Abstract: The objectives of the research are: (1) to know to what extent of the students’ vocabulary mastery improvement by using puzzle in the sixth grade students’ class (2) to identify the class situation when puzzles are implemented in the sixth grade students’ class of SD Negeri Sidoharjo 2, Sragen of the academic year 2011/2012. The study is a classroom action research that is carried out in two cycles from March 9th to March 30th 2012. The subject of the research is the students of the sixth grade that consist of 29 students, 18 males and 11 females. The data were in the form of qualitative and quantitative data. Qualitative data were collected by interview, questionnaire, students’ diary, and field note, while quantitative data were collected by test (pre test and posttest). The qualitative data are analyzed by using Burn method, analyzing action research data consisting of assembling, coding, comparing, building interpretation, and reporting the outcomes while quantitative data are analyzed by using descriptive statistic method. The research finding shows that the use of puzzle improves the students’ vocabulary mastery in four aspects and English class situation.

Keywords: action research, vocabulary, puzzle

Language is a means of communication. It is used to express idea and share feeling. Through language an idea can be conveyed. Without language, people will get difficulties in conveying their ideas and messages. One of the languages which is often used as a means of communication is English. It is one of the most widely studied languages in the world. Almost all of countries use it as the first or second language and taught at all of schools in the world.

English is taught at all levels of curriculum from elementary school to university. In the elementary school, English is taught from the fourth grade to the sixth grade. Indonesian education minister’s decision No. 22/2006 states that English is the local content lesson in the elementary school and can be introduced from the fourth graders. This national policy is also used by the local governor to make local policy so that English lesson can start from the first grader. In the elementary school, the English teacher does not only teach English in written but the teacher also teaches English in spoken forms.

English is a means to communicate in spoken and written, while in communication needs the mastery of vocabulary. It is impossible to master foreign language without mastering vocabulary. Therefore, vocabulary is essential part of language
learning and it is also basic step to learn English in written form as well as spoken form. Vocabulary itself can be defined as a list of words for a particular language or set of words that individual speaker of language might use (Hatch and Brown, 1995:1).

Since vocabulary is important in language learning, the elementary students have to master vocabulary. In fact, vocabularies of the students are very low. The students have not mastered vocabulary well.

During pre-observation in English class, the researcher found the problems that exist. First, it is related to the condition of elementary students who have low motivation to learn English. When the teacher explains the material, they are full of activities with their friends. Sometimes, they draw the pictures in their book or see something outside the class.

Second, the students are also passive during teaching learning process. They rarely have efforts to participate in teaching learning process like raising their hand when they want to answer the questions. They just keep silent without any efforts borrowing the book from another friend and they just sit down on their seats.

In addition, they are also shy to participate in teaching learning process when the teacher asks them to answer the question on their seat or in front of the class because they feel worry if they make any mistakes and their friends will laugh of them.

Besides, it is related to the students’ capability in mastering vocabulary. Many students do not master vocabulary well. From the pre-observation and interview done by the researcher, the researcher found that the students have low vocabulary mastery. It is proved with the students’ vocabulary pre test, they still have low score. Their mean score of vocabulary pre test are 4.34, while KKM (kriteria Ketuntasan Minimal) of passing English is 60. The indicators of the students’ vocabulary mastery problems are (1) Students get difficulty in grasping meanings, sometimes they forget the meaning of the word when they asked to mention (2) they still get difficulties in using new words, they cannot implement the words in the right contexts (3) they have difficulties in spelling the word correctly, they write a word as like its pronunciation (4) and they still get difficulties in pronouncing the words well, they pronounce it same with its writing.

Those problems are caused by the teacher who used inappropriate technique. In teaching English, the teacher only uses LKS (Lembar Kerja Siswa), so that they do not pay attention to the material taught by the teacher because the teacher does not use instruments to support teaching material such as picture show, game or media. It makes the students feel bored; they are unmotivated and inactive in the class so they rarely participate in the class.

From explanation above, it can be concluded that the students do not master vocabulary well. As the effect, the material cannot be received by the students well because they are unmotivated and inactive in teaching learning process so they have low vocabulary.

Young children learn language from word to word. Vygotsky in Cameron’s book (1999:7) believes that words do have a special significance for children learning a new language. Often too, we teach children words in the new language by showing them objects that they can see and touch, and that have single words labels in the first language. Therefore, the teacher should use an object as a media to teach students in order to attract students’ attention so that the students are able to participate actively in teaching and learning process.
Based on the problems and the reasons above, the researcher proposes one of the techniques as the solution in learning vocabulary. The teaching technique which is appropriate to overcome the problem is by using puzzle. There are several reasons why the use of puzzles can improve the students’ vocabulary mastery. According to Case (1994) puzzle involves less stress. In certain puzzle finding one answer often helps the students to find another answer. Puzzles are useful for language learners because of the enjoyment, satisfaction, reflection, and ‘play’ that can focus learners’ attention on the language in a concentrated but non-stressful way. On the other hand, the students will get pleasure from doing the puzzle because puzzles have several shapes, colors and solutions for their exercises in the activity.

In teaching vocabulary to the students in the classroom, the researcher applies a puzzle as a media in doing the activity of learning language in term of interaction communicative situation. The researcher sets all of activities that will are done by the students. Then, the students are able to carry out the task of the activity individually, in pair and in a group. Task may involve solving a word problem and creating puzzle. Willis (1996:38) defines the sequences of the activities teaching vocabulary in the classroom as follows:

a. Pre task : The teacher introduces the topic by using a puzzle and gives example how to use puzzle in language learning.

b. Task cycle : There are three stages which are conducted by the students.
   1.) Task : the students do the task. A task is vocabulary in the puzzle to encourage the students using vocabulary in the context individually, in pairs or small groups while the teacher monitor in a distance.
   2.) Planning: the students prepare to present the result where the students are asked to tell how they do the task in the puzzle and what the outcome is.
   3.) Report : the students present their task of the puzzle orally or in writing, and compare notes on what has happened.

c. Language focus : There are two stages in language focus.
   1.) The teacher observes the students’ task in the puzzle.
   2.) The teacher guides practice activities and reflection of the task is done.

Based on statements above, the researcher has strong belief that teaching vocabulary by using puzzle is effective to improve students’ vocabulary mastery. Moreover, there are some objectives in identifying to know the extent of the students’ vocabulary mastery improvement by using puzzle in learning English and to know what happens in the class when puzzle is implemented in teaching and learning process.

RESEARCH METHODS

The method of the research is action research. Action research is a process in which participants examine their own educational practice systematically and carefully using the techniques of research based on the following assumptions:
1. Teachers and principals work best on problems they have identified for themselves;
2. Teachers and principals become more effective when encouraged to examine and assess their own work and then consider ways of working differently;
3. Teachers and principals help each other by working collaboratively;
4. Working with colleagues helps teachers and principals in their professional development (Heidi Watts, 1985:1).

Besides, Burns, cited in Cornwell action research involves a self–reflective, systematic and critical approach to enquiry by participants who are at the same time members of the research community. The aim is to identify problematic situations or issues considered by participants to be worthy of investigation in order to bring about critically informed changes in practice. (Burns, 1999: 5).

Meanwhile, Anna Uhl Chamot et al define that action research is classroom – based research conducted by teachers in order to reflect upon and evolve their teaching. It is a systematic, documented inquiry into one aspect of teaching and learning in a specific classroom. The purpose of teacher research is to gain understanding of teaching and learning within one’s classroom and to use that knowledge to increase teaching efficacy/student learning.

The Model of action research is developed by Kemmis and McTaggart consisting four aspects.
1. Planning: develop a plan of critically informed action to improve what is already happening.
2. Action: act to implement the plan.
3. Observation: observe the effects of the critically informed action in the context in which it occurs.
4. Reflection: reflect on these effects as the basis for further planning, subsequent, critically informed action [etc.] through succession of stages (Kemmis and McTaggart, 1988:10).

In the research, the techniques used for collecting the data are qualitative and quantitative data. Qualitative data were collected from observation, interview, questionnaire and students’ diary while quantitative data consist of tests.

After collecting data above, the next step is analyzing the data that will be analyzed by using qualitative and quantitative ways.

1. Qualitative data. The researcher uses qualitative technique suggested by Burns (1999: 156) the process of qualitative data analysis consists of five stages.
   a. Assembling the Data
      The first step is assembling the data have been collected over the period of the research.
   b. Coding the Data
      The second step is coding the data. Once there has been some overall examination of the data, categories or codes can be developed to identify patterns more specifically.
   c. Comparing the Data
      At this stage, comparison can be made to see whether themes or pattern are repeated or developed across different data gathering techniques.
   d. Building Interpretations
      In this step, the researcher move beyond describing, categorizing, coding and comparing to make sense of the meaning of the data.
e. Reporting the Outcomes
The final stage, the researcher involves presenting an account of the research for others.

2. Quantitative data
    *Descriptive statistic method* is used to analyze quantitative data. It is done to compare the students’ vocabulary mastery before and after the action by dividing the sum of students’ score with the number of students before and after the action.

**RESULT AND DISCUSSION**

The research was conducted at the sixth grade class of SD Negeri Sidoharjo 2, Sragen. The problems were the students had low vocabulary mastery and the class situations needed to be improved by using puzzle.

There were two cycles in teaching vocabulary to the students. The first cycle was conducted in two meetings. The implementation of puzzle in the class consisted of four stages. They were planning, action, observation and reflection.

