

COOPERATIVE TEACHING-LEARNING USING THE FISHBOWL TECHNIQUE FOR TEACHING READING

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ABSTRACT

This study was done to find out the effects of using cooperative learning with the Fishbowl technique with third year students from the English department at UIN-Ar-Raniry Banda Aceh. The main purpose of the study was to find out if students who were taught reading using the Fishbowl technique would achieve better performance in reading comprehension than those who were taught using the usual technique. Two classes were used as the sample from the target population, one class was the Experimental Group (EG) which got the Fishbowl technique treatment and the other class was the Control Group (CG) which got the standard treatment. The EG had 25 students and the CG had 30. The mean post test score from the EG was 76 while that from the CG was 63. The t-test showed that the EG result was significantly higher than that from the CG. Thus the EG students who were taught using the Fishbowl technique got better performances in reading than the CG who were taught by the usual technique. A questionnaire was distributed to the EG at the end of the treatment to find out the perceptions of the EG students towards the use of the Fishbowl technique in their reading class. The students' responses reached the level of *Strongly Agree* which means that they responded positively to this cooperative model of teaching-learning. Thus, based on the findings, it is suggested to other researchers and teachers who have problems with teaching reading comprehension to their students to try to use this type of teaching-learning technique as it might help to overcome their problems.

Key words: *Cooperative Learning, Fishbowl Technique, Reading Comprehension.*

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INTRODUCTION

Reading can be defined as an activity with a purpose in order to gain information, to verify existing knowledge, or to analyze the ideas of a writer. Brown (2001) has stated that reading comprehension is primarily a matter of developing appropriate, efficient comprehension strategies in order to reach the target of reading. This means that the common target of teaching-learning reading comprehension is to be able to read comfortably in the foreign language and to guide the reader's understanding of the text. Similarly Stovall (1998) has mentioned that the major goal for any reading activity is to comprehend or understand and to know the scientific concepts or the language that is being read. From that statement we can see that students should reach a level at which they do not feel a conscious strain while reading and they should acquire the ability to read and process the contents in the foreign language straight away. Moreover, to achieve this objective, a teacher has the responsibility of leading the students from their basic knowledge to reaching the goals of understanding the texts.

Thus, reading comprehension tests have always been a difficult area for many students. It is found that there are various interrelated barriers faced by the students in comprehending reading passages. On the students' side, difficulties stem from lack of effective techniques to use for understanding the meanings in the texts. The students are often slow to develop their abilities in certain tasks, such as picking out important story information, making inferences, and identifying story ideas. In addition, students often did not fully accept the purpose of instructions in the reading passages and often fail to see the relevance of an assignment, so that they do not read purposively. Such conflicts often lead to incomprehension because the students fail to complete the activities to be done after reading the passage. As Marshall and Rowland (1998) claim that if readers concentrate on their purpose for reading both their speed and comprehension could increase.

Consequently, in order to overcome such problems as above, one cooperative learning technique that is believed to be effective to increase the reading comprehension ability of students is the fishbowl technique. It has been introduced as a technique to help students, where it can be adapted with the use of role playing techniques to highlight conflicts and to solve various problems. According to Opitz (2008) the fishbowl technique is a technique used to increase participation and understanding of issues. The fishbowl process can be modified to allow

participation in a discussion, where everyone can participate equally in the group.

Based on the explanation above two questions were envisaged; they are:

1. Are the students taught reading comprehension using the fishbowl technique will achieve better results than those who are taught by some other technique?
2. What are the responses of the students towards the teaching of reading comprehension using the fishbowl technique?

LITERATURE REVIEW

The Fishbowl Technique

The Fish Bowl Technique is a way of leading a discussion in large groups. The technique is named after the seating arrangement, which looks like a goldfish bowl. The participants sit in two circles. There is an inner and an outer circle, where the outer circle of students sits around the inner circle of students. Students in the inner circle group engage in an in-depth discussion, while students in the outer circle group consider what is being said and how it is being said. Inner circle students are challenged to participate in a high-level discussion while the outer circle is able to listen to the discussion and critique content, logic, and group interactions.

