Comparison of Student’s Learning Success Between Problem Solving Methods and Recitations in Learning Public Relations and Protocollability

Utari Wulandari*, Efni Cerya

DOI: 10.15294/eeaj.v11i3.61664

Abstract
This study aimed to determine the difference in the level of student learning success using the Problem-Solving method and the Recitation method in learning Automation of Public Relations and Protocol Governance at SMK Negeri 3 Padang using Quasi-Experimental type with Nonequivalent Control Group Design. The population of this study was 61 students with a sample of all parts of the population. The sampling technique was Total Sampling. The research instrument was in the form of test questions. The data analysis technique used was descriptive analysis, Prerequisite Analysis Test, namely Normality Test and Homogeneity Test, N-Gain Score Test, Wilcoxon Test, and Mann Whitney Test. Data processing used SPSS Version 22. The results showed an N-Gain Score of 0.27, G < 0.3 (low category). The results of hypothesis testing are: (1) There were differences in student learning outcomes before and after using the Problem-Solving method with a significance value of 0.002 < 0.005. (2) There was no difference in student learning outcomes before and after using the Recitation method with a significance value of 0.399 > 0.05. (3) There was no difference in student learning outcomes between those using the Problem Solving method and the Recitation method with a significance value of 0.435 > 0.05.

How to Cite
INTRODUCTION

Today graduates from Vocational High Schools (SMK) are required to have Soft Skills that meet standards in the world of work. Vocational education should be a place to hone skills that innovate based on their competencies. Karindasari & Roesminingsih (2021) explained from the secondary data of their research that the Educated Unemployment Rate (TPT) for SMK graduates found the highest position, namely 7.05 million SMK graduates became unemployed. In response to this, the teacher as a facilitator plays an important role in the success of learning, especially in SMK.

One of the successes of learning is marked by the success of student learning at a certain level which is classified into three aspects, namely psychomotor, affective, and cognitive aspects. In achieving this, teachers in teaching should be able to apply various strategies, models, and learning methods. However, learning activities in schools are still less than expected. One of them is at SMK Negeri 3 Padang Public Relations and Protocol Governance Automation (OTK) courses. Learning success means the achievement obtained from learning and leads to the desired changes to achieve a certain target. Successful learning is aimed at changing individual behavior, from a cognitive, psychomotor, and affective point of view (Efni Cerya, 2014; Sudjana, 2014). Learning success is realized through learning outcomes which are the level of student success and it can be felt by increasing insight, expertise, and achieving learning goals (Ariantika et al., 2018).

From this opinion, it can be seen that student learning success is the achievement of learning outcomes which can then be observed from the transition of student behavior to a better direction based on the cognitive, affective, and psychomotor dimensions which are realized through learning outcomes or learning achievements to achieve targeted goals and are measured through tests so that it can be evaluated to how far the needs learned by students are met. Measurement indicators of learning success can be seen from various types of actions or the formation of student behavior. The types of behavior include (1) habits, namely ways of acting that are owned by students and obtained through learning, (2) skills, namely actions or behavior that appear as a result of muscle activity and are moved and coordinated by the nervous system, (3) accumulation of perceptions, namely various perceptions obtained by students through learning, such as the introduction of symbols, numbers and understanding, (4) association and memorization, namely a set of memories about something as a result of strengthening through association, either intentional or reasonable associations or associations imitation, (5) understanding and concepts, (Susilo & Makhful, 2020).

Based on observations and interviews with one of the teachers who teach Public Relations and Protocol OTK on March 31, 2021, it shows that classroom learning was still applied by using the old method, namely the Conventional (Lecture) and teacher-centered method so the problem in teaching faced was that students were not too creative and felt bored during the learning process. From what the authors observed, it can be seen that the students’ views did not focus on listening to the teacher explaining the learning material in class.

Then, most students did not master the learning material when asked to re-explain the material being discussed. Even many of the students did not pay attention to learning seriously. Only a few paid attention to learning, especially students who ranked in the top five in the class. This directly affected the learning process less than optimal. This condition was also strengthened by the presence of the average value of the unsatisfactory Mid-Semester Examination (UTS) of students while still sitting in class XI in the subjects of OTK Public Relations and Protocol can be seen in Table 1.