In the first cycle, the making of lesson plan in teaching vocabulary was to conduct a study by focusing improving students’ vocabulary mastery by using puzzle. The material based on the topic in which taken from LKS, the book and the internet that designed using crossword puzzle and appropriated the syllable. The action was conducted in two meeting, on 9th March 2012 and 16th March 2012. The topic was “public places and transportations”. The lesson started at 07.30 and ended at 09.00 am.

Then, teaching vocabulary was implemented by using puzzle in the classroom. The students did the vocabulary in the puzzle. They did the vocabulary individually, in pairs and in small groups.

Before beginning the lesson, the teacher gave greeting to the students and checked students’ attendance. And then, the teacher gave explanation about the topic that would be learned. The teacher also gave example how to use puzzle in language learning and gave the exercise to be done individual, in pairs and small groups. The exercise was in crossword puzzle and included four aspects of vocabulary.

In implementation of crossword puzzle in the class, some students were enthusiastic and happy to achieve the lesson. Most of them respond the lesson well. Although there were some students respond the teacher explanation by seeing the teacher and heard explanation, most of them understood the teacher’s explanation. However, there were some students pronounced the words as its writing and they were bored without any activities in teaching learning process, so they made noisy. Besides, most students were still shy to spell the word in front of the class because they were shy if their friends would laugh them.

Briefly, in the first cycle, the students felt happy and enthusiast toward teaching learning process using crossword puzzle. By using crossword puzzle in teaching learning process, they were motivated to participate and active to the lesson. However, there were some students tended to pronounce the word like its writing. Sometimes, they were bored and made noises. Some of them were also still shy to join the lesson.

After observing and analyzing the result of the observation using crossword puzzle in the first cycle, there was improvement of students’ achievement and responses. The students’ mean score improves from pre test 4.34 into posttest
They felt happy, enthusiastic and active joining the lesson. However, there were some problems that had not overcome during teaching learning process in the first cycle. Some students were shy participate to the lesson. They got wrong pronunciation and got bored without any activity so they made noisy.

Gotten from the result of the first cycle, there were some problems that had not overcome that consist of two scopes, these were students vocabulary mastery and the class situation. In vocabulary mastery, the students pronounced the words as its writing, while in the class situation some students were shy and some students made noises because they were bored.

The plan of second cycle made based on the reflection gotten from the observation so it got better result. The revised plan consisted of two scopes; they were vocabulary mastery and class situation when puzzle implemented to the students in the classroom. In the second cycle the researcher made lesson plan consisting of preparing the materials, teaching media, students exercise, and everything related to the action. The second cycle was conducted in two meetings, on 22nd March 2012 and 29th March 2012. The topic for the first meeting was “tourism” and for the second meeting was “holiday”. The teaching learning process started at 07.30 and ended at 09.00 am. In the second cycle, the researcher chose another puzzle, which was combined with drilling to improve students’ vocabulary mastery and to overcome the students’ problem in the classroom. All of activities during the implementation in second cycle were observed by using the same technique which was used in the first cycle but in different topic and puzzle.

The implementation of jigsaw puzzle in the classroom consisted of four aspects of vocabulary; those were spelling, meaning, pronunciation and use. The students did the jigsaw puzzle individually, in pairs and small groups. In beginning the lesson, the teacher gave the example how to use the puzzle in the classroom and then the students did the exercise individually, in pairs and small groups. They more motivated and active in joining the lesson. Most students cooperated to complete the exercise. They also shown enthusiast attitude. There were some students reached their hand before the other pictures completed. In addition, they were not ashamed participating in teaching learning process because they like puzzles implemented in teaching learning process. Then, after the students finished in doing the exercise, they were more enthusiastic. They wanted to report in front of the class and compete to the others student. However, the teacher who acted as facilitator to facilitate the students’ exercise, she guided the students in doing the exercise and made the reflection of the students’ practice. After doing the observation, the teacher made reflection. Almost all of the students’ practices were better than the day before. They gave better result in the exercise including spelling, meaning, pronunciation and use.

Based on the observation result of the second cycle, the teaching learning process improved better than the first cycle. The researcher found that the use of jigsaw puzzle combining drilling in teaching learning process overcome the students’ problem in two scopes, those were vocabulary mastery and the class situation. When doing jigsaw puzzle combined with drilling, the students more enthusiastic and their pronunciation improved gradually and
they were not shy because the researcher gave them more drills combined with activities in jigsaw puzzle to be done individually and in a group than the day before, so they were not bored and felt confident. As a result, they focused on drilling combined with jigsaw puzzle and spent less time to be noisy.