Consequently, fishbowl processes provide a creative way to include the public in a small group discussion. The Fishbowl technique is a useful way for ventilating hot topics or for sharing ideas or information from a variety of perspectives. According to Brookfield and Preskill (2005) this technique serves two purposes to provide structure for in-depth discussions and to provide opportunities for students to model or observe group processes in a discussion setting. Kagan (2002) has said that the Fishbowl technique can be used in two distinct ways:

1. For brainstorming sessions: Choose a specific topic based on the group's needs or interests. A handful of seats are placed inside a larger circle. Participants who have something to say about the topic at hand sit in the center circle. Anyone sitting inside the fishbowl can also make a comment, offer information, respond to someone in the inner circle, or ask a question.
2. For structured observation of a group process: Participants in the inner fishbowl are given a specific task to do, while participants in the outside circle of the fishbowl act as observers of the group

process. The inner group works on its task together, and the outer group is asked to note specific behaviors.

In addition, Opitz (2008) states that fishbowl offers the class an opportunity to observe closely and learn about social interactions. This technique can be used in any content area. Meanwhile, Sterling (2006) has added that fishbowl technique is commonly applied as an outdoor activity by building communication interactively through discussion and analysis. These two reasons have made fishbowls popular in participatory group meetings and conferences. Additionally, according to Brookfield and Preskill (2005) there are other advantages of the fishbowl:

1. The Fishbowl is especially beneficial when using multicultural literature. Like K/W/L charts, a fishbowl allows the teacher to see what misconceptions students have and to address them. It also creates a safe forum for students to observe a discussion of cultural issues that might become heated. Because there is always a post-discussion analysis, fishbowls also allow a group to handle this together.
2. Students in the outside circle of a fishbowl can observe how specific individuals question, respond to, and find meanings in a text, which can be modeled in small-group reading circle discussions.
3. Fishbowls allow students to practice group discussion skills.
4. Fishbowls provide students with the opportunity to identify small-group discussion habits in an effort to improve upon them.
5. The fishbowl offers the class an opportunity to closely observe and learn about social interactions.
6. Fishbowls help students to become better listeners.

Students get feedback from peers and teachers about their own participation whether it is too dominant or too quiet, and we can use it in any content area. This is an ongoing process, and it takes time for students to develop the social skills necessary to have a thoughtful and sometimes highly agreeable discussion.

METHODOLOGY

Setting and Subjects

This study was carried out in the English department of the Tarbiyah faculty at UIN Ar-Raniry which is well-known as TEN. This department focuses on teaching English as a foreign language and

prepares its graduates to be teachers at schools or to become professional lecturers at a university.

The English Department is concentrating on education and teacher training particularly educating professional English teachers, and educating professional and prospective English teachers for Islamic Schools and for State Schools as well. Moreover, the population of this study was all the third year students in the English department at UIN Ar-Raniry. There were 82 students enrolled in the 2012/2013 academic year. They were divided into 3 classes, 25 students in unit 1, 27 students in unit 2, and 30 students in unit 3.

In addition, the sample for this research was selected by random sampling. Thus two reading classes were selected from the three classes (unit 1 and unit 3), with a total of 55 students. Thus the number of students in the experimental class (EG) was 25 students, 9 male and 16 female, while there were 30 students in the control group (CG), 12 male and 18 female.

Procedure

First there was a reading with a pre-test, then followed some reading with the treatment and finally a reading using the treatment with a post-test. Then the raw scores obtained from the EG and the CG from the pre-tests and the post-tests were processed to get the results. Both tests consisted of one reading followed by thirty questions about that reading; the questions examined four aspects via: main idea, details, word meanings, and inferences. Each question was scored 3.3 so the maximum score was 100 which was obtained by multiplying the score 3.3 with the number of questions, 30. The scores of the students in the test were calculated by multiplying the number of correct answers by 3.3.

Data Analysis

Some formulas were used in examining the first research problem, to calculate the mean, the standard deviation, and the t-test. Before the data was analyzed by the t-test, it was first tested for normality and homogeneity. In order to answer the second research question that is to find out the students responses toward the implementation of the fishbowl technique for teaching reading, the writer used a questionnaire with optional responses scored with a Likert scale with dummy numbers 4, 3, 2, and 1 as mentioned in Grounlund (1993).

RESULTS

The mean scores from the tests of the EG and the CG are set out in Table 1.

Table 1. Mean Scores from Pre-tests and Post-tests.

Experimental Group			Control Group		
No	Pre test	Post test	No	Pre test	Post test
25	57	76	30	57	63

Table 1 shows that the mean post test score from the EG was significantly higher than the post test score from the CG.