In Table 1, student learning outcomes from UTS scores in the Public Relations and Protocol OTK subjects while still in class XI were not satisfactory. While the Minimum
Graduation Criteria (KKM) determined by SMK Negeri 3 Padang are 65. The average value obtained for class XI OTKP 1 was 54.03 while for class XI OTKP 2 was 57.68. From these data, it is known that the achievement of students’ absorption of public relations and protocol OTK learning was still low.

In supporting the achievement of student absorption of a lesson, three pillars of learning success are initiated, namely learning models, learning strategies, and learning methods. Learning methods are a good choice for teachers to improve teaching. The learning method is very appropriate to be used as a liaison step for interaction between teachers and students to achieve learning objectives with the correct learning method mechanism (Afandi et al., 2013).

On this issue, the researcher argued that it would be more interesting to implement OTK PR and Protocol learning through a learning method that involves active students (Student-Centered), namely learning activities that foster active thinking of students to develop their skills so that there is no passive learning. Among the many choices of learning methods as solutions that can be implemented are Problem-Solving and Recitation.

The Problem-Solving method, how to present learning is done by training students’ thinking power through problems in the context of the subject matter given by the teacher. The Problem Solving method is a way of providing understanding by stimulating students to pay attention, examine, and think about a problem to further analyze the problem as an effort to solve the problem. Problem-solving ideas from the Problem-Solving method are conveyed by communicating through oral, written/notes, graphs, and diagrams.

In Problem-Solving, students learn independently to identify the cause of the problem and the solution to the problem. The teacher’s task in the Problem-Solving method is to provide cases or problems to be solved by students. Thus, the Problem-Solving method is expected to increase students’ independence and learning achievement. In the Problem-Solving method, learning activities begin by looking for data related to the problem to be solved and then drawing conclusions (Sutarmi & Suarjana, 2017).

Learning that emphasizes students’ higher thinking processes is called problem-solving learning (Problem-Solving). Problem Solving presents problems as learning materials for students to analyze and synthesize. Drivers say that thinking starts from problems faced independently or individually (Maulidya, 2018). In line with this thought process, the Problem-Solving method is applied to stimulate someone to analyze and synthesize the situation where the problem is (Sutarmi & Suarjana, 2017).

From the opinion above, it can be concluded that the Problem-Solving method is a thinking process in solving problems related to the subject matter, with the stages of collecting data, analyzing, and formulating hypotheses independently to draw a conclusion. The goal is that students better understand the lesson in depth from the problem being solved or given a solution.

While the Recitation method, the way the lesson is presented is done by giving assignments related to the material to students,
both during the lesson or continuing outside of class hours. The Recitation method does not only do assignments but also trains students to work independently without imitating their friends and fosters a responsible attitude. In this method, students can do assignments at school, at home, in the library, laboratory, and others.

The recitation learning method is learning by doing assignments in the form of groups or individuals in the teaching and learning process (PBM). The recitation method can be carried out during lessons or outside class hours. Recitation combines memorization, reading, repetition, testing, and self-evaluating.

The recitation method is a method of presenting material where the teacher gives certain tasks so that students carry out learning activities. The Recitation method stimulates students to actively learn both individually and in groups. The use of this method requires good preparation, especially the scope and material and its implementation is given individually or in groups. In the learning process, students should be encouraged to carry out activities that can foster the process of creative activities. Therefore, the recitation method can be used to support other learning methods.

The Recitation method cultivates the habit of learning to find, seek, develop one's courage, and allows for permanent results (Supriadie & Darmawan, 2012). The meaning of recitation is broader than giving assignments to be done at home, usually, assignments can be done in libraries, schools, and other places that allow for learning (Qodir, 2017).

From this opinion, it is concluded that giving assignments or recitations is the implementation of teaching and learning activities in the form of assignments so that students carry out learning activities anywhere and train students to be independent in dividing their time in learning. The stages of the Recitation method are the stages of assigning tasks, carrying out tasks, and being responsible for tasks.

