

Increasing of Students the Concept Understanding of Class X SMK Immanuel II Kabupaten Kubu Raya through Student Facilitator and Explaining Learning Model

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Abstract: This research aimed determining the increasing the concept understanding of students class X SMK Immanuel II Kabupaten Kubu Raya through student facilitator and explaining learning model. The research method was quasi experiment. The population of the research is all students of class X of PM at SMK Immanuel II Kabupaten Kubu Raya. The research sample was students of class X PM2 consist of 41 students as the control class and X PM1 consist of 41 students as the experimental class. Data obtained from the results of the pretest and posttest. Data analysis used was descriptive and inferential tests using t-test. The results showed that (1) the average value of pretest on the experimental class and the control class was in the same category that is "poor", while the average of the experimental class was categorized as "good" and the control class belonged to "medium" category. (2) There was significant influence of student facilitator and explaining learning model on the concept understanding with significance value 0,030, so it could be concluded that student facilitator and explaining learning model can improve the concept understanding on subjects of business communication on class X SMK Immanuel II Kabupaten Kubu Raya.

Keywords: student facilitator and explaining, concept understanding, business communication.

Introduction

In the process of teaching and learning teachers play an important role to guide and educate students at school. In accordance with the Law of the Republic of Indonesia Number 14 of 2005 concerning Teachers and Lecturers stated that, "Teachers are professional educators with the main task of educating, teaching, guiding, directing, training, evaluating and evaluating students in early childhood education, formal education, basic education and secondary education".

Teachers as mentors must be able to direct and shape the attitudes and characters of children so that they are more obedient to God the Almighty, have a sense of responsibility, honest and can work together and socialize well with fellow. Teachers are assigned to convey science to students with learning objectives to be achieved. Teachers should be able to explain the science well and straightforward, in order to be understood by the students. If the planned learning objectives are well conveyed, then the student learning achievement will be good. Because students are able to achieve learning objectives, the success of student learning achievement depends on the way teachers teach and learning models used in the learning process in the classroom.

In the process of teaching and learning in class X PM teachers tend to use learning models of lectures and discussions. The learning model that teachers apply in the classroom is not effective, many students are lazy to argue or work on questions from teachers. In group discussions students tend to rely on the clever or diligent friends, to answer the questions teachers. Others just follow without helping to answer the question. Even if the student is asked by the teacher to present the answer in front of the class or in his / her seat, they are not ready to explain the right and proper answers to the teacher because they does not understand the questions and the answers. This causes the students to become unfocused in learning, because the motivation in learning is less, so the students' learning comprehension is less and the students' learning achievement could be decrease.

Therefore, to improve students' understanding and the learning achievement, teachers should be more innovative and creative in teaching, such as applying the different model of learning. Learning model that can be used is Student Facilitator and Explaining. According to Rachmad Widodo (2009) Student Facilitator and Explaining learning model is a learning model where students / learners learn to present ideas / opinions to fellow students. Student Facilitator and Explaining learning model is one of the cooperative learning model which involves the students' activity in the learning process. Cooperative learning model is using small groups with the number of members of each group of 4-5 students in a heterogeneous (Trianto, 2007: 52).

According to Suprijono (2009: 128), the Student Facilitator and Explaining learning model is a model that involves the activeness of students who have six syntaxes, namely: 1) The teacher conveys the competencies to be achieved, 2) The teacher demonstrates / presents material, 3) gives students the opportunity to explain to other students for example through concept charts / maps, 4) Teachers conclude ideas / opinions from students, 5) Teachers explain all the material presented at the time, 6) Closing. Student Facilitator and Explaining learning model is an active learning method. Essentially active learning to direct the attention of learners to the material they have learned.