Normality Distribution Test for the Pre-test Scores

Based on the level of significance $\alpha = 0.05$ and $df = (1 - 0.05)$ (*the range of class-1*) = 5, the distribution label of chi-quadrat was $\chi^2_{(0,95)(5)} = 11.1$, it show that $\chi^2_{count} < \chi^2_{table}$ where $9.76 < 11.07$ which means that the control group were normally distributed.

Test of Homogeneity for results from Pre-tests of Both Groups

This test is intended to evaluate the equality of several populations of categorical data which is applied for the pre-test score of both groups. To reach the purpose, Ho (null hypothesis) and Ha (alternative hypothesis) should be formulated, namely:

Ho : the variance of experimental and control group is homogeneous.

Ha : the variance of experimental and control group is not homogeneous.

The criteria of examining hypotheses are Ho is accepted if $F_{count} < F_{table}$ and it is rejected if $F_{count} > F_{table}$. F_{count} is calculated through the following formula:

$$\begin{aligned}
 F_{count} &= \frac{S_1^2}{S_2^2} \\
 F_{count} &= \frac{41.7}{99.5} \\
 F_{count} &= 0.42 \\
 F_{table} &= F_{\alpha}(n_1 - 1, n_2 - 1) = F_{(0,05)}(25 - 1, 30 - 1) \\
 &= F_{(0,05)(24,26)} \\
 &= 2.66
 \end{aligned}$$

From the calculation above it was shown that the $F_{count} < F_{table}$ in which $0.42 < 2.66$, it can be concluded that both of variances are homogeneous for the pre-test. It means that both samples were homogenous.

The Independent t-test Analysis of the Pre-test Scores

The formula of t-test was used to examine the hypotheses in order to know whether or not the students who were taught by using fishbowl technique achieved a better performance in reading comprehension compared to those who were not; they are as follows:

Ho : The students who were taught reading comprehension by using fishbowl technique achieve a similar achievement with those who were taught reading by using conventional method.

Ha : The students who were taught reading comprehension by using fishbowl technique achieve a better performance than those who were taught reading by using conventional method.

The criteria of independent t-test by using 5% level of significance ($\alpha = 0.05$) are: if $t_{obtain} > t_{table}$, Ho is rejected

if $t_{count} < t_{table}$, Ho is accepted

The result proved the hypothesis that the students who were taught by using the fishbowl technique achieved a better performance in reading comprehension compared to those who were taught by using the conventional method.

Analysis of the results from the Questionnaire

Figures 1-3 show the students' responses towards their ability in reading comprehension of texts after the technique was implemented.

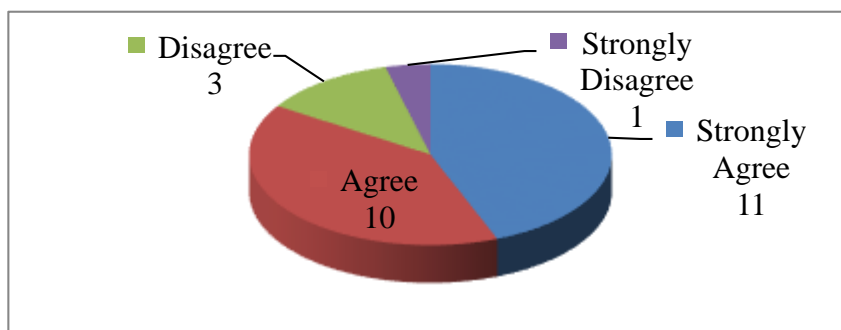


Figure 1. “Through the Fishbowl Technique the ability of students in reading comprehension of texts was improved”.

Figure 1 shows that 11 students strongly agreed that the fishbowl technique improved the reading comprehension ability of the students, 10 students agreed, and 3 students disagreed, and 1 student strongly disagreed with this statement. From this it can be concluded that the students agreed/strongly agreed that their ability in reading comprehension of texts was improved through the fishbowl technique.

