

THE USE OF JIGSAW TO IMPROVE STUDENTS READING COMPREHENSION

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ABSTRACT

This study aims to improve reading comprehension in English subjects using the Jigsaw method for students in class X Automotive Engineering at SMK Muhammadiyah Pekalongan. This type of research is Classroom Action Research. In the initial observation, the researcher used a questionnaire in the form of a reading comprehension instrument in English lessons with a rubric to get results in the form of scores. For class X English, the minimum completeness criterion is 75. Out of 31 students, only 11 (35%) students pass, whose scores are above 75, while 20 (65%) students do not complete under the KKM. The results of observations in learning from 31 students who were able to understand reading were only 11 children (35%). while the remaining 20 students (65%) could not understand the reading. Based on the conditions described above, the researcher will conduct research with the title: "Using Jigsaw to Improve Students' Reading Comprehension. The results of learning with the jigsaw method are very significant, namely reading comprehension in English lessons is good and correct, this is evident from the results in cycle I showing an average value of 91.18 out of 29 students, 28 students have completed it, while there is still 1 student which has not been completed because it is still below the KKM, namely 53.87, the highest score is 100, the lowest score is 53.87.

Key words: Reading comprehension, Jigsaw learning

INTRODUCTION

Education is something that must be obtained by every human being. Many studies are conducted with the aim of always improving existing education. Day by day, the development of learning models for quality education, both national and international levels become clearer. The development of education from year to year must be better, so that it fits the needs of the times which are always developing with the flow of globalization. This ongoing renewal process also has an impact on educational curricula in both schools and tertiary institutions, therefore educational curriculum reform needs to be carried out so that models and learning activities in class can spur the growth of creative, critical and active thinking.

Teachers have important roles in the implementation of learning in the classroom. In this case the role of the teacher is not only to have high academic abilities but also to be able to build a comfortable learning atmosphere for students. Being a good teacher must have four competencies, namely pedagogic, personality, social and professional. These four competencies are expected by the teacher to be able to create creative, critical and active learning so that students' motivation to learn can be increased and are always motivated to be even better. When student learning motivation is high, the knowledge and material provided will be easier to be understood.

The cooperative learning model with the Jigsaw type is expected to be able to overcome class problems that usually run passively, students who are usually not active are made to get used to express opinions in small group discussion forums. The students will have a high level of self-confidence and be more open so that students can develop arguments or opinions as well as their knowledge. In addition, the Jigsaw cooperative type emphasizes mutual cooperation learning, so it is suitable to be implemented in Muhammadiyah Vocational High School students because it upholds the culture of mutual cooperation. For the tenth grade English subjects the minimum completeness criterion is 75. Out of 31 student only 11 (35%) students pass, who get scores above 75, while 20 (65%) students did not complete under the minimum completeness criteria. The results of observations in learning from 31 students who were able to understand reading were only 11 children (35%) while the remaining 20 students (65%) could not understand reading comprehension. According to the author, if 11 students are empowered to help improve comprehension in order to be able to read English, maybe it can help in understanding reading well.

Based on the conditions described above, the researcher conducted research with the title: "The use of Jigsaw to improve students reading comprehension (A classroom Action Research the tenth grades SMK Muhammadiyah Pekalongan)

RESEARCH METHOD

This research was conducted with a quantitative approach. Quantitative research was conducted on class X automotive engineering -2 SMK Muhammadiyah Pekalongan. The implementation of the research was assisted by 2 teachers at SMK Muhammadiyah Pekalongan as observers and data collectors at the same time. In collecting data, the researchers used instruments in the form of questionnaires which were given to students from observation, pre-cycle during the English learning process in class. The data analysis technique in this study was carried out inductively, namely the analysis starting from data collection, data reduction, and data verification.

DISCUSSION

This research on the application of Jigsaw cooperative learning has a goal, namely to find out an increase in reading comprehension in English properly and correctly for students. Based on the research analysis, it was known that there was an improvement in reading comprehension in English properly and correctly for Class X automotive bodies. This can be seen from the increase in activities that reflect reading comprehension carried out by students during the learning process. The activities carried out by students met the criteria set out in the indicators regarding proper and correct reading comprehension in English for students and showed an increase during the Pre-cycle to Cycle I

Based on the results of the research and discussion, classroom action research on the basic competencies of narrative text related to folk legends for class X automotive bodies at SMK Muhammadiyah Pekalongan can be concluded as follows:

1. The application of the Jigsaw cooperative learning model can improve students' understanding of class X automotive bodies at SMK Muhammadiyah Pekalongan. The increase in reading comprehension in English properly and correctly can be seen in the increase in achievement indicators of students' reading comprehension in each cycle. By using observation, the results of students' reading comprehension were 65.87%, up 6.75% to 72.62% in the pre-cycle, then in cycle I it increased by 9.68%, initially the pre-cycle was 72.62%, then it became 82.30%.
2. The application of the Jigsaw cooperative learning model can improve students' understanding of class X automotive bodies at SMK Muhammadiyah Pekalongan. The increase in students' reading comprehension can be seen in the increase in achievement indicators of students' reading comprehension in each cycle. By using a questionnaire, the results of students' reading comprehension were 74.41%, up 4.85% to 79.26%.
3. The application of the Jigsaw cooperative learning model can improve students' reading comprehension properly and correctly in the basic competencies of narrative texts related to folk legends for class X automotive bodies at SMK Muhammadiyah Pekalongan. That matter can be seen from the increase in the percentage of completeness of student learning outcomes with the KKM limit of 75. Before the Jigsaw type cooperative learning model was implemented it was 54.84% then increased to 93.33%.

Table 16. Comparison of scores of reading comprehension in English properly and correctly Class X automotive body based on observation

Indicator	Score		Peningkatan
	Pre Cycle	Cycle I	Pre Cycle - Cycle I
Enthusiastic about learning	72.78%	81.67%	8.89%
Diligently do the task	76.67%	86.67%	10.00%
Confident in the face adversity	73.33%	84.44%	11.11%
Happier to learn and solve problems	75.00%	82.78%	7.78%
Can defend his opinion	72.22%	84.44%	12.22%
It's not easy to let go of things you believe in	70.00%	77.78%	7.78%
Happy to find and solve problems	68.33%	78.33%	10.00%
Average Score	72.62%	82.30%	9.68%

Source: Primary Data Processed Calculations are in the appendix

Based on the data above, it can be seen that there was an improvment in reading comprehension in English properly and correctly for Class X automotive body of SMK Muhammadiyah Pekalongan by implementing the Jigsaw cooperative learning model. The following data can be seen based on the graph:

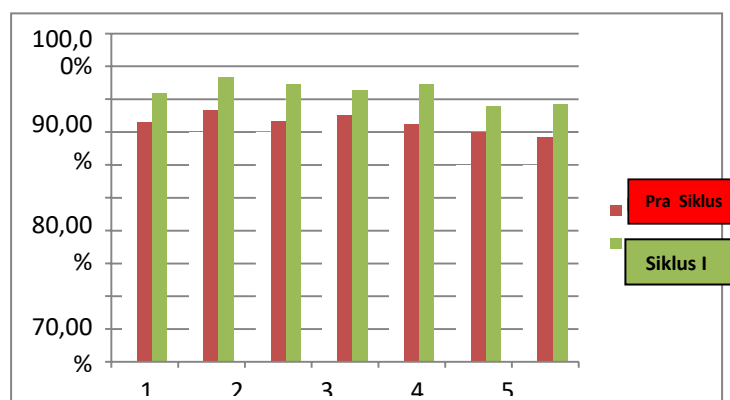


Figure 3. Pre-cycle and Cycle I Observation Results Diagram Source: Processed primary data Information:

- 1 : Enthusiastic about following the lesson
- 2 : Diligently doing the task
- 3: Confident in the face of adversity
- 4 : Happier to learn and solve problems
- 5 : Can defend his opinion
- 6: It's not easy to let go of things you believe in
- 7 : Enjoy finding and solving problems

Based on the data above, it can be seen that there was an improvement in the score of reading comprehension in English properly and correctly for Class X automotive body of SMK Muhammadiyah Pekalongan from before implementing Jigsaw type cooperative learning pre-cycle to cycle I by 9.68%.

Each cycle also obtained data on reading comprehension in English properly and correctly for Class X automotive body of SMK Muhammadiyah Pekalongan from a questionnaire which was distributed and filled in directly by the students.

Based on the results of the students' reading comprehension questionnaire, it was found that there was an improvement in reading comprehension in English properly and correctly Class X automotive body SMK Muhammadiyah Pekalongan. The increased understanding of student learning can be seen in the following table:

Table 17. Comparison of Reading Comprehension Scores Based on Questionnaire Results

No	Indicator	Score		Enhancement
		Pre Cycle	Cycle I	
1	Enthusiastic about learning	75.00%	84.17%	9.17%
2	Diligently do the task	76.67%	79.44%	2.77%
3	Confident face adversity	75.42%	78.33%	2.91%
4	Happier to learn and solve problems	76.94%	80.83%	3.89%
5	Can defend his opinion	73.54%	77.29%	3.75%
6	It's not easy to let go of things you believe in	72.78%	78.33%	5.55%
7	Happy to find and solve problems	70.56%	76.39%	5.83%
Average Score		74.41%	79.26%	4.85%

Source: Primary Data Processed Calculations are in the appendix

Based on the comprehension score the data with the questionnaire in the table above there is an increase in reading comprehension in English properly and correctly Class X automotive body SMK Muhammadiyah Pekalongan. The increase occurred by 4.85% from the pre-cycle of 74.41% to the first cycle of 79.26%. The data can be displayed in detail with the graph as follows:

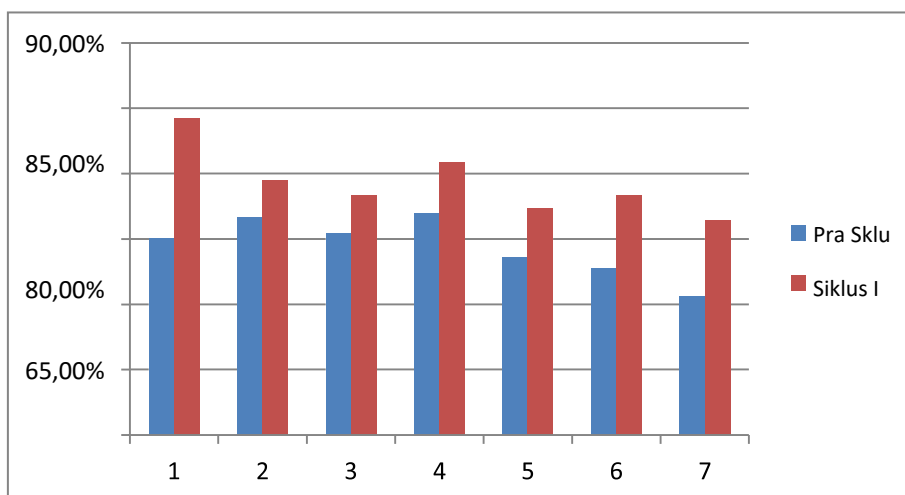


Figure 4. Pre-Cycle and Cycle I Questionnaire Data Diagram Source: Processed primary data Information:

- 1 : Enthusiastic about following the lesson
- 2 : Diligently doing the task
- 3: Confident in the face of adversity
- 4 : Happier to learn and solve problems
- 5 : Can defend his opinion
- 6: It's not easy to let go of things you believe in
- 7 : Enjoy finding and solving problems

Based on the results of observations and questionnaires on students' reading comprehension that have been displayed, a conclusion was obtained in the form of an increase in English reading comprehension properly and correctly Class X automotive body of SMK Muhammadiyah Pekalongan indicated by an increase in students' reading comprehension scores on each indicator that has been determined with the following details:

1) Enthusiastic in following the lesson

There was an increase in student learning understanding based on observations before the implementation of the Jigsaw cooperative learning model of 63.89%, up 8.89% to 72.78% in the pre-cycle and from pre-cycle to cycle I there was an increase of 8.89%, namely 72.78% to 81.67%. Furthermore, data obtained from the results of the questionnaire which was distributed to students in each cycle increased from pre-cycle of 75.00%, increased by 9.17% to 84.17% in cycle I. The indicator of enthusiasm for taking lessons using the Jigsaw type made students very enthusiastic. This was because students during the learning process were required to understand the material they are getting, so that students in studying the material were clear which parts are and have the opportunity to convey it to their friends. her friend. If nothing was understood, students were enthusiastic about paying attention to other students so that they understand.

2) Diligently do the task

There was an improvement in students' reading comprehension based on observations before the implementation of the Jigsaw cooperative learning model of 70.00%, up 6.67% to 76.67% in the pre-cycle and from pre-cycle to cycle I there was an increase of 10.00%, namely 76.67% to 86.67%. Furthermore, data obtained from the results of the questionnaire which was distributed to students in

each cycle increased from the pre-cycle of 76.67%, increased by 2.77% to 79.44% in cycle I. When working on assignments or questions, students do it regularly because it was easier to understand the problem. This can happen because students have mastered the material that has been given during the learning process. By understanding the material add, students can easily do questions and assignments.

3) Confident in the face of adversity

There was an improvement in student learning understanding based on observations before the implementation of the Jigsaw cooperative learning model of 70.00%, up 3.33% to 73.33% in the pre-cycle and from pre-cycle to cycle I there was an increase of 11.11%, namely 73.33% to 84.44%. Furthermore, data obtained from the results of the questionnaire distributed to students each cycle increased from pre-cycle of 75.42%, increased by 2.91% to 78.33% in cycle I

When working on assignments or questions students do not directly ask other students but try first what is the difficulty. When there was no answer or solution was found, ask a partner. When one group does not know, then ask the teacher concerned.