In addition to directing the attention of learners to the material being studied, Student Facilitator and Explaining can also be applied to all subjects and grade levels. Implementation of this learning model is expected to improve the memory and understanding of students and readiness in learning. The process of teaching and learning by using the model of learning can make the classroom learning atmosphere more effective. Teachers can also convey the purpose of learning well to students. Thus, students become happy to learn, more motivated, the learning atmosphere becomes fun, and the students also become easier in understanding the lesson. This can help improve student learning achievement that is initially low to increase. Through an effective learning process, student learning outcomes can be better. This is why in the teaching and learning process teachers are not only required to be able to convey knowledge to students, but must be creative and innovative in teaching so that the interests, motivation and learning achievement of students in learning increase. Purwanto (2014: 49) stated that, "learning achievement or behavioral changes that give rise to abilities can be in the form of Instructional Effect and nurturing effects." The main achievement of instruction is the learning ability that is planned to be realized in the curriculum and learning objectives. Being the accompanist results is the learning achievement that is achieved but not planned to be achieved, for example the students like the subject because they like the way the teacher teaches.

This study is intended to find out whether the Student Facilitator And Explaining learning model is effective in improving students' understanding of concepts in learning and how student learning achievement after the implementation of the learning model, to find it the author will do the research, namely by carrying out the teaching and learning process in XPM class using Student Facilitator And Explaining learning model. The learning model had chosen because it can help to build students' readiness / learners to present ideas / opinions to other students. This study was conducted at SMK Immanuel II Kubu Raya. This study takes samples in the class X PM and on business communication subjects. In order to get the accurate results, the author took 2 classes to be tested namely the control class and experimental class. The learning model is effective or not will be known after the research is completed. That is the basic reason of the researcher in doing the research about the "Effectiveness of the application of Student Facilitator and Explaining learning model in improving the understanding of concepts and student learning achievement in Business Communication subjects at Class X PM in SMK Immanuel II Kubu Raya" In general, the problem in this research is: "Does the application of Student Facilitator learning model and Explaining can improve students' understanding of concepts and learning achievement in Business Communication class X PM in SMK Immanuel II Kubu Raya?"

Research Methods

The method used in the study this was an experimental method with nonequivalent control group design. The population of this study was the students of class X PM in SMK Immanuel II Kubu Raya with the number of 82 students. Sampling technique used purposive and sample determination technique with certain consideration. Based on several considerations obtained from teachers who teach and student learning time, it is determined X PM2 as the control class X PM1 as the experimental class.

Data collection techniques used was direct observation techniques and measurement techniques. While, the measurement tools used were Direct Observation Sheet, Test, and Documentation. The instruments that have been compiled were tested to determine the validity, reliability, and distinguishing, and difficulty level of questions. The aim is to know whether the items have met the requirements of a good test or not.

Analysis of data processing in this study includes analysis of test instruments. The analysis of the results of the research includes the Normality Test, Homogeneity Test and the T-test. Normality test is used to find out whether the post test grade data between class X PM1 and X PM2 is normally distributed or not. Homogeneity test is to obtain the assumption that the research sample originates from the same or homogeneous conditions, which then to determine the t statistics that will be used in testing the hypothesis. Homogeneity test is done by investigating whether the two samples have the same variance or not. The average equality test (t-test) in the early stages is used to test whether there is an average similarity between the experimental class and the control class.

Results

Students class X of SMK Immanuel II Kubu Raya Regency before this research conducted still use conventional learning (lecture) in learning activity,. In this method, the teacher is more active as a giver of knowledge to the students, and the students only listen to the information from the teacher. It is not balanced with the active students, consequently the students tend to depend on the teacher, not independent, and the potential of the student does not develop optimally. This can be seen from only few students who are active to convey the opinions or difficulties they faced about the material presented. With this learning model, the lack of interaction between students and teachers, even student interaction with students so that will have a negative impact on student learning achievement. Overcoming the problems above, teachers need a learning model that allows every student to participate more actively in learning, so that students have their own responsibility in understanding the material being studied. Based on the condition of the students before the research, the writer is interested to create a fun learning that is trying to replace conventional learning (lecture) with student facilitator and explaining learning model on business communication subjects. Student facilitator and explaining learning model matches the subject of business communication, because it is effective to train students to talk or to convey ideas or opinions themselves. With the implementation of this learning model learners can issue ideas on their mind so they can understand the material more. Activities undertaken in this stage is to implement learning using cooperative learning model type Student Facilitator And Explaining (SFAE) in experimental group and Conventional Learning model for Control group.

Based on the Shapiro-Wilk normality test the pretest data was obtained for the experimental class with significance value $p = 120$, so $p > \alpha$ and for the control class the significance value $p = 128$, so $p > \alpha$. So it could be concluded that the pretest score data for the experimental class students and control class students or both samples are from normally distributed populations. While the result of Normality control and experimental posttest obtained result for experiment class value of significance $p = 0,529$, so $p > \alpha$ and for control class value of significance $p = 0,389$, so $p > \alpha$. So it could be said that the posttest score data for experimental class students and control class students or both samples also from a normally distributed population.

Based on the homogeneity test of variance of pretest data using Levene's test the significance value is, 982. Since $p\text{-value} = ,982 > 0.05$, it can be concluded that the control class students and the experimental class are from populations that have the same variance, or both classes are homogeny. While the result of homogeneity test of variance of posttest data by using Levene's tests significance value are 0,602. Since $p\text{-value} = 0.602 > 0.05$, it can be concluded that the control class students and the experimental class are from populations that have the same variance, or both classes are homogeny.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Score	Equal variances assumed	,001	,982	,359	80	,720	,74390	2,07183	-3,37918	4,86698
	Equal variances not assumed			,359	79,935	,721	,74390	2,07183	-3,37923	4,86703

Based on the result above known that the value of significances (sig.2-tailed) with the t-test is 0.720. Because the probability value is bigger than 0.05 ($0.720 > 0.05$) then H_0 accepted or Understanding the concepts and learning outcomes on the subjects of business communication class X SMK Immanuel II Kubu Raya at pretest does not differ significantly.

T-test on the final test (posttest). Both classes are normally distributed and have homogeneous variance, then the t-test done with SPSS 18.0 for Windows using Independent Sample T-Test with the assumption of the two variances assumed with significance level 0, 05.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Value									Lower	Upper
	Equal variances assumed	,274	,602	-2,206	80	,030	-5,585	2,532	-10,625	-,546
	Equal variances not assumed			-2,206	79,874	,030	-5,585	2,532	-10,625	-,546

Summary of t test-test known that the average experiment class learning result of 72.73 with Std. Deviation 11.24 and average control class learning outcome of 67.07 with Std. Deviation 10.43, so it can be concluded that the difference in the average of experimental class learning outcomes is bigger than the control class. From the table known that t_{count} equal to -2.206 with significance 0,030. Obtained t_{table} from db 64 at 5% significance level is 1,998. So the value of $t_{arithmetic} > t_{table} (-2,206 > 1,998)$ and significance value less than 0.05 ($p = 0,030 < 0,05$). Then H_0 rejected and H_a received, so it could be concluded that the application of student facilitator and explaining learning model more effective than Conventional Learning model to increasing the understanding the concept and learning achievement on the subject of business communication at class X SMK Immanuel II Kubu Raya.

To know the significance of the increasing of concept understanding is processed by using Normal Gain. Based on the results of the calculation shows that the average value of pretest of student learning outcomes before implemented learning in the control group 40.21 further increased at posttest with an average of 67.15, further gain in the control group is worth 26.94 while the N-gain value at the control group showed an increase in understanding or mastery of the concept with a value of 0.54 moderate category. While the average pretest of student learning outcomes before implemented learning in the experimental group was 39.46, then increased at posttest with an average of 72.12. With the N-gain value in the experimental group shows an increase in understanding or mastery of the concept with a value of 0.59 which belonged to "medium" category.

Discussion

This research is intended to know the effectiveness of the application of student learning model facilitator and explaining in improving the understanding of concepts and learning outcomes of students on the subject of business communication class X PM in SMK Immanuel II Kubu Raya District. Each class is treated differently. The experimental class is subjected to learning by using the student facilitator and explaining learning model, while the control class is subjected to learning by conventional method.

Understanding the concept after using the Student Facilitator and Explaining learning model. The average pretest of the students' learning achievement before the learning in the experimental group was 39.46, then increased at posttest with an average of 72.12. Based on testing known by Std. Deviation 11,72 then based on result of equality test of two mean between experiment class and control class show t_{count} equal to -2,206 with significance 0,030. With t_{table} of db 64 at 5% significance level is 1,998. So the value of $t_{arithmetic} > t_{table} (-2,206 > 1,998)$ and significance value less than 0.05 ($p = 0,045 < 0,05$). Then H_0 is rejected and H_a is accepted, then from N-Gain test shows improvement of comprehension or mastery of concept with value 0,59 belonged to "medium" category. Hence it could be concluded that the application of student learning model facilitator and explaining more effective than Conventional Learning to understanding the concept and learning achievement on the subject of business communication class X SMK Immanuel II Kubu Raya District.

These results indicate that student learning achievement taught using student facilitator and explaining learning models are better than conventional learning. So it can be concluded that the use of model learning student facilitator and explaining in improving the understanding of concepts and student learning outcomes on the subject of business communication class X pm at SMK Immanuel II Kubu Raya district. It is also evident that the average grade of the experimental experiment is increasing, where the pre experimental value is 39.46 while the value after the experiment is 72.73.

The results of this study supported the opinion of Prasetya (2009) which stated that the advantages of Student facilitator and explaining learning model are: 1) Can encourage the growth and development of students' critical thinking potential optimally; 2) Train active, creative students in facing every problem; 3) Encouraging the growth of tolerance, listening and appreciating the opinions of others; 4) Encouraging the growth of demonstration attitudes; 5) Train students to improve the ability to exchange opinions objectively, rationally to find a truth in the cooperation of members of the group; 6) Encourage the growth of courage to express the opinions of students openly; 7) Train students to always be independent in facing each problem; 8) Train students' leadership; 9) Expanding students' insights through the sharing of information, opinions and experiences among them.

Therefore, teachers who provide lessons should make variations in teaching. Mathematical learning that uses the right media can make it easier for learners to remember the learning material. Teachers can hold variations by providing the choice of learning methods that learners want to be more motivated and avoid saturation in learners in the implementation of learning.

Learning outcomes after using the Student Facilitator and Explaining model showed the average value of pretest control class 40.21 and then rose to 67.15 with median 40 on pretest and 65 on posttest. The values that often appear on the pretest are 35 and 65 on the posttest. The lowest value is 25 at the pretest and the highest score is 60.5 while the lowest value on the posttest is 45 and the highest is 90.

The average grade of experiment class pretest 39.46 then rose to 72.73 with a median of 40 on pretest and 75 on posttest. The values that often appear on the pretest are 35 and 75 in the posttest. The lowest score is 25 on the pretest and the highest score 60 while the lowest score on the posttest is 50 and the highest is 95.

Based on the data that the researchers describe above it is clear that learning achievement after using the Student Facilitator and Explaining learning model is more effective than learning using conventional learning model.

In the process of teaching and learning in class X PM teachers tend to use learning models of lectures and discussions. The usual teaching-learning model that teachers apply in the classroom is not effective, many students are lazy to argue or work on questions from teachers. After a trial using the Student Facilitator and Explaining learning model, the results obtained are better. Where Student Facilitator and Explaining learning model is one model of cooperative learning that involves the activeness of students in the learning process.

It can be seen from the average presets of control class 39,46 then rose to 72,73 with median 40 at pretest and 75 on posttest. The values that often appear on the presets are 35 and 75 in the posttest. The lowest score on the pretest was 25 and the highest score was 60 while the lowest score on the posttest was 50 and the highest was 95. Based on the post-test t test is known average experiment class learning outcome of 72.73 with Std. Deviation 11.24 and average control class learning outcome of 67.07 with Std. Deviation 10.43, so it can be concluded that the difference in average learning outcomes experiment class is greater than 5 with control class. From the table is known t count equal to -2.206 with significance 0,030. Obtained t table from db 64 at 5% significance level is 1,998. So the value of $t_{\text{arithmetic}} > t_{\text{table}}$ ($-2,206 > 1,998$) and significance value less than 0.05 ($p = 0,030 < 0,05$). Then H_0 rejected and H_a received, so it can be concluded Application of student learning model facilitator and explaining more effective than Conventional Learning to understanding the concept and learning outcomes on the subject of business communication class X SMK Immanuel II Kubu Raya. N-gain values in the control group showed an increase in comprehension or mastery of the concept with a value of 0.54 moderate categories. While the value of N-gain in the experimental group showed an increase in understanding or mastery of the concept with a value of 0.59 moderate categories.

The results of this research are in line with the opinion of Rachmad Widodo (2009) Student Facilitator and Explaining model of learning is a model of learning where students / learners to present ideas / opinions to other fellow learners. Similarly Devira (2012) Model Student Facilitator and Explaining is a model that provides opportunities for students or participants to present ideas or opinions to other fellow participants. Student Facilitator and Explaining Learning Model have advantages that students are invited to be able to explain to other students, students can issue ideas that on their mind so that they can understand the material better. With the implementation of learning model Student Facilitator and Explaining in class X PM students are braver to issue ideas that on their mind so that they can understand the material better.

The result of this research is in line with Indah Lestari research (2014). The result of research shows that the result of science learning of students who follow SFAE learning (Student Facilitator and Explaining) is better than the result of science learning of students who follow conventional learning. Similarly, based on research results Dita Wuri Andari (2013), that the application of Learning Model Student Facilitator and Explaining (SFAE) can improve learning achievement. As well as in Siska Ryane Muslim's (2015) study, it shows that the mathematical problem solving ability of the learning using Student Facilitator and Explaining method is significantly better than conventional learning.

Conclusion

Based on the results of research and discussion can be drawn conclusion as follows. After learning by using student facilitator and explaining model in the experimental class obtained an average of 72.12. while for the initial average grade of experiments of 39.46 Based on the test known by Std. Deviation 11,72 then based on result of equality test of two mean between experiment class and control class show t_{count} equal to -2,206 with significance 0,030. With t_{table} of db 64 at 5% significance level is 1,998. So the value of $t_{arithmetic} > t_{table}$ (-2,206 > 1,998) and significance value less than 0.05 ($p = 0,045 < 0,05$). Then H_0 is rejected and H_a is received, then from N-Gain test shows improvement of comprehension or mastery of concept with value 0,59 belonged to "medium" category. so it can be concluded Application of student learning model facilitator and explaining more effective than Conventional Learning to understanding concept.

In the experimental class after the learning using student facilitator and explaining model average learning outcome of 72.73 while for the average value of initial experiment class of 39.46. This means that the experiment class grade has increased after treatment. For the control class taught by using the conventional model obtained the average learning outcome of 67.15. Obtaining the average value of the experimental class after the treatment of 72.73 more than the KKM established by the school that is 70. Hence it could be concluded learning result of Business Communication learners on the material of interview procedure on the experiment class better than learning achievement of students on control class. Thus the use of student learning model facilitator and explaining effective in improving the understanding of the concepts and learning achievement of learners on the materials of interview procedures class X SMK IMMANUEL II Kubu Raya District.

Based on post-test t_{test} , it is known that the average of experimental class learning result is 72,73 with Std. Deviation 11.24 and average control class learning outcome of 67.07 with Std. Deviation 10.43, so it can be concluded that the difference in average learning outcomes experiment class is greater than 5 with control class. From the table is known t_{count} equal to -2.206 with significance 0,030. Obtained t_{table} from db 64 at 5% significance level is 1,998. So the value of $t_{arithmetic} > t_{table}$ (-2,206 > 1,998) and significance value less than 0.05 ($p = 0,030 < 0,05$). Then H_0 rejected and H_a received, so it can be concluded Application of student learning model facilitator and explaining more effective than Conventional Learning to understanding the concept and learning achievement on the subject of business communication class X SMK Immanuel II Kubu Raya.

The results of the study are expected to give a little contribution of thought as an effort to improve the ability in the field of education and especially the field of business communication. Suggestions that writers can contribute in relation to the results of this study are as follows. 1. It is suggested that the teacher can prepare the learning design into student facilitator and explaining model so that each learner can be responsible to understand the material being taught. 2. Teachers can use student facilitator and explaining model during the learning process so that learners are interested and not bored while learning process. 3. The use of student learning model facilitator and explaining can be applied in learning business communication on other subject matter that is considered suitable to use it. 4. The use of student facilitator and explaining learning model can be applied in other schools. 7. There is a need for further research as the development of this research, especially by completing the use of student facilitator and explaining learning model.

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