READING IN ACTION THE EFFECT OF COLLABORATIVE STRATEGIES TOWARDS STUDENTS’ LEARNING ACTIVITIES AND READING COMPREHENSION

Edi Firman(1)
(firmaneddy3@gmail.com(1))
Faculty of Education for Language and Art
Mataram Institute of Teacher Training and Education

ABSTRACT
Reading is still considered as a difficult skill to be taught and learnt, some students have difficulties in comprehending the text and reading also regarded as passive activities instead of active activity. This Research is aimed to know the effect of collaborative strategies towards students' learning activities and reading comprehension. This research is quasi-experimental pre-test post-test design. The data were analyzed using paired samples, independent test and correlation. The result proved that the experimental post-learning activities are higher than pre-activities (83.27 > 61.20) and ttest 16.434. The independent test also clarified that the experimental group performed greater learning activities t (5.322 > 2.000). In Reading, the experimental post-test mean score is higher than pre-test (59.44 > 47.41), and ttest (4.237 > 2.021). The independent samples test confirmed that the experimental group ttest is higher than ttable. (3.777 > 1.980). Meanwhile the correlation analysis proved that rtest is smaller than rtable (0.134 ≤ 0.199) very low category. It can be concluded that collaborative strategies are effective towards students' learning activities and reading comprehension, although there is no correlation between learning activities and reading comprehension.

Keywords: Reading, Action, Collaborative, Activities, Comprehension
INTRODUCTION

Reading is one of the essential skills that need to be learnt in relation to language teaching and learning. It offers a creative approach in improving vocabulary mastery and lexical identification. It provides resources of knowledge which may stimulate the ways of thinking, and constitute comprehensive strategies in mastering language structures and sentence making skill. Those are some small role why reading is regarded as an important part to be involved in language teaching and learning.

The core idea of reading is referred to the ability of literatures comprehension, it does not mean that reading should occur in a clumsy way, but reading also should be considered as an active process of acquiring rather than passive activity and it should be designed and implemented with multiple purposes and models in intensifying the comprehensive comprehension. Reading is a part of activity, where the students are able to experience learning and material to connect them into comprehensive comprehension. Catherine (2002:15) highlights consequences of reading are part of the activity, and some activities lead to an increase in the knowledge a reader has.

In this point, reading is regarded as cognitive process and physical activity; cognitive process is the process of engaging the reading texts (words or Phrases) with the readers’ prior knowledge in order to facilitate them with the idea about what they are going to read, and help them to construct the meaning and message of the text and context. Meanwhile physical activity is not limited to the eyes, ears, and mouth activities. Moreover it also includes physical performance, active communication and collaborative working. Therefore reading teacher should urge the students to be actively involved in teaching learning process which lead them into deep understanding.

In fact some students still have some difficulties to comprehend the texts, the problems are not merely occurred on linguistic aspect, but also occurred on the ability to create schemata about what they are going read. Regarding to the students' learning activities, the performances were limited on reading texts, without some meaningful activities that challenge the students' knowledge, analysis, synthesis, evaluation and application which might stimulate the students’ interest and motivation to engage with learning process and materials.

Collaborative strategies constitute the combination of some strategies, they are; pair-reading aloud, questioning, visualizing, inferring and synthesizing. The strategies were proposed in order to facilitate the students with comprehensive comprehension by helping the students in creating the background knowledge and connecting it with the text and context before, during and after reading and it also helps the students
in experiencing the learning physically, cognitively and emotionally.

This study was intended to identify whether collaborative strategies effective towards students' learning activities and reading comprehension and additionally this study also aimed to know whether learning activities correlated to reading comprehension.

METHOD

This research is quasi-experimental research with pre and posttest design. Quasi-experimental design was implemented because the experiment was done in classroom setting Muijs (2004). Best and Kahn (2006) claim that quasi-experimental is implemented in natural school or classroom experiments. The design can be represented as:

\[
\begin{array}{c|c|c}
O_1 & X & O_2 \\
\hline
O_3 & C & O_4 \\
\end{array}
\]

Notes:

- \(O_1\) and \(O_3\): Pretest
- \(O_2\) and \(O_4\): Post-test
- \(X\): treatment of experimental group
- \(C\): treatment of control group

The population in this research was all of the second semester students of FPBS IKIP Mataram which were consisted of 238 students, the sample was selected by using cluster random sampling. There were 41 students in the experimental group and there were 39 students in the control group. This research consisted of 3 variables; 1 independent variable (collaborative strategies) and 2 dependent variables (learning activities and reading comprehension). Learning activities in this study also considered as moderator variable because it might be also affecting reading comprehension.

