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IMPROVING ENGLISH SPEAKING SKILLS THROUGH SCIENTIFIC METHOD ASSISTED GRAPHIC MEDIA
(Action Research at SMPN 1 Cikidang Sukabumi)

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Abstract

The objectives of this study were to find out the effect of implementation of scientific method assisted by graphic media to improve students' English speaking skills. The research used action research design. The subjects were 30 second year eight class students of SMPN 1 Cikidang Sukabumi. Observation, interviews, stionnaires, and documentation were employed to collect the data of the students" learning ctivities and speaking tests were conducted to identify students" speaking achievement. In the scientific method students carry out observing, asking, trying, reasoning and communicating activities, where these activities can train students to speak English. The implementation of this study by applying the scientific method assisted by graphic media is as much as two cycles. In the pre-action stage there were 2 students with a percentage of learning completeness of 6.7%, after the action applied in the first cycle, as many as 8 students with a percentage of learning completeness 26.7% and English speaking skills of students after the second cycle, as many as 28 students with a percentage of 93.3% learning completeness. So, it can be concluded that the scientific method assisted by graphic media can improve English speaking skills of class VIII H students of SMPN 1 Cikidang Sukabumi.

Keyword: scientific method, graphic media, English speaking skill.

INTRODUCTION

In the National Education System Law Number 20 of 2003 Article 33 paragraph 3 explains that foreign languages can be used as a language of instruction in certain educational units to support students' foreign language skills. In implementing the National Education System in Indonesia, English has been chosen as the most dominant foreign language used starting from basic education to higher education. Even English is the first foreign language in Indonesia that has an essential role because it supports the development of science and technology and

the quality of human resources.That is why, the Ministry of National Education emphasizes that English is a compulsory subject in school so students are expected to be able to master English language skills well orally or in writing. That is why speaking is very essential, moreover speaking English. Aye and Phyu (2015: 1) state that we need an effective English speaking skill in the whole life aspects in this globalization era. Then, Sepahvand (2014: 1847) argues that there are some reasons to put speaking as the first aim of study such as personal satisfaction from being able to speak and reaching other interests or career goals. Additionally,

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Tahir (2015: 174) says that somebody is considered successful in learning a foreign language when he or she has the ability to speak it.

However, the improvement of speaking skills in learning English at SMPN 1 Cikidang Sukabumi is actually facing classic obstacles that tend to be the same. Based on the results of interviews and observations with English teachers at SMPN 1 Cikidang Sukabumi, data obtained from learning English in particular speaking skills are still below the minimum completeness criteria (KKM 75). Besides that the results of observations in the process of learning English, showed that speaking class VIII skills were still not good.

These constraints include: (1) the teacher still emphasizes learning in language rules, whereas it should emphasize the aspect of English as a communication tool. As a result, many students find it difficult to use English as a communication tool for the various reasons they offer. (2) This weakness causes untrained students to pronounce vocabularies correctly. (3) Teachers are poor in innovation and creativity, so the learning strategies used tend to use conventional and monotonous approaches. (4) Teachers tend to teach about English, not how to use English, so speaking is considered as memorization. (5) the teaching and learning process is less attractive, boring and creates a frightening impression for students. (6) Students tend to be less interested, less motivated and lazy in practicing speaking, so their learning activities are low. (7) Students and some teachers assume that reading, listening and writing skills are far more important.

In an effort to overcome learning difficulties in mastering English speaking skills, the teacher needs to use various methods to improve the learning outcomes of English speaking skills, one of them is by using the scientific method assisted by graphic media. Scientific method is an alternative strategy with considered more effective and more efficient to be applied in learning English speaking skills. This method is very suitable for speaking learning activities, because the scientific method assisted by graphic media gives students the opportunity to be active in speaking. The steps of scientific methods with graphical media are: (1) observing, (2) asking questions, (3) gathering information, (4) processing information, and (5) communicating.

The results of the research on improving English speaking skills have been done a lot, first by Manurung (2015:44-51) with the research title Improving the speaking skill using reading contextual internet-based instructional materials in EFL class in Indonesia. Second, Using Online Videos to Improve Speaking Abilities of Leaners Yükselir & Kömür (2017:255-266), this study aims to improve the speaking skills of EFL students in preparatory schools using online videos at Osmaniye Korkut Ata University. And third, research with the title Using Online Videos to Improve Speaking Abilities of EFL Leaner Dineen Rodrigues & Edwin Vethamani, (2015: 43-67).

Based on the background description above and the success of the previous researchers, the researchers wanted to conduct action research with the title "Improving English speaking skills through the scientific method assisted by graphic media in class VIII H at SMPN 1 Cikidang 1 Sukabumi " . This research was conducted with the general aim of: (1) Improving the quality of learning English speaking skills in the classroom (2) Improving students' abilities in mastering English speaking skills and (3) Providing opportunities for teachers to study learning speaking skills. The specific objective of the researchers was to improve their English speaking skills through the scientific method assisted by graphic media in class VIII H students at SMPN 1 Cikidang Sukabumi. From this

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research, it is expected to be able to provide solutions in the learning process of English speaking skills of class VIII H students at SMPN 1 Cikidang.

METHOD

Sugiyono (2014:487) say that action Research contains two words, namely research and action. In line with sugyono Emzir (2013:237) explain that action research is an informal, qualitative, formative, subjective, interpretive, reflective research, and an experiential research model, in which individuals are involved in studies as participants who know and support so that action research is a study where all participants are involved in the research. This action research is a series of cyclic studies which each cycle consists of 4 main activities, namely plan, actions, observation, and reflection in order to solve the problem.

This research was conducted at SMPN 1 Cikidang Sukabumi for three months. Data were obtained from class VIII H students in the second semester with 30 students. The results of the research data are then analyzed quantitatively by the results of each test conducted at the end of each meeting in each cycle and also qualitatively by describing the results of observations. Performance tests are carried out 2 times at the end of each cycle. The success of this action can be seen from the increase or progress in the learning process, which is the result of improving students' English speaking skills. Students' speaking abilities show improvement in pronunciation, vocabulary, grammar, fluency, and understanding. In addition, it is the attitude of change in students who show good enthusiasm and participate actively during the activity, confident in asking questions and expressing opinions.

The data analyzed in this study were students' speaking skills. Individual assessment of students is considered to have completed learning if they can reach a minimum mastery level of 75% or get a test score of ≥ 75. The value of the results of the learning process in speaking evaluation activities is obtained from the assessment sheet and can be calculated using the following formula.

$$N = \frac{R}{SM} \times 100\%$$

Information :
N = Value
R = Skor Obtained
SM = Maximum Score
100% = Constants

Research is considered successful if 75% of students in the class can achieve KKM grades. To calculate the learning achievement assessment using percentage formula:

$$P_b = \frac{n}{N} \times 100\%$$

Information :
Pb = Percentage of student learning completeness
 n = The number of students who complete study (KKM $\geq$75)
N = Number of all students
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RESULTS AND DISCUSSION

Based on the results of observations made at the time of the study, it was obtained data on students 'English speaking skills and the percentage of students' completeness in the pre-cycle, cycle 1, and cycle 2 stages. At the initial stage, the researcher conducted observations, tests and also interviewed students of class VIII H of SMP 1 Cikidang Sukabumi regarding learning English speaking skills of students. Researchers get problems in the form of methods used by monotonous teachers, namely conventional methods and assignments and lack of student speaking skills.

The pre-action stage shows the average student learning activity with a percentage of 11% with very low criteria, meaning that there needs to be improvement by using the right method to improve student learning activities. While to find out the speaking skills of students using English, researchers pay attention to the value of speaking skills obtained by students. This is important because the value obtained is an illustration of the mastery of students' English speaking skills. Based on the acquisition of pre-test results, data were obtained that students who were well involved in teaching and learning activities reached 2 students (6.7%). In general, students are involved in speaking activities. The above fact encourages researchers to increase the value of students 'English speaking skills, especially improving students' language skills by using Scientific methods assisted by graphic media related to basic competencies learned in the first cycle.

Stage I cycle shows the average learning activities of students get a percentage of 56% with sufficient categories, meaning that there needs to be improvement by continuing the second cycle. From the average posttest value in cycle 1, it can be seen that there has been an increase in all aspects, both language and non-language. In the grammar aspect there was a significant increase from 6.7% in pre-action to 23.3%, in the vocabulary aspect to 63.3%, in terms of understanding the context increased to 66.7%, fluency 30% pronunciation 30% and in the non-language aspect, self-confidence also increased by 40%. While learning completeness becomes 26.7%. This fact indicates the success of the actions taken in improving learning outcomes. However, classically it has not been said to be successful because overall the percentage of completeness has not reached 75% so learning still has to be continued in cycle II

Stage II cycle shows the average learning activities of students get a percentage of 78% with a high category, meaning that they are not required to make improvements again in the next cycle. Then it can be concluded that the activeness of students in the learning process by applying the Scientific Method assisted by Graphic Media on English speaking skills of students, is achieved with the desired target according to the steps in the lesson plan. The ability to speak English as a whole also has increased learning using the scientific method assisted by graphic media. From the average in the second cycle experienced a significant increase in aspects of language and non-language. In grammar aspects from 23.3% to 83.3%, vocabulary from 76.7% to 9.7%, understanding context from 66.7% to 90%, fluency from 30% to 80%, pronunciation from 30% to 53%, self-confidence in non-language aspects 40% to 97% and learning completeness from 26.7% to 93.3%.

Based on the results of data analysis, there was an increase in student activities by applying Scientific Method assisted by Graphic Media. This was seen when students were actively in learning. For the average value of each cycle there are the following graphs:

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## Graph 1. Comparison of Average Student Activities
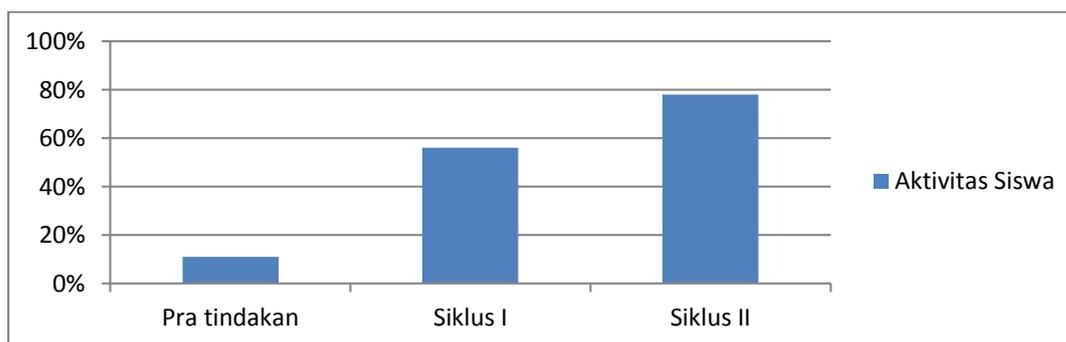
So based on the graph of comparison of the average student activity in the pre-action, cycle 1 and cycle II, the application of the scientific method assisted by graphic media has been successful. This is because the activities of students in participating in learning in the initial activities, the core and the end have been carried out well in accordance with the lesson plan. This is also relevant to the study entitled Application of Scientific Method in Laboratories to Psychomotor Ability of Sungguminasa 3 High School Students Nurmiati (2017 :317-326) which shows that the results of the analysis after learning using scientific learning method obtained the highest value 24, the lowest value 10, the average value average 19.23 and standard deviation 2, 73. The results of inferential analysis show that psychomotooric abilities of students in class X1. Ipa1 Sungguminasa 3 Public High School Academic Year 2016/2017 has increased.

Based on the average final score, for each aspect can be seen in the graph below where in general the average post-test cycle II is higher than the pre-test and post-test in cycle I.

Graph 2. Comparison of Average Final Values of Speaking Aspects Prat action,Cycle I and Cycle II
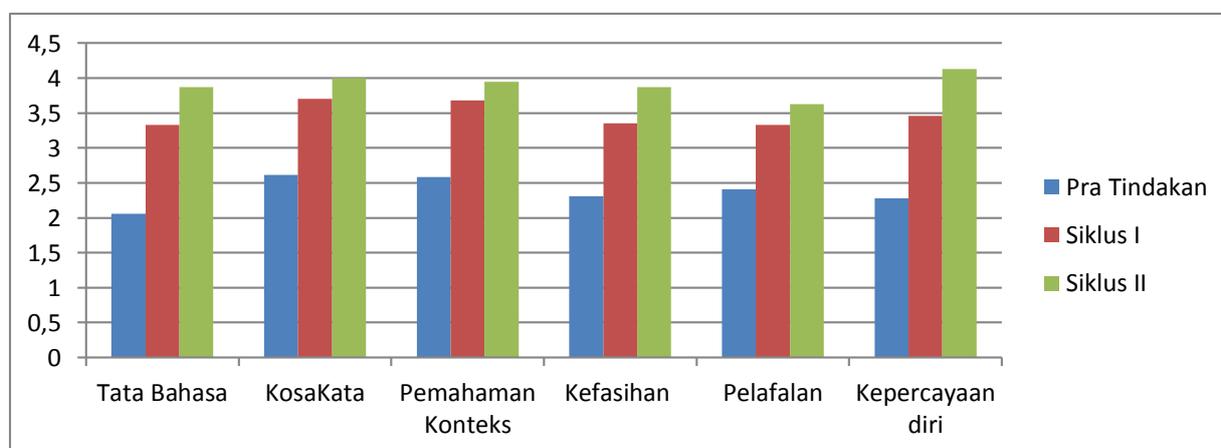
It can be concluded that several things have occurred, namely an increase in the percentage of completeness from pre-action, cycle I and cycle II. Language aspects increased from 6.7% to 23.3% and

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76.7% (complete), while for non-language aspects there was an increase from 6.7% to 23% and 96.7% in cycle II. So based on the results of the student's significant achievements in pre-action, cycle I and cycle II, Scientific Method assisted Graphic Media has succeeded in improving English speaking skills in students at SMPN 1 Cikidang Sukabumi and researchers decided not to continue the research.

These results are also relevant to the research entitled The Effect of Scientific Approach on Students' English Achievement for Junior High School Level in Riau Province, Indonesia Hasan (2018:123-128). The findings indicate that there is a significant effect of the scientific approach through the 2013 ICT curriculum on English achievement students. Research entitled Scientific Approach to Improve Mathematical Problem Solving Skills for Students of Grade V Herman & Jupri (2017:1-6)). Based on the results and analysis, the conclusion is that the Scientific Approach can improve students' mathematical problem solving skills. The study entitled Application of Scientific Approach Using Concrete Media to Improve Mathematics Learning Outcomes in Elementary School Students S Wulandari (2017:587-599) that the application of the scientific approach using concrete media improves student learning outcomes in mathematics grade 3 Sidorejo Lor 01 Elementary School has improved learning outcomes in the pre cycle of 34%, cycle I was 71%, in cycle II it increased to 92%.

CONCLUSION

The learning process using the scientific method assisted by graphic media increases the ability to speak English skills of class VIII H students of SMPN 1 Cikidang, Sukabumi. This fact is obtained from the results of the analysis, which shows an increase in the percentage of completeness from pretest to pre-action to posttest in cycle II,The increase occurred in aspects of language, which increased from

6.7% in the pre-action to 23.3% in the first cycle and a significant increase in the second cycle, namely 76.7%. The increase also occurred in non-language aspects, which increased from 6.7% to 23% in the first cycle and 96.7% in the second cycle. Referring to the final score, the increase occurred from 33% in the pre-action to 26.7% in the first cycle and in the second cycle namely 93.3%.

Based on the minimum completeness criteria of 75%, it can be concluded that completeness occurs classically, both language and non-language aspects, and the final grade point average.Personally, all students experience an increase in the final grades of pre-action, cycle I and cycle II. From the posttest results, it was found that there were 2 students who did not complete. They need special attention in order to complete their studies.Scientific method with the help of graphic media is an effective method for students to improve their speaking skills in English. This process starts from the activities of understanding, asking and collecting data to be analyzed so that students learn in detail the various elements of the language contained in the material presented. The results of the analysis are used as capital for students to develop the ability to think logically and systematically to respond to the transactional and interpersonal texts they learn. Responses are communicated in the form of making presentations. In presentations, students must speak English.

The scientific method based on graphic media used as a teaching method fosters the sensitivity of students to think scientifically. This is related to the scientific approach used in the learning process. By using a scientific approach, students discover for themselves the concepts of knowledge they learn.The application of constructivism takes place when students work together in groups. Students work together to build mutual knowledge between them. This was realized in the form of training using

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English when delivering responses. In small groups, they practiced speaking to use English to express their opinions and respond. Furthermore, students dare to carry out speaking activities in front of the class. This has an impact on improving students' English speaking skills.

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