The selection of the Problem-Solving learning method and the Recitation method includes students who are fully active during the learning activities. This can indicate an increase in student interest in learning and affect learning outcomes. The success of student learning is one of the forms of learning outcomes achieved from the competencies of interest, as well as successful learning, one of which is marked by the implementation of correct learning methods (Maesaroh, 2013). Due to the COVID-19 pandemic, learning in schools must be carried out online (on the network).

With the author trying to apply and test student learning outcomes through the Problem-Solving learning method and the Recitation method, if there are differences it will allow teachers in the future to choose and apply which method further improves student learning outcomes because each method is considered good if its application is based on the applicable syntax and based on the appropriate subject matter taught. The achievement to be addressed in this study is to determine the difference in the level of student learning success between the Problem Solving method and the applied Recitation method. That way learning activities become more optimal. Based on the explanation of the background of the problem, the focus of this research is: the comparison of student learning success between those using the Problem-Solving method and Recitation in PR and Protocol learning at SMKN 3 Padang.

METHODS

Problem-Solving Method was carried out in class XII OTKP 1 while the recitation method was carried out in class XII OKTP 2. Both classes were given KD 3.15 material, namely implementing meetings/meetings at SMK Negeri 3 Padang. Quasi-Experimental is a type of research that has a control group, using the Nonequivalent Control Group Design. The experimental and control groups were each given treatment. Sugiyono (2013),
suggested that the experimental and control groups in this design were not chosen randomly. The purpose of this study was to determine the difference in the level of student learning success through the Problem Solving learning method with the Recitation method.

The population in this study was 61 students. The sample selection used a total sampling technique with class XII OTKP 1, namely the experimental class with 29 students, and class XII OTKP 2, the control class with 32 students. The determination for the experimental class and the control class was made based on the consideration of the student score data while still in class XI obtained during initial observations and based on the direction and input from the homeroom teacher of XII OTKP 1 and XII OTKP 2. The study was conducted at SMK Negeri 3 Padang with instruments of multiple-choice written test to obtain student learning outcomes. Data analysis was performed by descriptive analysis, normality and homogeneity test, and N-Gain Score test. Hypothesis testing used Wilcoxon Test and Mann Whitney Test. The data analysis process was carried out by using the SPSS version 22 program.

RESULTS AND DISCUSSION

This research was described by the results of student learning outcomes in the sample class. Description of the data obtained from the experimental class showed the average Pre-test was 60.93 and when the Post-test increased to 71.34. In the control class, the average re-test was 63.47 then the post-test increased to 65.75. Furthermore, the analysis prerequisite test is carried out in Table 2.

The results were obtained with the normality of the Pre-test and Post-test values of the experimental class, the values of sig 0.132 > 0.05 and sig 0.019 <0.05. While the calculation of the normality of the Pre-test-

**Table 2. Normality Test Results**

<table>
<thead>
<tr>
<th>Class</th>
<th>Kolmogorov-Smirnova</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistics</td>
<td>Df</td>
</tr>
<tr>
<td>Student learning outcomes</td>
<td>Pretest_Experiment</td>
<td>.143</td>
</tr>
<tr>
<td></td>
<td>Posttest_Experiment</td>
<td>.178</td>
</tr>
<tr>
<td></td>
<td>Pretest_Control</td>
<td>.162</td>
</tr>
<tr>
<td></td>
<td>Posttest_Control</td>
<td>.178</td>
</tr>
</tbody>
</table>

Source: Primary Processed Data, 2021

**Table 3. Homogeneity Test Results**

<table>
<thead>
<tr>
<th>Test of Homogeneity of Variance</th>
<th>Levene Statistics</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student learning outcomes</td>
<td>Based on Mean</td>
<td>.322</td>
<td>1</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Based on Median</td>
<td>.045</td>
<td>1</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Based on Median and with adjusted df</td>
<td>.045</td>
<td>1</td>
<td>55,297</td>
</tr>
<tr>
<td></td>
<td>Based on trimmed mean</td>
<td>.197</td>
<td>1</td>
<td>59</td>
</tr>
</tbody>
</table>

Source: Primary Processed Data, 2021
Post-test values for the control class, sig 0.032 <0.05 and 0.012 <0.05. This means that the data obtained are not normally distributed because the data on the value of students who have extremely high or low extreme values. Then the homogeneity test was carried out in Table 3.

