to learning reading in content areas (science and social study); (3) the school needs to upgrade teachers' competence; and (4) future researchers may conduct replication research with different sample and condition.

Keywords: *Content area reading, Collaborative Strategic Reading, Lecturing*

INTRODUCTION

Meltzer (as cited in Azevedo, 2009: 1) annotates that high school students need to continue to develop additional literacy skills beyond those acquired in early

learning to read processes, in order for them to understand academic content available from text sources, communicate effectively, participate in a variety of communities, and negotiate in the world.

Since English starts to be taught in content subjects, most senior high school students get difficulty in reading expository texts which is used in content area reading. Many research results indicated that the ability of Indonesian high school students to read English texts is very low (Hamra, et al., 2010: 28).

One of indicators of the teaching reading in content subject failures is that students are not able to read English texts with complete comprehension. This is because the role of teacher in teaching reading is not maximum.

Some adolescent readers in senior high schools are continuously struggling with content area texts because the skills and strategies necessary to understand these texts are not being modeled, and taught uniformly in every subject area (Hirsch, 2003). They are not provided with good reading learning stages for the sake of comprehension development.

Not with standing, to comprehend any texts, students require two crucial distinctive reading stages. It is in line with Jeanne Chall in Azevedo (2009: 3) that students' reading comprehension can be achieved by: 1) learning to read, and 2) reading to learn. More current thinking about teaching reading suggests that these stages should not be sequential, but rather developed simultaneously throughout the learners' experience.

However, since the students may not always be taught to read to learn while

learning to read and be provided with an appropriate balance of expository text in content subjects, they may not be prepared to respond well to the tasks of reading texts given, therefore creating what appears to be a "slump" in reading performance.

In addition, teacher's inappropriate reading strategy selection determines students' comprehension failure especially in teaching content area reading. Teacher frequently neglects the importance of innovative reading strategy in the classroom. The use of appropriate reading strategy will lead to the students' reading comprehension success. Power (2012: 1) states that strategy it self is a plan developed by a reader and facilitated by the teacher to assist in comprehending and thinking about texts, when reading the words alone does not give the reader a sense of the meaning of a text.

Graesser in Abidin and Riswanto (2012: 192) states that strategy plays a prominent in comprehension because readers use them to construct the coherent mental representation and explanation of situation described in the text. Comprehension strategies are also regarded as deliberate and goal oriented processes used to construct meaning from text.

The goals of reading comprehension strategies according to U.S. Department of Education, National Center for Education Statistics are to a.) easily

generalize what was read; b.) come up with new ideas, and; c.) understand the text. In particular, the use of deeper level of strategies such as predicting upcoming text content, generating and answering the questions, constructing self-explanation and clarification, capturing the gist of the text, and monitoring comprehension seems to promote good reading comprehension (McNamara as cited in Abidin and Zainol, 2012: 192).

Azevedo (2009: 4) announces that although the success of students' comprehension in reading is highly influenced by the teacher's reading strategy, some student's literacy needs are missed by schools and they do not get the support they need in order to be successful readers in the content areas. Vacca (as cited in Azevedo, 2009: 4) states that supports the importance of reading strategy in the content areas since reading is a major means to obtaining information and is expected in every subject taught.

Based on the background of the research above, the writer formulates some research objectives: 1) whether or not Collaborative Strategic Reading (CSR) strategy is more effective than lecturing in teaching content area reading comprehension at the eleventh year students of *Rintisan Madrasah Bertaraf Internasional* (RMBI) MAN 1 Bojonegoro in the academic year of 2012/2013; 2) whether or not students having high intelligence have better reading

comprehension than those having low linguistic intelligence of the eleventh year students of *Rintisan Madrasah Bertaraf Internasional* (RMBI) MAN 1 Bojonegoro in the academic year of 2012/2013; 3) whether or not there is an interaction between teaching strategies and students' intelligence in teaching reading.

Musthafa (1999: 1) declares that content area reading is a learner-centered strategic intervention to help learners to develop into independent readers who can strategically use supplemental reading and other learning strategies to acquire new knowledge in the content subjects they research. It is in line with Perfetti (1991: 329) that some principles and strategies can be derived from what has been known relative to the nature of comprehension of "subject matter genre", the general patterns of textual organization of the content area text, the nature of background knowledge, and cognitive processes involved in reading to learn from content-specific expository prose.

Different reading strategies are needed in order to comprehend the type of text students are expected to interpret; therefore, teachers of every subject should be teaching the specialized reading skills of their content area to assist students in acquiring academic content from text sources. Two alternative teaching reading strategies observed in this research are lecturing

and Collaborative Strategic Reading (CSR).

Lecturing is an existing conventional strategy used by the content teachers. According to McIntosh (1996: 96) points out that lecturing is frequently a one-way verbal communication unaccompanied by discussion, questioning, or immediate practice. There are three steps of lecturing strategy used in this research:

Pre-reading Activity

Preparation: (Giving proper motivation to the students, Writing an outline of lecture main points, Introducing the lesson by giving examples and personal experiences related to the subject of the lesson) This can be done by the assistance of the materials the teachers will want to use (powerpoint slides, LCD projector, etc), Putting questions (Such as: *what is the picture/video about?*, *what do you know about the topic?* and *can you tell me what will we learn?*)

While reading activity

Presentation (Explaining the relevance of the topic. (Why should they listen? Why is this topic important?), Engaging the class in the lecture, Monitoring students' understanding by asking students questions and also encouraging them to ask questions.

Post reading activity

Ending the lecturing (Summarizing today's material), Reinforcing teachers' main points, Having students apply what

they learned by giving them practice exercises or a homework assignment to complete outside of class (giving evaluation).

Meanwhile, Collaborative Strategic Reading (CSR) is a combined teaching reading strategy used to stimulate the students' comprehension on a text. According to Kligner and Vaughn (cited in Bremer et al., 2002: 1) define Collaborative Strategic Reading (CSR) is a set of instructional strategies designed to help students with diverse abilities acquire and practice comprehension strategies for use with informational text. There are some steps of Collaborative Strategic Reading (CSR), such as:

Pre-reading activity

Step 1: Whole class introduction. The teacher introduces the topic, teaches key vocabulary, and provides instructions.

Step 2: Cooperative group activity (during preview, click and clunk, get the gist, and wrap up). Each group member plays an assigned role and fills out a CSR learning log during the activity.

Previewing:

Addressing some questions related to the topic discussion, such as: *Brainstorm*—the teacher prompts students to think about what they learn when they watch a sneak preview of slide and videos. The questions may be: *What is the picture/video about* and *what do we know about the topic?* *Predict*—the teacher asks students to make prediction about what they will learn.

While reading activity

Clicking and clucking (Are there any parts that are hard to understand (clunk)?, (How can the clunk be fixed?)

Getting the gist (What is the most important thing?, What is the most important idea about the thing?)

In teaching reading, internal factors play important roles. One of the most important internal factors that influence students' reading comprehension is the students' intelligence. Intelligence is included in cognitive ability which is very influential and plays an important role in the process of teaching and learning. Gardner (1990: 597) states that intelligence is the ability to solve problems or to develop outcomes and products that are valued in one or more cultural settings.

Based on the theories above, the writer formulates the hypotheses of the research as follows: 1) Collaborative Strategic Reading is more effective than lecturing strategy for teaching content area reading at the eleventh year students of *Rintisan Madrasah Bertaraf Internasional* (RMBI) MAN 1 Bojonegoro in the academic year of 2012/2013; 2) Students having high intelligence have better ability in content area reading than students having low intelligence at the eleventh year students of *Rintisan Madrasah Bertaraf Internasional* (RMBI) MAN 1 Bojonegoro in the academic year of 2012/2013; 3) There is an interaction between teaching strategies and the

students' intelligence in teaching reading at the eleventh year students of *Rintisan Madrasah Bertaraf Internasional* (RMBI) MAN 1 Bojonegoro in the academic year of 2012/2013.

RESEARCH METHOD

This research was carried out in September to November 2012 at the first semester of the eleventh year Bilingual classes of *Rintisan Madrasah Bertaraf Internasional* (RMBI) MAN 1 Bojonegoro in the academic year of 2012/2013.

The research method that was used in this research was experimental research. The writer examined the effectiveness of the content based reading strategy (Collaborative Strategic Reading) in subject matters (Biology). Factorial design is used to extend the number of relationships that were examined.

There are at least two groups in this experiment, namely experimental and control group. The experimental group is the class that was taught by using Collaborative Strategic Reading (CSR) strategy and the control group is the class that was taught by using lecturing strategy. They were given different treatment. After the treatment, the groups were given post-test. In addition, before the treatment, the students were classified based on their intelligence. The students' intelligence is classified into high and low.

The population of the research was the first semester students year eleven of

Rintisan Madrasah Bertaraf Internasional (RMBI) MAN 1 Bojonegoro in the academic year of 2012/2013. Meanwhile, the samples of the research were XI Bilingual 2 as the experimental class and XI Bilingual 3 as the control class. Each class consisted of 24 students.

There are two kinds of strategies used in collecting data. They are test and documentation about the prior students' intelligence score. This research used the objective type test in the form of multiple choices with five options.

The writer used a descriptive analysis and inferential analysis in this research. Normality and homogeneity were used before testing the hypothesis. Moreover, one statistical device that is appropriate for factorial design is analysis of variance (ANOVA). The writer used two independent variables, dealing with this research, the teaching reading strategies and intelligence which were divided into two kinds, namely, high intelligence and low intelligence.

It can be clued that there are two independent variables, ANOVA is called 2 x 2 ANOVA. H_0 is rejected if $F_0 > F_t$. If H_0 is rejected the analysis is continued using Tukey test.

RESULTS OF THE RESEARCH AND DISCUSSION

ANOVA Test (Multifactor Analysis of Variance)

The hypothesis testing is to know whether the null hypotheses (H_0) is

rejected or accepted. Multifactor Analysis of Variance (ANOVA) is used to test the hypotheses.

Statistically, the H_0 (null hypotheses) is accepted if F_0 is lower than or the same as F_t ($F_0 \leq F_t$). On the other hand, H_0 (null hypotheses) is rejected if F_0 is higher than F_t ($F_0 > F_t$).

Table 1 The Summary 2x2 Multifactor Analysis Variance

Source of variance	SS	df	MS	F ₀	F _{t(0.05)}
Between columns	7500	1	7500	186.44	4.05
Between rows	4332.00	1	4332	107.69	4.05
Columns by rows (interaction)	243	1	243	6.04	4.05
Between groups	12075.00	3	4025		
Within groups	1770.00	44	40.23		
Total	13845.0	47			

Based on the table above, it can be interpreted that:

1. Collaborative Strategic Reading (CSR) is More Effective than Lecturing Strategy in Teaching Content Area Reading

F_0 between columns (186.44) is bigger than F_t at the level of significance $\alpha = 0.05$ (4.05). H_0 is rejected and the difference between columns is significant. It can be concluded that teaching content area reading using Collaborative Strategic Reading (CSR) to eleventh year students of *Rintisan Madrasah Bertaraf Internasional* (RMBI) MAN 1 Bojonegoro is significantly different from the one using Lecturing Strategy. The mean score of students taught using Collaborative Strategic Reading (CSR) (75.75) is higher

than the one of those taught using Lecturing Strategy (50.75). In other words teaching content area reading using Collaborative Strategic Reading (CSR) is more effective than the one using Lecturing strategy.

2. Students with High Intelligence Have Better Content Area Reading Achievement than Those with Low Intelligence

F_0 between rows (107.69) is bigger than F_t at the level of significance $\alpha= 0.05$ (4.05). H_0 is rejected and the difference between rows is significant. It can be concluded that students having high intelligence are significantly different from those having low intelligence. The mean score of students having high intelligence (73) is higher than the one of those having low intelligence (54). It can be concluded that the students having high intelligence have higher content area reading comprehension than students having low intelligence.

3. There is An Interaction Effect between Teaching Strategies and Students' Intelligence in Teaching Content Area Reading Comprehension

F_0 interaction (6.04) is bigger than F_t at the level of significance $\alpha= 0.05$ (4.05) because F_0 interaction is higher than F_t , H_0 is rejected and it can be concluded that there is interaction effect between the

two variables, teaching strategies and intelligence on the students' reading.

Tukey Test

From hypothesis testing above, it can be seen that there is interaction effect between the two variables, teaching strategies and intelligence. So, calculation must be continued using Tukey test. It shows as follows:

Table 2. The Summary of Tukey Test

PAIR	TUKEY (q_0)	CRITICAL ($q_{t(0.05)}$)	STATUS
$A_1 - A_2$	19.31	2.92	$q_0 > q_t$
$B_1 - B_2$	14.68	2.92	$q_0 > q_t$
$A_1B_1 - A_2B_1$	11.20	3.08	$q_0 > q_t$
$A_1B_2 - A_2B_2$	16.11	3.08	$q_0 > q_t$

Based on the summary of Tukey test above, it can be concluded that:

a. Collaborative Strategic Reading (CSR) Compared with Lecturing Strategy

$$q = \frac{\bar{x}_{c_1} - \bar{x}_{c_2}}{\sqrt{\text{error variance}/n}} = \frac{75.75 - 50.75}{\sqrt{40.23/24}} = 19.31$$

From the computation above, it can be seen that q_0 (19.31) is higher than q_t (2.92). Because q_0 between columns (19.31) is higher than q_t (2.92), the difference between columns is significant. It can be concluded that teaching content area reading using Collaborative Strategic Reading (CSR) to the eleventh year students of *Rintisan Madrasah Bertaraf Internasional* (RMBI) MAN 1 Bojonegoro significantly differs from the one using Lecturing Strategy. The mean score of students taught by Collaborative Strategic Reading (CSR) (75.75) is higher than the one of those

taught using Lecturing Strategy (50.75). It means that teaching content area reading using Collaborative Strategic Reading (CSR) to the eleventh year students of *Rintisan Madrasah Bertaraf Internasional* (RMBI) MAN 1 Bojonegoro is more effective than the one using Lecturing Strategy.

b. Students Having High Intelligence Compared with Ones Having Low Intelligence

$$q = \frac{\bar{x}r_1 - \bar{x}r_2}{\sqrt{\text{error variance}/n}} = \frac{73 - 53.8}{\sqrt{40.23/24}} = 14.68$$

From the computation above, it can be seen that q_o (14.68) is higher than q_t (2.92). Because q_o between rows (14.68) is higher than q_t (2.92), the difference between rows is significant. It can be concluded that the students who have high intelligence are significantly different in their content area reading comprehension from students who have low intelligence. The mean score of students having high intelligence (73) is higher than the mean score of those who have low intelligence (54). So, the students who have high intelligence have a better content area reading comprehension than the students who have low intelligence.

c. Comparing Students Having High Intelligence Taught Using Collaborative Strategic Reading (CSR) and Lecturing Strategy

$$q = \frac{\bar{x}c_1r_1 - \bar{x}c_2r_1}{\sqrt{\text{error variance}/n}} = \frac{83 - 63}{\sqrt{40.23/12}} = 11.20$$

From the computation, it can be seen that q_o (11.20) is higher than q_t (3.08). Because q_o between columns (11.20) is higher than q_t (3.08), the difference between columns is significant. It can be concluded that the students who have high intelligence who are taught using Collaborative Strategic Reading (CSR) is significantly different in their content area reading comprehension from the students who have high intelligence who are taught by using Lecturing Strategy.

The mean score of students having high intelligence who are taught by using Collaborative Strategic Reading (CSR) (83) is higher than the mean score of those who have high intelligence who are taught by using Lecturing Strategy (63). So, it can be concluded that Collaborative Strategic Reading (CSR) is more effective than Lecturing Strategy to teach content area reading comprehension for the students who have high intelligence.

d. Comparing Students Having Low Intelligence Taught Using Collaborative Strategic Reading (CSR) and Lecturing Strategy

$$q = \frac{\bar{x}c_1r_2 - \bar{x}c_2r_2}{\sqrt{\text{error variance}/n}} = \frac{69 - 39}{\sqrt{40.23/12}} = 16.11$$

From the computation above, it can be seen that q_o (16.11) is higher than q_t (3.08). Because q_o between columns (16.11) is higher than q_t (3.08), the

difference between columns is significant. It can be concluded that the students who have low intelligence who are taught by using Collaborative Strategic Reading (CSR) are significantly different in their content area reading comprehension from the students who have low intelligence who are taught by using lecturing strategy. The mean score of those who have low intelligence who are taught by using Collaborative Strategic Reading (CSR) (69) is higher than the mean score of those who have low intelligence who are taught by using lecturing strategy (39). So, it can be concluded that Collaborative Strategic Reading (CSR) is more effective than Lecturing Strategy to teach content area reading comprehension for the students who have low intelligence.

Based on the result of point c and d, Collaborative Strategic Reading (CSR) is more effective than lecturing Strategy to teach content area reading comprehension for both high and low intelligence students.

Discussion of Results of the Research Collaborative Strategic Reading (CSR) is More Effective Than Lecturing Strategy

Based on the findings of the research, the writer draws a conclusion that the implementation of Collaborative Strategic Reading (CSR) is effective to help students in improving students' content area reading comprehension especially in Biology.

Collaborative Strategic Reading (CSR) was designed to facilitate reading comprehension for students with reading, learning, and behavior problems included in science and social study reading text (Klingner et al., 2001: 221-234).

CSR preview and clunk stages help students' retention on reading (Abidin and Riswanto, 2012: 194). In addition, CSR is metacognitively used to obtain students' learning experiences by principle of planning, self-monitoring, and evaluating in content area reading texts (Elkaumy, 2004: 10).

Meanwhile, CSR can promote the students' cooperative learning as well. It is in line with Slavin (as cited in Hitchcock et al., 1995: 59) that cooperative learning technique principle in teachers' learning strategy can improve better learning result because the students can discuss and solve the problems together.

CSR is designed to prevail problems in text-related learning vocabulary (Klingner, 2004: 292). The English text used in content area reading enables students to get barriers in understanding the vocabulary in the texts. The content terms used seem to be difficult for students. The intervention of reading strategy using CSR can help the students solve the problems during encoding the text using fix-up strategies in CSR clunk stage.

From the statements above, it can be concluded that Collaborative Strategic Reading (CSR) has some advantages such as: (1) promoting students' academic achievement in content area reading; (2) increasing students' retention; (3) enhancing students' satisfaction with their learning experience; (4) developing students' social skills; and (5) improving English content terms vocabulary.

On the contrary, lecturing is not quite effective to be the primary means of instruction. Cashin (1985: 1) states that the most serious is that lecturing is not suited for higher levels of learning comprehension.

Application, analysis, synthesis, evaluation and creativity that must be learned by doing. The students seem to be passive learners, has little control over the flow of information, and is reduced to playing a stenographic roles. It is in line with Turnwald et al., (1993), Becker and Watts (1996), Becker (1997) cited in Augustiniene (2004: 73) that large groups format tend to encourage passive learning.

Furthermore, lecturing strategy is less effective for long term retention than the strategies where the participants are more actively involved (Turnwald et al.,: 1993, Hake: 2002, McKeachie: 2002, Ramsden: 2000, Cantillon: 2003) cited in Augustinien (2010: 74). The teachers tend to convey the knowledge orally and minimize the students critical thinking in form of questioning and remembering

the details of the lessons. Speech skills, cooperative group thinking, and motor skills, for example, are difficult to teach with the lecture strategy (Cashin, 1985: 99).

Lecturing emphasizes on one way verbal communication. Anderson and Krathwohl (cited in Cashin, 2010: 1) state that lecturing is especially useful to convey knowledge or factual information. Furthermore, lecturing is also an excellent way to provide overviews or summarizations of course material, to draw together diverse elements, and to show connections between concepts.

Students with High Intelligence Have Better Content Area Reading Comprehension than Those with Low Intelligence

Intelligence was the ability to attend, process, and use information when reading (Nagliery and Reardon in Worth, 2005: 2). This is in line with Wechsler in Worth (2005: 2) that the components of intelligence related to reading include full scale intelligence, verbal comprehension, working memory, perceptual reasoning, and speed of processing. Vocabulary comprehension and working memory are important in long term-learning of new words and reading.

The ability to comprehend the lessons is influenced by the level of intelligence. Students with high intelligence tend to have better comprehension in learning any lessons

including reading in subject contents.

The high intelligence students are easily able to develop cognitive thinking process fast. They are motivated to learn and compete to obtain good achievement. There is a relationship between reading and high intelligence. Amstrong in Rahimi et al., (2011: 157) state that high intelligence is theoretically considered to be the most relevant ones to reading comprehension.

On the contrary, students with low intelligence feel difficult to understand the reading texts. They do not understand easily the information in the texts. They get confused to recognize parts of speech through reading passage, misplaced the correct part of speech in reading passage. Some of them still get difficulty in finding the factual information and still do not know the meaning of each sentence. It is because low intelligence students fail to master basic reading process such as comprehension despite intelligence and educational opportunity.

Shaywitz in Worth (2005: 22) states that for the two necessary parts of reading assessment are decoding and comprehension. In addition, low intelligence students evidenced difficulty with main idea formulation, memory of details, vocabulary, summarization, and inferencing when reading or listening (Bakken and Mastrioperi as cited in Worth, 2005: 30).

Students with poor reading comprehension frequently had difficulty in acquiring word level reading skills and inordinate difficulties mastering the alphabetical principle in learning to read and extreme difficulties using grapheme phoneme correspondences to decode words (Shaywitz in Worthz. 2003: 30).

There is No Interaction between Teaching Reading strategies and Intelligence

Intelligence and reading comprehension has close relationship. Based on the research finding, high intelligence accounted for a good part of the variance observed in the reading comprehension ability of the learners. In effect, reading comprehension, as suggested by Smith (as cited in Rahimi, 2011: 166) is a multidimensional process consisting of linguistic, social, and cognitive processes. All these processes are involved in successful comprehension. Thus, high intelligence, being a cognitive trait, accounts for some part of comprehension.

Amstrong cited in Rahimi (2011: 157) declares that among eight general or multiple intelligence, emotional and intelligence theoretically considered to be the most relevant ones to reading comprehension. In addition, as Duraiswamy (cited in Rahimi, 2011: 157-158) suggests that emotional intelligence must be seriously attended to in teaching reading comprehension because

emotional awareness helps bring language to consciousness and can enable readers to understand the ideas mentioned in a text much better. Meanwhile, intelligence has been assumed to be the most important domain of intelligence contributing to reading comprehension performance.

Students with high linguistic and emotional intelligence tend to have better comprehension in learning reading in subject content. The high intelligence students are easily able to develop cognitive thinking process fast. They are motivated to learn and compete to obtain good achievement. There is a relationship between reading and high intelligence. Armstrong in Rahimi et al. (2011: 157) states that high intelligence especially considered to be the most relevant ones to reading comprehension.

Johnson and Johnson et al., (as cited in Abidin et al., 2012: 195) state that the use of Collaborative Strategic Reading (CSR) engages students to work in small group cooperatively, so they have opportunity to discuss and share the ideas among the members of the groups as well as develop their social skills. Collaborative Strategic Reading (CSR) is more effective to teach content area reading comprehension for the students who have high intelligence.

On the contrary, students with low intelligence feel difficult to understand the reading texts. They do not understand easily the information in the

texts. They get confused to recognize parts of speech through reading passage, misplaced the correct part of speech in reading passage. Some of them still get difficulty in finding the factual information and still do not know the meaning of each sentence. It is because low intelligence students fail to master basic reading process such as comprehension despite intelligence and educational opportunity. Shaywitz (as cited in Worth, 2003: 22) states that for the two necessary parts of reading assessment are decoding and comprehension. In addition, low intelligence students evidenced difficulty with main idea formulation, memory of details, vocabulary, summarization, and inferencing when reading or listening (Bakken and Mastroperi, 1997: 5).

Lecturing is not quite effective to be the primary means of instruction. Bloom et al., (1956) and Anderson and Krathwohl (2001) (as cited in Cashin, 2010: 1) state that the most serious is that lecturing is not suited for higher levels of learning comprehension, application, analysis, synthesis, evaluation, and creativity that must be learned by doing.

Finally, the result of this research shows that the effect of teaching strategies does not depend on students' intelligence. Thus, it can be concluded that there is no interaction between teaching strategies and students' intelligence.

CONCLUSION, IMPLICATION, AND SUGGESTION

Collaborative Strategic Reading (CSR) is more effective than Lecturing strategy to teach content area reading comprehension to the eleventh year students of *Rintisan Madrasah Bertaraf Internasional* (RMBI) MAN 1 Bojonegoro in the academic year of 2012/2013.

The students who have high intelligence have better content area reading comprehension than those who have low intelligence of the eleventh year students of *Rintisan Madrasah Bertaraf Internasional* (RMBI) MAN 1 Bojonegoro in the academic year of 2012/2013.

There is an interaction between the teaching strategies and intelligence in teaching content area reading comprehension to the eleventh year students of *Rintisan Madrasah Bertaraf Internasional* (RMBI) MAN 1 Bojonegoro in the academic year of 2012/2013.

Based on those findings, the conclusion is that Collaborative Strategic Reading (CSR) is an effective content area reading strategy to the eleventh year students of *Rintisan Madrasah Bertaraf Internasional* (RMBI) MAN 1 Bojonegoro in the academic year of 2012/2013. By using Collaborative Strategic Reading (CSR) students are getting more encouraged and motivated to study.

The implication of Collaborative Strategic Reading (CSR) to teach content area reading in Biology can generate the general reading indicators such as the

students are able to identify the topic and the purpose of the text, guess the meaning of unfamiliar words or phrases (the meaning of content terms) in the text, obtain explicit and implicit information, find the main idea of the text and explain the reference in the text.

Based on conclusion and implication earlier, there are some suggestions for the teachers, the students, school management, and other writers. The teachers must be well-trained and qualified to teach Collaborative Strategic Reading (CSR) and they must be able to analyze their students ability as the basis of determining appropriate instructional strategies.

The students need to get accustomed to learning reading in content areas (science and social study). The students need to foster English mastery because it plays role as a means of instruction in content area reading.

The school management needs to upgrade the teachers' competence by developing teachers' English mastery. In addition, The school needs to afford good books for teachers and students as complementary support to learn.

Meanwhile, other writers are expected to conduct replication research to ensure whether the result of the research is significant and consistent or not. It can be implemented with different methodology and subjects of the research in different schools contex.

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