The instruments used in this study were observation and questionnaire for collecting the students' learning activities data and test was implemented to obtain the students' reading comprehension data. To analyze the research data, there were 3 test applied: first was the paired sample test, it was applied to know the effectiveness of collaborative strategies before and after treatment, second was independent samples test, it was used to answer the research hypothesis and comparing the experimental group score and control group score and third was Pearson correlation, it was used to indentify whether learning activities correlate to reading comprehension or vice versa.

THEORETICAL REVIEW

1. Collaborative Strategies

Brown (2000:113) notes strategies as specific methods of approaching a problem or task, modes of operation for achieving a particular end, planned design for controlling and manipulating certain information. Strategy is not a single performance, but it constitutes collaborative
activity to accelerate the goal accomplishment. It could be underlined that strategy should be combined with other strategies to accelerate the goal achievement and maximize its influence towards target learning. Moreillon (2007) proposes the goal of collaborative strategies for teaching reading comprehension is maximizing the impact to help the educators develop teaching strategies to ensure students achievement.

In this study, there are some strategies were combined into collaborative teaching learning strategy in order to facilitate and maximize the students' learning activities and reading comprehension. The strategies are consisted of:

a. Pair Reading Aloud

Reading Aloud strategy guides the students' knowledge to engage with the words, phrase, expression and finally to the text. Vaughn in Crawford et al (2005: 25) declares that pair reading is a technique for having pairs of students read a text closely for understanding. Stone (2009: 39) explains that the readers' ability to problem solve and decode unknown or unfamiliar words, phrase passages and expression and tone as appropriate and create a fluent dialogue, all of which allow them to comprehend the complexities and the subtleties of what is being read.

b. Questioning

Teachers commonly instigate questions after reading to recall the students' understanding about what they read. Brassell & Rasinski (2008: 84) underline that questioning is the most powerful ways for students to better comprehend what they read. Furthermore, Dorn and Soffos (2005) confirm that Deep comprehension is dependent on the reader's ability to "ask questions" before, during, and after the reading.

c. Visualizing

Berthoff in Fleckenstain et al (2008: 74) describes that visualizing, making meaning by means of mental images, is the paradigm of all acts of the mind: imagining is forming par excellence, and it is therefore the emblem of the mind's power. The students are supposed to be able create images on their mental brain, because this concept engage them to issues of the text and facilitate them to have a good comprehension.

d. Inferring

Inferring leads the readers to find clues, make prediction and draw conclusion. Tovani (2000: 101) elaborates that an inference is a logical conclusion not directly confirmed by the author. It is based on clues from the text and personal connections made by the reader. Moreillon (2007: 76) describes the significance of inference toward reading comprehension is to facilitate the reader to use the illustrations plus their prior knowledge and experience to interpret the text.

e. Synthesizing

Finally, synthesizing activity after reading is wedding process of all information from several resources and knowledge, finding agreement among texts, determining main ideas and make valuable judgments.
Bergeron & Wolff (2002: 11) pronounce that synthesizing is integrating information within and across a text; bringing together separate elements of a text to make a connected and meaningful whole.

Those strategies were not implemented by single performance, but they were mutually applied in teaching learning process, especially in reading phases; pre-reading, while-reading and post reading to optimize the students' ability in comprehending the reading texts. And furthermore the collaborative strategy was also used to stimulate the students' learning activities.

2. Learning Activities

Reading in action in this writing stands for learning activities that may engage the learners with teaching learning process an also connect the reader with what they are going to read. Kniep and Zocchia (2009: 13) state that "Engagement relates to the extent to which students are actively involved in their own learning". It means that engagement should help students to be able to make meaning of what they are learning, analyze information and solve the learning problems.

There are many activities that the students may perform as a basis of learning engagement, and the activities should cover cognitive domain, affective domain and psychomotor domain. In Line to those concepts Paul D. Dierich in Sudirman (2012:101) formulates some indicator of learning activities.

a. Visual Activities.

Visual activities involve; reading, pictures observation, experimenting, demonstrating and role playing

b. Oral activities

Oral activities refers to the students ability to express their ideas, connecting the ideas, giving and asking information

c. Listening activities

Listening is the activity to receive and process information from other resources

d. Writing activities

Writing activities are related to the students ability to express their ideas in form of written language, such us write a story, report, summarizing the story, doing the test etc.

e. Drawing activities

Drawing activities constitute the students capability to transfer their comprehension into picture, graphic, map or diagram

f. Motor activities

In this aspect, the students are demanded to be able to experience the learning, design and perform the learning, such us; make an experiment, role play etc.

g. Mental activities

Mentally, the students are predisposed to be able to memorize, analyze, solve the learning problems and make decision

h. Emotional activities

All aspect that relate to the learners emotion in teaching learning process are parts of emotional activities, such us; learning interest,
motivation, curiosity, bravery to explore ideas, hesitation, nervous etc.

3. Reading Comprehension

Jain & Patel (2008: 115) confirm that Reading is an active process which consists of recognition and recognition and comprehension skill. Snow (2002: 11) also defines reading comprehension as the process of simultaneously extracting and constructing meaning through interaction and involvement with written language. Interaction and involvement are the essential parts of comprehension which is entailed three elements those are; reader, text and activity.

a. The reader who is doing the comprehension, it includes all the capacities, abilities, knowledge, and experiences of that the reader brings to the act of reading

b. The text that is to be comprehended, it is broadly construed to include any printed text or electronic text.

c. The activity in which comprehension is a part, it includes the purposes, processes, and consequences associated with the act of reading.

Reading comprehension is not a passive activity in which meaning magically appears once the reader reads the words in text. Nevertheless, reading comprehension is an act of understanding what we are reading. It requires an intentional, active, interactive process that occurs before, during and after a person reads a particular piece of writing. Literally, reading and comprehension are different although they have the similarity regarding to the act/activity. But reading and comprehension have overpowering liaison. Without comprehension, reading is nothing more than tracking symbols on a page with the eyes and sounding them out.

Dorn and Soffos (2005: 14) recognize that comprehension is a complex process regulated by cognitive, emotional, perceptual, and social experiences. Therefore, the comprehension level classified into two categories;

a. Surface level

The surface level of comprehension is a literal level of understanding represented by the ability to recall factual information from the text. This retrieval process involves short-term memory; thus, this level of understanding directly relates to the recency of the reading

b. Deep level

The deep level of comprehension is a conceptual level of understanding that results from the reader’s ability to think beyond the text, thus integrating the author’s intentions with the reader’s point of view. At this level, the author’s message serves as a pivotal point in regulating the reader’s deeper thinking.

A. Reading Aspect

There are some aspects that teacher of reading should concern with:

a. Intensive Reading

The readers are leaded to have knowledge about what they read, understanding not merely the text
meaning, but also how the meaning is fashioned. Furthermore, Jain and Patel (2008) formulate characteristics of intensive reading; 1). This reading helps learner to develop active vocabulary, 2). Teacher play main role in this Reading, 3). Linguistic items are developed, 4). This reading aims at active use of language, 5). Intensive reading is reading aloud and 6). In intensive reading speech habit are emphasized and accent, stress, intonation and rhythm can be corrected.

b. Extensive Reading

The extensive reading is purposed to train the students to direct reading and fluent reading in target language with less guidance of the teacher. Ferris and Hedgcock (2009: 211) describe the term of extensive reading as fairly rapid, covers quantities of text, and intent by definition to read rather than to learn about reading or to dissect text.

Extensive reading offers readers crucial practice in applying schemata and strategies. They also formulate some characteristics of extensive reading, those are; Improves comprehension skills, Develops automaticity, Enhances background knowledge (schemata, both content and formal), Builds vocabulary and grammar knowledge (i.e., linguistic schemata), Improves production skills (speaking and especially writing) and Promotes confidence and motivation.

B. Reading Phases

In fashionable practice, reading is frequently applied into three phases: pre-reading, while-reading and post-reading stages.

1. Pre-reading

Pre-reading is applied to activate the students' knowledge about the reading subject. Murcia (1991: 202) underlines that the first goal of the pre-reading stage is founded upon notion, discussed earlier, the students prior knowledge and experience effect their comprehension of the material. Leading the learner to have prior knowledge will facilitate them to comprehend the topic, have some the preparation of the text and also motivate them have the reason for reading.

2. While-reading

This stage is then next level of reading phases which is intended to help the reader to be aware of the playwright's purposes, conduct the text structure understanding and to elucidate the text content

3. Post-reading

The last reading phases is aimed at reviewing the lesson context, it would be applied by consolidate and reflect about what has been read by the learner and in this stage the relational process of text to the students' background knowledge and interest are carried out.

Considering teaching reading as a second or foreign language, then the readers should have the idea about what they read or at least they have background knowledge of text. Cook (2008: 121) states that the meaning of a text is not just found in the sentences themselves, but it is also derived from the previous knowledge
stored in the reader’s mind and the processes through which the reader tackles it.

**FINDINGS**

1. Normality and Homogeneity

   Before the data were analyzed with $t$-test, it needs to administer the normality and homogeneity test of samples. The normality analysis in this study was Shapiro-Wilk and the homogeneity analysis was Levene’s test. The result of normality and homogeneity test is preserved on SPSS 21 below:

   ![Figure SPSS 21](http://ojs.ikipmataram.ac.id/index.php/joelt

   **Experimental Group Normality Test**

| GROUP | Kolmogorov-Smirnov $^a$ | Shapiro-Wilk |
|-------|-------------------------|-------------|
|       | Statistic | df | Sig. | Statistic | df | Sig. |
| SCORE |            |    |     |            |    |     |
| 1     | .102       | 41 | .200 | .961       | 41 | .165 |
| 2     | .146       | 41 | .027 | .955       | 41 | .105 |

   **Control Group Normality Test**

   ![Figure SPSS 21](http://ojs.ikipmataram.ac.id/index.php/joelt

   | GROUP | Kolmogorov-Smirnov $^a$ | Shapiro-Wilk |
|-------|-------------------------|-------------|
|       | Statistic | df | Sig. | Statistic | df | Sig. |
| SCORE |            |    |     |            |    |     |
| 1     | .098       | 39 | .200 | .977       | 39 | .588 |
| 2     | .107       | 39 | .200 | .978       | 39 | .634 |

   The first output explains that the experimental group significant value are higher than $\alpha = 5\%$ (1: 0.165 > 0.05 and 2: 0.105 > 0.05). Thereby the experimental group sample is normal. The second normality test output also prove that the (sig) value of control group is higher than $\alpha = 5\%$ (1: 0.588 > 0.05 and 2: 0.634 > 0.05). Based on the normality analysis above, it could be claimed that the data in this study are normal.

   ![Figure 4.a.2 SPSS 21](http://ojs.ikipmataram.ac.id/index.php/joelt

   **Experimental Test of Homogeneity of Variance**

   | SCORE | Levene Statistic | df1 | df2 | Sig. |
|-------|------------------|-----|-----|-----|
| Based on Mean | 1.939 | 1 | 80 | .168 |
| Based on Median | 1.981 | 1 | 80 | .163 |
| Based on Median and with adjusted df | 1.981 | 1 | 79.980 | .163 |
| Based on trimmed mean | 1.857 | 1 | 80 | .177 |

   **Control Test of Homogeneity of Variance**

| Levene Statistic | df1 | df2 | Sig. |
|-----------------|-----|-----|-----|
| SCORE              | Value | df | Sig. |
|-------------------|-------|----|------|
| Based on Mean     | .519  | 1  | .76  |
| Based on Median   | .533  | 1  | .76  |
| Based on Median and with adjusted df | .533  | 76.394 | .468 |
| Based on trimmed mean | .518  | 1  | .76  |

The Levene's price shown by all of the ρ values (sig), and the result indicated that both of the group ρ (sig) value is higher than α 5% (ρ (sig) value > 0.05), consequently. It might be claimed that the data are homogenous.

2. Inferential Statistics

The effect of collaborative strategies towards students' learning activities:

Figures 4.b.1. Learning Activities
Paired and Independent Sample Test:

Paired Samples Statistics

|       | Mean | N  | Std. Deviation | Std. Error Mean |
|-------|------|----|----------------|-----------------|
| Pair 1 | Pre_Test | 61.20 | 41 | 7.181 | 1.121 |
|       | Post_Test | 83.27 | 41 | 7.765 | 1.213 |

Paired Samples Test

| Paired Differences | t | df | Sig. (2-tailed) |
|--------------------|---|----|----------------|
| Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |
| Lower | Upper |
| Pair 1 | Pre_Test - Post_Test | -22.073 | 8.601 | 1.343 | -24.788 | -19.359 | -16.434 | 40 | .000 |

The first output on Paired Samples test explains that the learning activity mean score was statistically increase from pre-test to post-test (61.20 - 83.27) with the number of sample was 41 students.

The second output paired samples \( t_{\text{test}} \) clarify that the \( t_{\text{test}} \) is higher that \( t\)-table (16.434 > 2.021), the result is significant in \( \rho \) value (sig.) is smaller than \( \alpha = 5\% \) (0.001 < 0.05), and the third output confirms the effect of
collaborative strategies towards students' learning activities with equal variances assumed that the \( t_{\text{test}} \) is higher than \( t_{\text{table}} \) (5.322 > 2.000) in significant level 5%. The data analysis above proved that collaborative strategies are effective towards students' learning activities.

### Paired Samples Statistics

|            | Mean  | N    | Std. Deviation | Std. Error Mean |
|------------|-------|------|----------------|-----------------|
| Pre_Test   | 47.41 | 41   | 16.962         | 2.649           |
| Post_Test  | 59.44 | 41   | 14.474         | 2.260           |

### Paired Samples Test

| Paired Differences | t   | df | Sig. (2-tailed) |
|--------------------|-----|----|-----------------|
| Pre_Test - Post_Test| -12.024 | 18.171 | 2.838       | -17.760 | -6.289 | -4.237 | 40 | .000 |

### Independent Samples Test

|                  | \( F \) | Sig. | \( t \) | \( df \) | \( t_{\text{(2-tailed)}} \) | Mean Differences | Std Error Differences | 15% Confidence Interval of the Difference Lower | Upper |
|------------------|---------|------|---------|--------|--------------------------|-----------------|-------------------|---------------------------------------------|-------|
| Equal variances assumed | 0.000 | .988 | 3.777 | 76 | 0.000 | 11.942 | 3.059 | 5.459 | 17.823 |
| Equal variances not assumed | 8.979 | 77.012 | 0.000 | 11.942 | 3.049 | 5.477 | 17.806 |

(47.41–59.44). Referring to the \( t_{\text{test}} \) score, it is known that the \( t_{\text{test}} \) is higher than \( t_{\text{table}} \) in degree of freedom level (\( df \) 40) (4.237 > 2.021) with \( \rho \) value (\( \text{sig} \) < \( \alpha \) (0.01 < 0.05) in significant level 5%. And Lavene's equality of variances table indicates that the significant \( \rho \) value is 0.854 > \( \alpha \) 0.05, it means that the variances are equal. The data analysis proved that also effective towards students' learning activities and reading comprehension.

b. The Correlation between Learning Activities and Reading Comprehension.

Figure 4.c: The Correlation between Learning Activities and Reading Comprehension.
The Figure 4.c SPSS 21® provide evident that the value of Pearson correlation \(r\) is 0.134 with sig. (2-tailed) higher than \(\alpha\) value (0.402 > 0.05), the value claims that the correlation is very low category. it means that there is no correlation between learning activities and reading comprehension.

### DISCUSSION

The findings on the previous chapter evidently described the effectiveness of collaborative strategy (Pair Reading Aloud, Questioning, visualizing, inferring, and synthesizing) towards students' learning activities and reading comprehension, especially in comprehend narrative and explanation texts. This study also analyzed the correlation between learning activities and reading comprehension.

1. The Effectiveness of Collaborative Strategies towards Students' Learning Activities

The improvement of students' learning activities could be observed from questionnaire and observation because the learning activities referred to visual activities, oral activities, listening activities, writing activities drawing activities, motor activities, mental activities and emotional activities.

The significant effect of collaborative strategies towards students' learning activities also proved by the statistical analysis in findings, where in post-activities the students were performed better activities during teaching learning process compared to learning activities before treatment.

2. The Effectiveness of Collaborative Strategies towards Students' Reading Comprehension

The collaborative strategies were reciprocal applied in teaching learning process, the strategies were scattered into three phases of teaching reading: pre-reading, while-reading and post-reading. In pre-reading, pair reading aloud and questioning were applied to make the students familiar with word sounds and pronunciation, with the meaning of certain
vocabularies, in this phase the students also created the background knowledge about what they are going to read which would help them to comprehend the text. In while-reading, visualizing and inferring strategies were used in connecting and also confirming the background knowledge with text and context by having imagination image with strengthen the comprehension. Meanwhile in post-reading, synthesizing were implemented to challenge the students' knowledge about the text which were connected to the real context or the students' experiences, here, the students' also were challenged to be creative and brave in responding the texts they read.

Certainly, the improvement of the students' ability in comprehending the English texts was obtained after the implementation of collaborative strategies in teaching learning process. The statistical correlation clarified that there is a very low correlation between learning activity and reading comprehension or it might be assume that there is no correlation between learning activities and reading comprehension.

CONCLUSION

Learning activities referred to improvement of eight elements which constitute an inseparable part of activities in teaching learning process. Meanwhile collaborative strategies were sustainably applied in teaching learning process without disassociating the functions of each strategy. The collaborative strategies were implemented in three phases of reading: pre-reading, while-reading and post-reading, the strategies stimulated the students to be able to comprehend the texts comprehensively.

Based on the findings and discussion in chapter, this study came into three points of conclusion:

1. Collaborative strategies were significantly effective in improving the students’ learning activities
2. Collaborative strategies were effective towards the improvement of students’ reading comprehension
3. There no correlation between learning activities and reading comprehension.

In general it could be concluded that is no correlation between learning activities and reading comprehension. But it is admitted that
partly collaborative strategies are effective in improving the students' learning activities and it also effecting the students' ability to comprehend English texts especially narrative and explanation texts.

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