The results of the variance in the two samples were the same or homogeneous, with 95% confidence the sig value was 0.573 > 0.05. The difference between the Pre-test and Post-test values of the sample class carried out using the N-Gain Score Test showed that the experimental class had an average percentage of 27.9629 or 0.27 included in the low interpretation because G < 0.3. Then in the control class the average percentage was -4.1243 or -0.04 included in the low category because G < 0.3. For decision making in the study the authors conducted a hypothesis test.

During the implementation of the Problem Solving method in the experimental class, students experienced an increase in learning outcomes, where before the Problem Solving method was applied there were 14 students out of 29 students who scored above the KKM, after the Problem Solving method was applied it rose to 23 out of 29 students who scored above the KKM. The results of the first hypothesis test are as shown in the Table 4.

### Table 4. Wilcoxon Test Results of Differences in Experimental Class Learning Results

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>Post-test Experiment - Pre-test Experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>-3.049b</td>
</tr>
<tr>
<td>asymp. Sig. (2-tailed)</td>
<td>.002</td>
</tr>
</tbody>
</table>

Source: Primary Processed Data, 2021

In Table 4, it obtained a significant value of 0.002 <0.05 then rejected so it was concluded that there were significant differences in student learning outcomes before and after using the Problem Solving method in class XII OTKP SMK Negeri 3 Padang. It was concluded that because the results of testing this hypothesis were in line with the data obtained from the research, namely in the experimental class where the learning was carried out by using the Problem Solving method, there was an increase in the average Post-test score which was high compared to the Pre-test score before being given treatment. H_0

Because, it was found that students’ motivation and competitiveness were high during learning. In line with research by Sarasgih (2020) which stated that Problem Solving enhanced student learning outcomes so that the learning improvement process was declared successful. During the implementation of learning with the Problem Solving method, student discipline in participating in learning also increased, where students attended and participated in Video Conferences in conducting online research. Students were punctual in filling attendance and collecting problem solving tasks that had been provided by using online learning media. Students were able to participate in learning using the Problem Solving method in a coherent manner based on the syntax of the Problem Solving method that had been determined.

This can be seen from the consistency of students collecting assignments given by the teacher to make optimal learning and students followed the instructions and learning steps of the Problem Solving method correctly. Along with research from Ardiawan (2021), also said that the application of the Problem Solving method developed thinking opportunities for students to learn and carry out assignments.

Then, Kartini (2020) stated that the Problem Solving method added to the progress of student learning outcomes and caused a positive response from students when conducting questions and answers in learning. This was also shown from the good responsiveness of the experimental class, namely during learning in class XII OTKP 1 especially
In table 5, the significance value was 0.399 > 0.05, so it was accepted. From the test, it was said that there was no significant difference in student learning outcomes after applying the Recitation method to class XII OTKP students at SMK Negeri 3 Padang. This method of giving or recitation was presented in the form of tasks containing related subject matter so that students carried out learning activities which can then be accounted for. Giving assignments or recitations will stimulate them independently to study harder in deepening the material and broaden their horizons about what is being studied, especially in the subject of Public Relations and Protocol Governance Automation.

Tonaiyo et al., (2020) said in his findings that the average value of students taught with Recitation was higher than using the discussion method. The findings of this study were different from the results obtained from this second hypothesis test where in the first stage of the assignment phase, the control class students, namely XII OTKP 2, were provided with assignments in the form of questions through Google Classroom with a deadline sufficient for the students to carry out. Next was the second stage of the task implementation phase, where the control class did the assignment or recitation in lesson hours independently and was allowed to look for answers from the internet and learning resource books because the questions were analytical in nature, therefore students answered the recitation questions using their own language and analysis. In the first and second
stages of the Recitation method, it was carried out by using online media, namely Google Classroom and Google Forms. However, in the third stage, namely the accountability phase, it was carried out by means of a Video Conference. In the phase of taking responsibility for the task, students did not develop a good responsive attitude. This was also found in research by Siadi et al., (2009) and Wargina (2022) which stated that the Recitation method could not be applied properly because students were not serious in doing assignments so that the application of the Recitation method was not optimal.