After analyzing the result of the research, there was improvement of vocabulary. The result of vocabulary mean score of the second cycle was more improved than the mean score of pre-test. In the pre test, the students mean score was 4.34 while in the post test of first cycle the students’ mean score was 7.89 and in the post test of second cycle the students’ mean score was 8.99. The improvement of students’ vocabulary mastery can be seen from the improvement of students’ mean score that can be shown on the graphic below:

![Chart: The Improvement of Students’ Mean Score](image)

Besides, there was improvement of classroom atmosphere. The students were more motivated in teaching learning process. Before research, the students had low motivation; they did not pay attention in teaching learning process. However, when the use of puzzles implemented in different creation, the students felt enthusiast. They more paid attention and students’ concentration focused on the lesson so they spent less time to be noisy. They felt enjoy doing exercise in the puzzle. They could play and learn to have fun using puzzle without any worries and they focused on the language.

Moreover, the students were more active participate to the lesson. The students felt happy and interested to the lesson because puzzle attracted their attention. They often participate in teaching learning process without being pointed the teacher. The students were more confident participating in teaching learning process because puzzles attracted their attention so they spent less time to be noisy.

In addition, in the second cycle the researcher implemented different puzzle combined with drilling, so it obtained the amazing of puzzle that designed in different color and shape. Thus, the data above shown that the students interested and motivated in teaching learning process. They actively participate in teaching learning process. It indicated that the students more comfortable joining to the lesson using puzzle. By having the students’ comfortable joining the teaching learning process, the class situation was more alive. As a result, the students’ vocabulary mastery was improved. Therefore, it could be said that teaching
English by using puzzles in the classroom was effective proved by the improvement of students’ vocabulary mastery and students’ problem could be solved.

**CONCLUSION AND SUGGESTION**

Based on the result of the research which aims to increase the students’ vocabulary mastery by using puzzle to the sixth grade students of SD Negeri Sidoharjo 2, Sragen, the researcher finds that the use of puzzle effectively improves the students’ vocabulary mastery and class atmosphere in teaching learning process. The research finding can be concluded that teaching vocabulary by using puzzles improve the students’ vocabulary mastery in four aspects, these are: a.) the students’ memorization improved in grasping the meaning. They were easier grasped the meaning of vocabulary by using puzzle implemented in teaching learning process. Thus, by using puzzle in teaching learning process the students made fewer mistakes in identifying meaning of the words. b.) the students easily used the words in the context by using puzzle in the classroom. They made fewer mistakes implementing the words in the right contexts. c.) the students made fewer mistakes in spelling the words. Most of them answered in correct spelling. Thus, most of them wrote the words were not like its pronunciation but most of them wrote the words in correct spelling so they made fewer mistakes in spelling the words. d.) the students’ pronunciation improved gradually. They pronounced the word better than the day before.

From explanations above, it can be also proved by the score of students’ vocabulary test before and after the action. The mean score of pre -test before the research is 4.34 while the mean score of final post-test after the research improve to 8.99.

Besides, teaching vocabulary by using puzzles also improved the classroom situation. It was proved by: a.) the students more motivated in teaching learning process. They were more enthusiasts involved to the lesson b.) the students were more active in teaching learning process. They actively answered the crossword and jigsaw puzzle individually or in a group. There was improvement of students’ attitude. They helped the teacher without asking for help to them and they were more confidence participating in teaching learning process. They frequently practiced English in front of the class, individually or in a group.

Finally, puzzle as a media can be used to facilitate teaching learning process. Most of them give advantages in learning language. Puzzle gives better result to the student, which is puzzles have improved the students’ vocabulary mastery and the classroom atmosphere in the sixth grade students of SD Negeri Sidoharjo 2, Sragen.

Based on the result of the research above, the researcher proposes some suggestions. The research hopefully can be useful for the English teacher, the students, the others researcher and the institution which can increase the students’ vocabulary mastery.

For the teacher, it is expected that the result of this research can give the contribution in teaching and learning process and the teacher can use the result of the study effectively. It is better to use various puzzles as one of English teaching technique.
Teaching English by using puzzle can improve students’ vocabulary mastery. They are more active during teaching learning process. They can play and learning at the same time without any worry. Thus, as an English teacher, she can choose the best technique to improve students’ vocabulary mastery. In addition, the problem can be solved by using puzzle.

For the students, it is expected that the students are easier to learn vocabulary mastery and have high motivation to learn English by using puzzle. Besides, this technique is an appropriate one in teaching vocabulary mastery to the students. As a result, the students are enthusiastic during the English teaching and learning process.

For the researcher, by doing this research, the researcher hopes that the research will be useful for the other researchers as reference to do the others research and used as the teaching aid which is appropriated to the students’ level.

For the institution, the institution should provide the complete facilities to support teaching learning process. As a result, the teaching learning process runs well.
BIBLIOGRAPHY