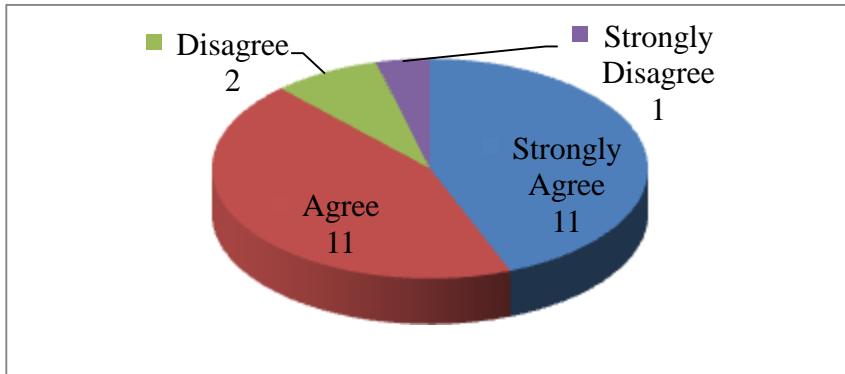


Figure 2. "The Fishbowl Technique can make students more confident to show their ability in reading comprehension".

Figure 2 shows 11 students strongly agree that this technique can make them more confident to show their ability in reading comprehension, 1 student strongly disagrees, 2 students disagree, and 11 students agree. This means that the students believe that teaching reading by using the fishbowl technique made the students more confident in learning reading comprehension.

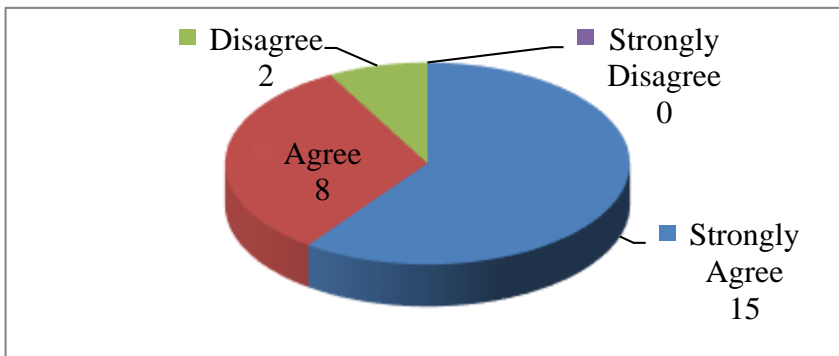


Figure 3. "The students enjoyed studying reading comprehension through the Fishbowl Technique".

Figure 3 shows that 15 students strongly agreed that the fishbowl technique made them enjoy studying reading comprehension another 8 students agreed, but 2 students disagreed. This means that the students believed that learning reading comprehension using the fishbowl technique was more enjoyable for the students (than the traditional technique).

DISCUSSION

The data from this study have been presented quantitatively. The activities of this research were the pre-tests, the teaching and learning using the reading process (the treatment), the post-tests, the analysis of the results from the tests and the questionnaires. The pre-tests were given to both groups at the first meeting. They were asked 30 questions related to the main idea, specific details, word meanings, and inferences without any treatment being done.

In the next meeting after conducting the pre-test the text was discussed and explained clearly by the lecturer and the researcher as the treatment. The lecturer used the conventional method with the CG for teaching reading comprehension.

The treatment for teaching reading using the Fishbowl technique with the EG was started by making the 25 students sit in 2 circles. An inner circle of 5 chairs was arranged in the center of the room, while a circle of 20 chairs was arranged around the outside of the inner circle. Meanwhile teaching reading with the CG the teacher did not give them any special treatment as was done with the EG, the writer just used the conventional method used for teaching reading but using the same materials and the same topic as the EG. At the end of the last meeting the post-test was given to both classes with the same reading text used for both tests. The scores from the pre-tests and the post-tests were analyzed by the researcher to get the results.

After calculating the test by using statistics and questionnaires by using Likert scale, first the writer discussed the results of which obtained from the pre-test and the post-test given to both groups. Next, the data from the tests was analyzed to find the means and the variance and tested for normality, homogeneity, and used for t-tests. The findings showed that the mean score for reading for the EG in the pre-test was 57 and that for the CG was also 57.

The variances in the results were calculated and tested and the figures showed that the results from both of the groups were normally

distributed. After the normality test and the homogeneity test on both classes, showed that the pre-test scores from both the EG and CG were homogeneous. The last step was the t-test where the result indicated that there was no significant difference in the pre-test data from both groups. In other words the EG and the CG were similar in terms of their initial ability in reading comprehension.

The means scores of the post-test result for both the EG and the CG were also calculated. The procedure was the same as for the pre-test. The post-test mean score for the EG was 76 and for the CG was 63 and the t-test showed that there was a significant difference between the mean scores from the EG and the CG for reading.

Thus the use of the Fishbowl technique helped the students to use the language since a language is used as means of communication in developing social interactions. The use of the Fishbowl technique in teaching reading is a way to improve and motivate students. As stated by Broussard (2004) motivation is one of the potential mediating processes whereby cooperative learning affects achievement. Furthermore, Brookfield and Preskill (2005) has stated that in the Fishbowl inner circles students engage in deep discussions. The students discuss the reading text, present or report on the results of the discussions, while the outer circle students listen to the discussions, observe, take notes on both content and group discussion and give comments or critiques.

This technique has improved the students reading skills because cooperative learning utilizes four basic elements. *Positive Interdependence*, students perceive that they need each other to complete the group's task. Teachers structure positive interdependence by establishing mutual goals (learn and make sure all other group members learn), joint rewards (if all group members achieve above criteria, each will receive bonus points), shared resources (each member receives only a part of the information), and assigned roles (summarizer, encourager of participation, recorder, etc.).

Face-to- Face Interaction, the students help each other's learning by discussing, sharing, and encouraging efforts to learn. Students explain, discuss, and teach what they know to their classmates in their group while the teachers structure the groups so that students sit and talk through each aspect of the assignment.

Individual Accountability, each student's performance is frequently assessed and the results are given to the group and to the individuals. Teachers structure individual accountability by giving an individual test

to each student or randomly selecting one member of the group to give the answer. Interpersonal and small group skills are effectively developed as students need and use these social skills. Teachers teach these skills as purposefully and precisely as academic skills. Collaborative skills include leadership, decision making, trust building, communication, and conflict-management skills (Villa & Thousand, 1987).

Lastly, *Group Processing*, each group needs some specific time to discuss how well the students are achieving their goals and maintaining activities as a group.

This last discussion was about the results from the questionnaire. The results showed that the use of the fishbowl technique significantly improved the reading comprehension ability of the EG students. However, the effectiveness of the Fishbowl technique was not only proved by the results from analysis of the post-test scores from the EG students but also from their responses to the fishbowl technique on the questionnaire. There were 16 items on the questionnaire classified into three general aspects: technique, motivation, and material. The questionnaire was in the form of closed questions with answers using a Likert scale. The responses to the questionnaire which was given to the 25 EG students revealed that the students strongly agreed with the implementation of the Fishbowl technique for teaching-learning reading comprehension.

CONCLUSIONS AND SUGGESTIONS

First, the findings showed that the use of the Fishbowl technique was an effective means to improve the reading comprehension ability of the students. This was proved by the results from the tests.

Second, the students responded positively toward the implementation of cooperative learning using the Fishbowl technique. This is proven from the answers to the questionnaire consisting of three general points; strategy, motivation, material. The overall mean score from the questionnaire reached the level of *strongly agree* which clearly means that there was a positive response towards the use of the Fishbowl technique. The strength of cooperative learning through the Fishbowl technique leads the students to work cooperatively to develop teamwork to solve their reading comprehension tasks. Accordingly the students worked together in their groups teaching each another, using

critical thinking, solving their problems, developing appropriate social skills and improving their reading comprehension.

In the end of this research, some suggestions are contributed in order to improve the teaching-learning process for reading comprehension.

Based on the findings, it is suggested that English teachers consider using this teaching-learning model for it offers some advantages that can help teachers improve and modify their teaching strategies particularly for improving the reading comprehension of their students, since by implementing this learning technique, their students can share their ideas and background knowledge to be able to compare information in a given passage with their own knowledge and values.

To get the maximum results from research, a researcher needs to be very well organized and well prepared for the teaching-learning process in the classroom by getting and studying all the reading materials in advance. Importantly, they have to learn about the weaknesses in the teaching technique that they will use in their research, so that they will be able to minimize those weaknesses.

The writer suggests that teachers give materials to students which will help to teach them about reading sub-skills such as main ideas, word meanings, details, references, inferences so that they will learn how to identify these in their new texts. The teacher should also give her students attractive authentic materials or texts for teaching reading comprehension that will cater to the interests of her students.

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