This was a factor in the percentage of student learning outcomes in the control class which was less high than the experimental class. However, some other students showed positive responses during the lesson and were active in the question and answered phase in the phase of taking responsibility for this task. The results of this hypothesis test contradicted the research findings by Oktaviana et al., (2013), Wibowo & Hermawan (2014) and Uswatun Khasanah & Fuadiah (2019) which stated that the Recitation method improved student learning outcomes. However, the data obtained from the control class showed that there was no difference in student learning outcomes before and after the application of the Recitation method.

Testing the third hypothesis that the two sample classes were given different treatment between the experimental class that applied the Problem Solving learning method and the control class applied the Recitation learning method. It can be observed in the Table 6.

In Table 6, it was known that the significance value was 0.435 > 0.05, so it was accepted, it was concluded that there was no difference in student learning outcomes between the experimental class which was applied by the Problem Solving method and the control class which applied the Recitation method to class XII OTKP students at SMK Negeri 3 Padang. Based on the descriptive analysis of the data that had been carried out on the experimental class students who applied the

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>410,000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>938,000</td>
</tr>
<tr>
<td>Z</td>
<td>-.781</td>
</tr>
<tr>
<td>asymp. Sig. (2-tailed)</td>
<td>.435</td>
</tr>
</tbody>
</table>

Source: Primary Processed Data, 2021

Problem Solving method and the control class students who applied the Recitation method, the average value of the Pre-test of the experimental class was 60.93 and the average value of the Pre-test of the control class was 63.47. This showed that the difference in learning outcomes on the pre-test for the two sample classes was not very significant. H_0

In this research, an experimental class was class XII OTKP 1, given learning activities based on the syntax of the Problem Solving method using Problem Solving questions in the form of problem solving questions related to the material. Then the control class was class XII OKTP 2 whose learning activities were given tasks in the form of analytical questions related to the material discussed in the study. Where the two sample classes were equally given the material KD 3.15 prepared the holding of meetings/meetings by following each syntax of the learning method used.

Results of the final test (Post-test) obtained from the class that applied the Problem Solving method and the class that applied the Recitation method had the same student learning abilities. This was known after the research referred to the data found with the test scores of student learning outcomes. However, based on the testing of the first and second hypotheses, the experimental class found a more significant increase in learning outcomes, namely the average score for the initial test was 60.93, then the final test score increased to 71.24. Compared to the control class, the Re-
citation method was applied where the initial test found an average score of 63.46 then given the final test, the average score was 65.75. This means that the Problem Solving learning method in this study had more potential to improve student learning outcomes, especially in class XII OTKP at SMK Negeri 3 Padang. But it also depended on the learning material applied and depended on the situation and condition of students in learning. In line with this, Maulidya (2018) stated that Recitation and Problem Solving methods were effective on student achievement where this was returned to the subject teacher to apply the right method to the conditions, abilities, and learning styles of the students.

CONCLUSION

The limitations of the research are one of the data collection techniques was done online by using Google Forms to distribute test questions, so that there was a lack of supervision of the respondent’s work on the test questions in detail. Then, during a video conference, some respondents did not activate the camera in the ongoing learning activities as well as internet network disturbances in carrying out presentations. However, researchers tried to get respondents to work on the test questions carefully and distribute the materials first. From the research, it can be concluded: (1) There were differences in student learning outcomes before and after using the Problem Solving method with a sig value of 0.002, which means that the significance value was less than 0.05. (2) There was no difference in student learning outcomes before and after using the Recitation method with a sig value of 0.399, which means the significance value was greater than 0.05. (3) There was no difference in student learning outcomes using the Problem Solving method and the Recitation method in class XII OTKP students at SMKN 3 Padang with a sig value of 0.435, which means the significance value was greater than 0.05. The suggestions that can be shared are: for teachers to apply the Problem Solving method in the learning process because there were differences in student learning outcomes with an increase, especially in the material for preparing for meetings/meetings as had been tested by researchers. For further researchers, it is recommended to apply the Problem Solving learning method variables with other variables and consider the Recitation method variables on different learning materials.

REFERENCES