4) Happier to learn and solve problems

There was an improvement in student learning understanding based on observations before the implementation of the Jigsaw cooperative learning model of 73.89%, up 1.11% to 75.00% in the pre-cycle and from pre-cycle to cycle I there was an increase of 7.78%, namely 75.00% to 82.78%. Furthermore, the data obtained from the results of the questionnaire which was distributed to students in each cycle increased from the pre-cycle of 76.94%, increased by 3.89% to 80.83% in cycle I. In this indicator, students prefer to study and solve problems in groups. By implementing the Jigsaw cooperative learning type, it can help students who have difficulty solving problems with explanations and exchanging opinions so that goals are achieved.

5) Can defend his opinion

There was an improvement in students' reading comprehension based on observations from before the application of the Jigsaw cooperative learning model of 63.33% increased by 8.89% to 72.22% in the pre-cycle and from pre-cycle to cycle I there was an increase of 12.22%, namely 72.22% to 84.44%. Furthermore, the data obtained from the results of the questionnaire which was distributed to students in each cycle increased from the pre-cycle of 73.54%, increased by 3.75% to 77.29% in cycle I.

Initially students who were less academically, felt less confident with their opinions so they rely on other students who are smarter. With the implementation of the Jigsaw cooperative learning model, students with poor reading comprehension have started to feel confident in their opinions because they already understand the material.

6) It's not easy to let go of things you believe in

There was an increase in students' reading comprehension based on observations from before the implementation of the Jigsaw cooperative learning model of 60.00%, up 10.00% to 70.00% in the pre-cycle and from pre-cycle to cycle I there was an increase of 7.78%, namely 70.00% to 77.78%. Furthermore, the data obtained the results of the questionnaire which was distributed to students in each cycle increased from the pre-cycle of 72.78%, increased by 5.55% to 78.33% in cycle I. In Jigsaw cooperative learning, students in groups express opinions strongly and correctly so that they can rectify from their inaccurate group mates.

7) Enjoy looking for and solving problems

There was an increase in students' reading comprehension based on observations before the implementation of the Jigsaw cooperative learning model of 60.00%, up 8.33% to 68.33% in the pre-cycle and from pre-cycle to cycle I there was an increase of 10.00%, namely 68.33% to 78.33%. Furthermore,

data obtained from the results of the questionnaire distributed to students each cycle increased from pre-cycle of 70.56%, increased by 5.83% to 76.39% in cycle I.

Table 18. Comparison of Pre-Cycle and Cycle I Students' Reading Comprehension.

Students' Code	Results	
	Pre Cycle	Cycle 1
1	63.64	88.46
2	86.36	100
3	86.36	90.38
4	54.55	90.38
5	72.73	90.38
6	72.73	100
7	77.27	90.38
8	63.64	88.46
9	77.27	86.54
10	81.82	96.15
11	36.36	92.31
12	68.18	96.15
13	72.73	96.15
14	86.36	92.31
15	50.00	82.69
16	54.55	53.87
17	31.82	88.46
18	63.64	80.77
19	72.73	96.15
20	77.27	94.23
21	59.10	92.31
22	68.18	96.15
23	72.73	88.46
24	59.09	88.46

25	50.00	Absence
26	50.00	100
27	90.91	100
28	-	Absence
29	72.73	92.31
30	50.00	96.15
31	36.36	96.15

Average	65.30	91.18
The highest score	90.91	100.00
Lowest Value	31.82	53.87
Total Value >80	5	28
Completeness Percentage	16.67%	93.33%

Learning outcomes in the pre-cycle has not reached the success criteria that have been planned, namely 16.67% of the success criteria of 75%. Nonetheless, overall the results of the percentage of complete learning outcomes after the implementation of the Jigsaw cooperative learning model have been successful in increasing from pre-cycle to cycle I.

Cycle I obtained a result of 93.33% so that a minimum criterion of 75% was reached.

CONCLUSION

Learning the jigsaw method has the following advantages:

1. Stimulating students to think critically
2. Forcing students to make the right words so they can explain to other friends. This will help students develop their social skills.
3. That the application of the Jigsaw cooperative learning model can improve students' reading comprehension properly and correctly in the basic competencies of narrative texts related to folk legends for class X automotive bodies at SMK Muhammadiyah Pekalongan. That matter can be seen from the increase in the percentage of completeness of student learning outcomes

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