

Influence of Strategy of Learning and Achievement Motivation of Learning Achievement Class VIII Students of State Junior High School in District Blitar

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Abstract

This study aims for know influence of problem-based learning strategies and achievement motivation on learning achievement. The method used in this research is quantitative method. The instrument used in this study is two fold instruments to measure moderator variable (achievement motivation) and instruments to measure the dependent variable (the learning achievement). Technical analysis of the data to be used in this research is descriptive and inferential statistics, while the research data collected and processed by ANCOVA techniques. The research proposed by researchers before used analysis of variance of two paths first tested the parametric test assumptions. These results indicate that. Of the 59 samples in the experimental group were included in the category of learners motivated high achievers was 37 (62.71%) and are included in the category of low achievement motivation was 22 (37.29%), the sample control group applying of discussion teaching amounts to 54. Of the 54 samples that are categories of learners who have high achievement motivation numbered 20 (37.04%), and that included motivated underachievers 34 (62.94%). The hypothesis of this study is There is a difference of learning achievement between groups of learners that learned with problem-based learning strategy with a group of learners that learned with the learning strategy discussions. There is a difference of learning achievement between groups of learners who have high achievement motivation with a group of learners who have low achievement motivation. There is an interaction between the two strategies using problem-based learning and discussion, as well as achievement motivation on learning achievement.

Keywords: Problem-based learning, achievement motivation, learning achievement.

PRELIMINARY

The paradigm shift of education of sorting that selects the ability of learners be emphasis on learning (Reigeluth & Cheliman, 1999), there by shifting the role of each component of the educational system. The design of learning should be shifted from focusing on the presentation of the material completely be focused on creating a learning environment according to the needs of learners, from learning that originally impressed simply pour information into the process of helping learners build knowledge itself, of learners are passive to learners active, of verbal learning tends to be more contextual learning / real and more meaningful. The shift is consistent with the view Gu and Wang (2006): "A changing view of learning and teaching has been prevalent around the world a greater emphasis on social and constructivist dimensions". Many of the criticisms aimed at teaching learners too much emphasis on the mastery of some information or a mere concept. The ability of learners is very alarming in applying these concepts if have any problems in life. Stacking of information or concepts in subjects students can be less than helpful is not even helpful at all if it is only communicated by the learner to learner through in one direction like pouring water into a glass. In teaching, learning always requires learners to learn and rarely give lessons on how learners to learn. Learners also requires learners to solve the problem, but rarely taught how learners should solve the problem (Arends, 1997: 243).

Observations conducted by researchers in the field before the study was conducted in 10 schools, learning social studies indeed tend to be monotonous, less varied due to the knowledge and ability of learners in selecting and implementing learning strategies is still limited. Although there has been some shift in the paradigm of learning from a lecture to discussion, but the chosen strategy is less varied and more still centered on the learner (*Teacher centered*), it affects the learning achievements of learners. For it is necessary to apply strategies learner-centered learning, because it can enable learners, provide opportunities for learners to construct knowledge, and provide opportunities to cooperate in solving the problem. One strategy that is suitable for it is a strategy of problem-based learning (problem based learning) which emphasizes on "learning".

PBM strategy influence on learning achievement has been studied by experts, and in general the results are significant, which could improve learning achievement. As the results of Kaufman and Mann (1999) shows that learners who use PBL in learning will produce a good performance compared with learners who are not using PBM. Other studies in the field of saint carried by Akinoglu, et al (2007), Semra Sungur, et al (2006) concluded that the applied learning in the experimental group who apply problem-based learning show an increase learning performance is better compared with grade control group applying traditional learning, Similar studies have also been conducted by Zaduqisti (2010), Dimiyati (2012) which concluded that there were significant differences in learning achievement between learners that learned with PBL compared to conventional learning.

METHOD

The subjects in this study is a Junior High School eighth grade learners who are in the district of Blitar (42 schools). The number of schools to be sampled are two schools of research, in which each school is taken 2 class. The instrument used in this study is twofold instruments to measure moderator variable (achievement motivation) and instruments to measure the dependent variable (the learning achievement). Ardhana (1983) explains that in order to select the assays as an instrument in the study should be explained why these tests are used.

Instruments to measure the dependent variable in this case is the use of learning achievement test instrument pretest and posttest learning achievement in the form of multiple-choice test. Instrument pretest and posttest the same amount. Pretest and posttest instrument consists of 25 questions. The trial was conducted to determine the level instrument constancy (reliability) and the level of accuracy (validity) on instruments that will be used for research, although in this study used an instrument that had previously been tested reliability. Event data collection is done in two stages, namely the preparatory phase and the implementation phase of data collection.

Preparation of research instruments for achievement motivation using a questionnaire developed by Robinson (1961), which has been adapted by Degeng (1991). Instrument is based on the following factors: (1) work hard, (2) expectations for success, (3) fear of failure, and (4) competition. Instruments for achievement motivation using a questionnaire (questionnaire) attitude scale. Technical analysis of the data to be used in this research is descriptive and inferential statistics. The research data were collected and processed by using ANCOVA (analysis of Covariance) to test the hypothesis that are study by researchers. Before being used analysis of variance of two paths first tested the assumption of parametric: (1) test for normality of data distribution of the dependent variable and, (2) test of homogeneity (equality test variance between groups). Test for normality distribution of data each treatment group performed the statistical Kosmogorov-Smirnov test and homogeneity of variance test conducted by test levene's Test. Normality Test (Test of normality).

RESULTS

a. Standard deviation

Data on the value pretest Learning PBL (experimental) and Discussion (control).

Table 1

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Experiment	59	36.00	68.00	50.1356	8.24508
Control	54	32.00	68.00	50.2963	7.27267
Valid N (Listwise)	54				

Note: The maximum score ideal (SMI) = 10

Table 2

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Experiment	59	76.00	100.00	90.2373	6.35810
Control	54	72.00	92.00	78.8889	5.40673
Valid N (listwise)	54				

Table 3 Normality Test Results

Tests of Normality

	Factor	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Achievement motivation	1.00	.166	58	.200	.935	58	.387
	2.00	.315	54	.163	.824	54	.127

a. Lilliefors Significance Correction

Note: Factor 1 = Class Experiment
 Factor 2 = Class Control

Table 4 Test Results Data Homogeneity with Levene's Test
Test of Homogeneity of Variances

Achievement motivation			
Levene Statistic	df1	df2	Sig.
1.432	1	110	.234

1.2.1 Hypothesis Testing research

After fulfillment of parametric assumptions, then the next step is to conduct research data analysis. The hypothesis in this study were tested by analysis of variance (ANCOVA) two 2x2 lanes. There are three hypotheses in this study are:

Table 5

Tests of Between-Subjects Effects

Dependent Variable: achievement motivation

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3543.692 ^a	2	1771.846	50.097	.000
Intercept	2601.835	1	2601.835	73.564	.000
motivasi presensi	5.065	1	5.065	.143	.706
kelas	683.635	1	683.635	19.329	.000
Error	3855.165	109	35.368		
Total	811168.000	112			
Corrected Total	7398.857	111			

A. R Squared = .479 (Adjusted R Squared = .469)

- 1) Correct Model: a Value influence of all independent variables (PBL and discussion) is Simultaneous or together - equal to the dependent variable (achievement motivation and interaction) sig (0,000) of <0.05 means significant influence.
- 2) Intercepts: Values dependent variable can change without being affected by an intercept despite the existence covariat and independent variables.
- 3) Achievement motivation: achievement motivation is for scale variables then it becomes covariat. Value covariat show how big influence on the dependent variable (class). Sig 706 > 0.05 means significant effect.
- 4) The smaller the error value, the better the multivariate models.
- 5) R squared multiple determination value independent simultaneously all variables on the dependent variable.

Based on the results of hypothesis testing, it can be concluded as follows:

- 1) There is a difference of learning achievement between groups of learners that learned with problem-based learning strategy with a group of learners that learned with the learning strategy discussions.
- 2) There is a difference of learning achievement between groups of learners who have high achievement motivation with a group of learners who have low achievement motivation.
- 3) There is significant influence learning strategies (application of the model PBM) and achievement motivation on learning achievement.

DISCUSSION

Influence of Learning Strategies on Learning Achievement Subjects social study. Statistical analysis showed that the value of variable significance PBL strategy at posttest learning achievement is much smaller than the numbers 0.05, so the null hypothesis that there was "no difference in learning achievement between groups of learners that learned with PBM strategy and the group of learners that learned with discussion teaching" rejected. Results of studies have shown that there are significant differences between learners that learned to use learning strategies PBL with that learned the lesson discussion. The value of learning achievement of class groups that learned with the learning strategy PBL is better than the group that learned with the class discussion of learning strategies. This can be caused by several things that gave him influence, either directly or indirectly.

Influence Achievement Motivation toward learning achievement Statistical analysis showed that the level of significance or value of the probability of achieving motivation is less than 0.05, so the null hypothesis is not accepted or rejected. This proves that "there are differences in achievement motivation among learners who have high achievement motivation by learners who have low achievement motivation". In fact studies have shown that achievement motivation has an important role in achieving a learning achievement.

In other words, the higher the achievement motivation of learners, the higher learning achievements gained. Research showing the relationship between achievement motivation and academic achievement have been done. In general, the results of the study showed a positive correlation. Interaction between Learning Strategies and Achievement Motivation on Learning Achievement strategy PBL superior to discussion teaching in order to achieve the learning achievement both for learners who have high achievement motivation and low especially in

the matter "Institution and deviations Social" in class VIII Junior High School, where high achievement motivation is at the top, while the low achievement motivation located at the bottom of both the PBM strategies and discussions, and does not appear parallel. Thus it can be explained that learners who have high achievement motivation and academic achievement is higher than the learners who have low achievement motivation. From these explanations it can finally be concluded that there is an interaction between the two variables, namely learning strategies (PBL and discussion) and achievement motivation (high and low). In the present study found PBM strategic advantages compared with the strategy discussion, namely, the class PBM however motivation underachievement results or learning achievement is not much different or the difference was not significant.

CONCLUSION

- 1) Achievement of learning social studies in class VIII Junior High School treated using PBL strategies in the experimental class groups, with group discussion teaching classes that implement their apparent differences
- 2) The social studies learning achievement between groups of learners who have high achievement motivation by learners who have low achievement motivation appear to have differences.
- 3) There is interaction between the learning strategies and achievement motivation on learning achievement in social studies class VIII Junior High School. It's just that there is a difference between the effects of experimental classes that implement PBL learning with group discussion classes that apply learning.
- 4) There is a significant effect of learning strategies (application of the model PBL) on student achievement.

SUGGESTIONS

- 1) For the junior level learners, it is advisable to choose a learning strategy with regard Characteristics of learners, and to further boost performance required learners to master the material, mastering learning strategies, high confidence, and have high competence. For that we need to do further research what factors could impact the competency improvement for student.
- 2) Application of PBL strategy requires an understanding of the concept of application correctly in order to obtain maximum results. It required careful preparation ranging from recognizing the characteristics of learners, the selection of appropriate materials, preparation of learning tools, the media used, evaluation tools, until the product is produced.
- 3) The results of this study show that PBL strategy is superior to a strategy discussion in terms of learning achievement. Needs to be researched more about implementing a learning strategy discussions particularly in terms of the concept of good discussion.
- 4) All learning tools and materials in this study refers to the curriculum in 2006 (KTSP), and when it is applied to the curriculum besides KTSP certainly needed adjustment, it would need to be held for further study.

REFERENCES

- Ardhana, I.W, 1983, *Kesanggupan Berpikir Formal Ala Piaget dan Kemajuan Belajar di Sekolah*. Disertasi tidak diterbitkan. Malang:Pascasarjana IKIP Malang.
- Arends, R.I 1997. *Classroom Instruction and Management*. New York: McGraw Hill.
- Akinoglu, O., & Tandogan, R.O. 2007. *The Effects of Problem-Based Active Learning in Science Education on Students Academic Achievement, Attitude and Concept Learning*. Istanbul, Turki: Marmara Univercity. (Online), (<http://www.Ejmste.com>). Diakses September 2014
- Degeng, I.N.S, 1991, *Karakteristik Belajar Pebelajar Berbagai Perpembelajaran Tinggi di Indonesia*. Jakarta PAU-UT Dirjen Dikti Depatemen Pendidikan dan Kebudayaan.
- Dimiyati, 2012. Pengaruh Strategi Pembelajaran Matematika Realistik & Motivasi Berprestasi & Sikap siswa Pada Bidang Studi Matematika.*Disertasi*. Pascasarjana Universitas Negeri malang. Tidak Dipublikasikan.
- Gu, L. & wang, J. 2006. School-based research and professional learning: An innovative model to promote teacher professional development in China. *Teaching education*, 17(1): 59-73.
- Kaufman,D.M. & Mann, K.V. 1999. Achievement of Students in a conventional and Problem-Based Learning (PBL)Curriculum. *Advances in health Sciences Education* 4:245-260, 1999.
- