Teachers Ability To Solve Students Problems In Ppkn Lessons Viewed From The Active Learning Strategy The Power Of Two (Study Case In SMA 6 Penatangsiantar)

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Abstract: This study aims to see the ability of students to solve existing problems. The subjects in this study were 36 students of Class X IPA 1 SMA Negeri 6 Pematangsiantar, SMA Negeri 6 Pematangsiantar were one of the schools implementing the power of two active learning strategy in PPKn subjects. This study uses the method of observation, interviews and questionnaires, the analysis of which uses descriptive qualitative. The value of x1 individuals = 26.92, x2 individuals = 31.22, x3 individuals = 37.58 with xtotal = 95.72, where the results of rhit = 0.785. Value of x1 group = 26.83, x2 group = 36.83, and x3 group = 40.78 with xtotal = 104.44 where rhit = 0.693. Both of these results indicate an increase in students' problem solving skills from day to day both individually and in groups. So, from the results obtained through observation, interviews and statistical data it can be concluded that the active learning strategy of the power of two can improve students' ability to solve problems.

Keywords: problem, solving, ability, power two, active, learning, strategies

1. Introduction

In the era of the industrial revolution 4.0, human life cannot be separated from science and technology (IPTEK) which is increasingly developing, so that qualified human resources, namely human resources that balance soft skills and hard skills.

The formation of qualified human resources can be obtained through education, so that education is the key for a nation to be able to reach the future with all the potential that exists. Thus education should be managed both in quality

or quantity. With good education will change students who are independent, work hard, study hard, never give up and be proactive in finding solutions to problems encountered, making it possible to develop students' abilities optimally and function fully in accordance with their personal needs and community needs. The current learning implementation must undergo change, where students are no longer allowed as mere learning objects, but must be given an active role as partners in the learning process, so students act as active learning agents while teachers act as creative facilitators and mediators. The teacher facilitates students in accordance with the four

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pillars of education namely learning to know, learning to be, learning to do and learning to life together (Unesco, 2014)

One of the things that marks the commitment of teachers in acting as a facilitator is the ability to renew and improve methods in the teaching and learning process. In accordance with the latest curriculum demands namely curriculum 13 that students must be more active and critical in solving a problem (Amri, 2015), then the use of active learning strategies the power of two is suitable when used by teachers to encourage students to gain knowledge, skills and active attitude.

The power of two is one of several active learning strategy models developed by Silberman, where the advantages of using this strategy model are more emphasis on developing the ability to express ideas or ideas with words verbally by comparing the ideas or ideas of others, helping students to work together with others, honing their individual abilities in solving problems and being aware of all their limitations and accepting their shortcomings, helping students to be more responsible in carrying out their tasks and also at the same time improving students' social abilities, so that active learning strategy models this is in accordance with the demands of the new curriculum.

The use of the power of two model can be applied in a variety of subjects, not least in the subjects of Pancasila and Citizenship Education (PPKn). Citizenship Education is a field of study that includes dimensions of knowledge, skills and values. Citizenship Education wants to form ideal citizens, who have knowledge, skills and values that are in accordance with the concepts and principles of Citizenship Education (Untari, in Purwanto 2009).

Many students are less enthusiastic about taking PPKn lessons, they find PPKn subjects boring because they are memorizing lessons, the methods applied are less interesting and less varied, so they cannot bring them to participate directly or actively in class learning.

In general, teachers in presenting PPKn subject matter so far have used methods or methods that are less varied and tend to be monotonous, so students easily feel bored and less enthusiastic. This will result in the attention, motivation and interest of students in solving problems with the lesson decreases. For this reason diversity is needed in the presentation of learning material.

By using the active learning model of the power of two, students are invited to express their opinions and exchange opinions with their 1 (one) teammates so they get a new perspective on the topic of discussion or problem given and want to be a good listener in solving existing problems so that opinions are they said they could provide a solution and not an opinion that could make the problem worse.

A similar study of the power of two model has also been conducted by Jumalia Ali, et al (2016: 6) about the active learning strategy of the power of two and mathematical communication skills in which the results are obtained that the abilities of students learning using the power of two active learning strategy better than the mathematical communication skills of students whose learning uses conventional learning methods (Silberman, 2016).

Pematangsiantar 6 Public High School is one of the schools that applies the power of two active learning strategy in delivering material. Based on the results of an interview with one of the teachers in Pematangsiantar 6 Public High School, in 2016 the school was the only school proposed as a model school in Pematangsiantar city. This school wants to make active learning one of the strategies to explore the potential of students in order to think critically and be able to solve problems and express opinions better.

1.1. Significance of the study

This research can be used as a material consideration in the context of fostering and developing the process of teaching and learning activities in various other fields of study in schools. And theoretically it is expected to be able to contribute to science, especially educational psychology, so that it can encourage the effectiveness of active learning so as to produce students who are brave and confident in solving problems and expressing their opinions in groups or individuals.

1.2. Scope and Limitation of the study

The researcher limits this problem to see how the students' problem solving skills in the PPKn subject are viewed from the active learning strategy of the power of two in SMA Negeri 6 Pematangsiantar.

1.3. Setting of the study

Pematangsiantar Public High School 6 is in Cadika Street no.15, Bah Kapul, sub-district of Siantar Sitalasari, Pematangsiantar City, North Sumatra Province. Access to schools is very limited, there is only one type of public transportation that passes close to the school, but does not stop immediately in front of the school.

Pematangsiantar 6 Public High School is one of the schools with A Accreditation that uses the K13 curriculum as a learning unit. This new 5-year-old school has succeeded in stealing the attention of many students who have just graduated from junior high schools, as evidenced by the large number of students from outside the Siantar area who study here.

The school that holds the title Adiwiyata School also prioritizes cleanliness and love of the environment. This is reflected in the holding of a lesson to foster a sense of responsibility for each student by planting and caring for plants in front of each class. Every plant that successfully grows beautifully and is maintained will give additional value to the students who plant it given by the teacher in the field of PPKn.

2. Research Design And Methodology

In general, the type of research used is descriptive research, in which this research is intended to gather information about a symptom that exists, namely the state of symptoms according to what they were at the time the study was conducted. In this study two research variables will be used, the dependent variable: Problem Solving Ability and the Independent Variable: The Power of Two Active Learning Strategy.

2.1. Respondents of the study

The subjects in this study were students of class X Science 1 of SMA Negeri 6 Pematangsiantar in the 2016/2017 school year. The number of subjects in this study were 36 students with 15 male students and 21 female students. This class selection is due to the lack of active students in giving opinions and critical in solving problems compared to 6 (six) other classes based on the results of interviews with related teachers.

2.2. Research Instrument

The instruments in this study were compiled and made by the researchers, and then the instrument reliability was carried out which would produce reliable data, correct data

with reality, which if used several times, the result will remain the same.

Reliable testing of the instrument was carried out with the product moment technique by Pearson. For this reason, the validity of the measurements used in this study is in the form of an inter-rater, which is conducted by three PPKn subject teachers to assess the question sheets from each individual and group.

2.3. Data Gathering Procedure

Data collection techniques in this study took the form of students twice, individually and in groups where later sheets would be given answers that had been arranged in such a way as to suit research expectations,

accompanied by observations of problem solving abilities and also active learning of the power of two . But in general, the information collection techniques in this study are observation, and interviews.

2.4. Statistical Analysis

The data collected was then analyzed using qualitative descriptive analysis techniques, which illustrate how students' ability to solve problems in PPKn lessons in terms of the active learning strategy of the power of two (Sugyono, 2016).

3. Findings And Conclusions

In this first study, it can be seen overall how the students' ability to solve problems through the table below.

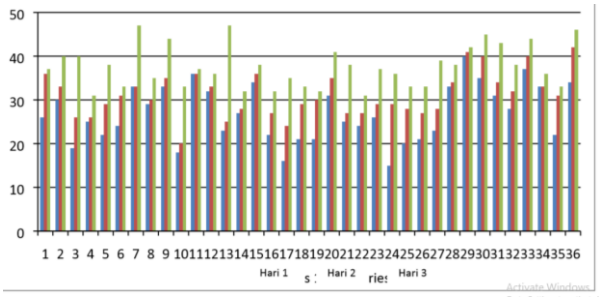
Table 1. Focus of research results

Observation of Students' Problem Solving Abilities	The teacher asks questions to students
Understand the Problem	The teacher asks students to answer the questions individually
Make a Problem Resolution Plan	The teacher asks students to make groups in pairs
Carry out Problem Planning	The teacher asks the group to discuss the answers with their partners
Review of Completion Plan	The teacher asks the group to exchange opinions with other groups

3.1. Value of Problem Solving Ability

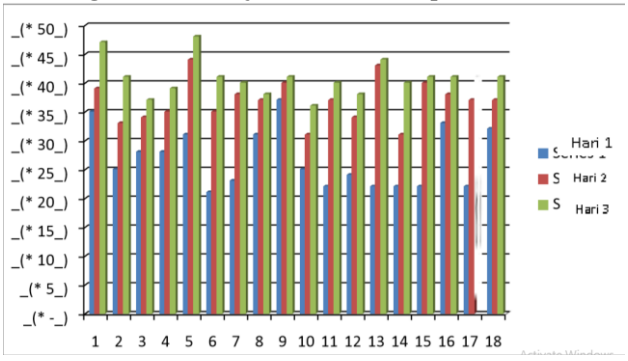
The assessment used in assessing the ability to solve problems based on inter-rater, where each rater can give the highest score of 16 of the 4 aspects, the highest total value that can be obtained per student from the inter-rater is 48

Figure 1. Individual Student Values



Based on the results of the study, on the first day it was obtained x = 26.92, the second day it was obtained x = 31.22, and on the third day it was obtained x = 37.58, with the individual Xtotal results obtained at 95.72. This shows a significant increase. In diagram 4.1 it is known that the highest score on the first day is obtained by students with sequence number 29, where the value obtained is 40/48. On the second day the highest score was obtained by students with sequence number 36, where the value obtained was 43/48, and on the third day the highest score was obtained by sequence numbers 7 and 13, where the value obtained was 47/48.

Figure 2. Ability to Solve Group Problems



Based on the results of the study, the results obtained x group on the first day = 26.83, x groups on the second day = 36.83, x groups on the third day = 40.78, and Xtotal groups = 104.44, which means each group has increased the ability to solve significant problems.

In diagram 4.2 it is known that the highest value for the group on the first day was obtained by group 9, where the value obtained was 37/48. On the

second day the highest score of the group was obtained by group 5, where the value obtained was 44/48, and on the third day the highest value of the group was also obtained by group 5, where the value obtained was 48/48

Table 2. Day 1 group correlation test results

		Kelompok	Jumlah1	Jumlah2	Jumlah3	J.Total
Kelompok	Pearson Correlation	1	-,093	-,012	-,014	-,036
	Sig. (2-tailed)		,714	,961	,955	,886
	N	18	18	18	18	18
Jumlah1	Pearson Correlation	-,093	1	,947**	,918**	,970**
	Sig. (2-tailed)	,714		,000	,000	,000
	N	18	18	18	18	18
Jumlah2	Pearson Correlation	-,012	,947**	1	,963**	,990**
	Sig. (2-tailed)	,961	,000		,000	,000
	N	18	18	18	18	18
Jumlah3	Pearson Correlation	-,014	,918**	,963**	1	,982**
	Sig. (2-tailed)	,955	,000	,000		,000
	N	18	18	18	18	18
J.Total	Pearson Correlation	-,036	,970**	,990**	,982**	1
	Sig. (2-tailed)	,886	,000	,000	,000	
	N	18	18	18	18	18

**. Correlation is significant at the 0.01 level (2-tailed).

Based on table 4.4 above it can be seen that the high level of significance is between number 1 (total value of rater 1), number2 (total value of rater 2), and number3 (total value of rater 3), where the value obtained is 0.947; 0.918; 0.963 with a significance level of 0.01.

Table 3. Day 2 group correlation test results

		Kelompok	Jumlah.1	Jumlah.2	Jumlah.3	J.Total
Kelompok	Pearson Correlation	1	,055	-,040	,149	,065
	Sig. (2-tailed)		,830	,874	,554	,796
	N	18	18	18	18	18
Jumlah.1	Pearson Correlation	,055	1	,898**	,803**	,966**
	Sig. (2-tailed)	,830		,000	,000	,000
	N	18	18	18	18	18
Jumlah.2	Pearson Correlation	-,040	,898**	1	,717**	,924**
	Sig. (2-tailed)	,874	,000		,001	,000
	N	18	18	18	18	18
Jumlah.3	Pearson Correlation	,149	,803**	,717**	1	,908**
	Sig. (2-tailed)	,554	,000	,001		,000
	N	18	18	18	18	18
J.Total	Pearson Correlation	,065	,966**	,924**	,908**	1
	Sig. (2-tailed)	,796	,000	,000	,000	
	N	18	18	18	18	18

**. Correlation is significant at the 0.01 level (2-tailed).

Based on table 4.5 above, it can be seen that there is a significant difference between the number.1 (total value of rater 1), number.2 (total value of rater 2), and total.3 (total value of rater 3) with each value of 0.898; 0.717; .803. This is based on a significance level of 0.01.

Table 4. Day 3 group correlation test results

		Kelompok	Jumlah.1	Jumlah.2	Jumlah.3	J.Total
Jumlah.1	Pearson Correlation	-,220	1	,779**	,770**	,926**
	Sig. (2-tailed)	,381		,000	,000	,000
	N	18	18	18	18	18
Jumlah.2	Pearson Correlation	-,168	,779**	1	,820**	,934**
	Sig. (2-tailed)	,505	,000		,000	,000
	N	18	18	18	18	18
Jumlah.3	Pearson Correlation	-,029	,770**	,820**	1	,921**
	Sig. (2-tailed)	,910	,000	,000		,000
	N	18	18	18	18	18

**. Correlation is significant at the 0.01 level (2-tailed).

Based on table 4.6 above, it can be seen that there is a significance between the number 1 (total value of rater 1), number.2 (total value of rater 2), and total.3 (total value of rater 3) at 88 days 3 groups with each group. each value of 0.779; 0.820; 0.770, where the significance level of 0.01 Based on the formulation of the problem and the proposed hypothesis, this study discusses the following results:

4. Conclussion

Based on observations and interviews conducted, it can be concluded that:

a) The use of the power of two active learning strategy in SMA 6 Pematangsiantar went very well in PPKn subjects, but in other subjects it was still not implemented by the school.

b) The ability of students to solve problems in terms of active learning strategies the power of two experienced a significant increase can be seen from the average value that continues to increase where individual scores x1 = 26.92, x2 = 31.22, and x3 = 37.58 and group values x1 = 26.83, x2 = 36.83, and x3 = 40.78. Students experience changes in learning styles and increased values and abilities in other fields when using this learning strategy.

c) The ability to solve student problems individually and in groups looks different. Students feel more able to solve problems when doing it alone with a group of friends rather than doing it themselves. Based on the proposed hypothesis, it appears that there is a difference in the ability to solve problems between individuals and groups, where the total value of the group is higher than the total individual score (104.44> 95.72). Thus, the hypothesis in this study was accepted.

5. Recommendations

5.1. Suggestion

By looking at the results that have been proven before, researchers hope to:

- Principal, so that this method will receive attention and support so that it can be applied in learning PPKn continuously, or maybe even applied in other subjects and provide training to teachers in applying this method.

- PPKn subject teachers, so that it is more likely to use this learning method, then motivation in student achievement needs to be improved. This can be done by giving awards to the group that gets the highest score and helping students who get the lowest score.

- Teachers in other fields of study, so it might be considered using this learning strategy to improve various skills within learners.

- Students, so that they are more actively involved in the learning process in all subjects, especially in this method.

- The next researcher, so that it is possible to observe each student more deeply in order to know what developments occur during the process of using this learning method.

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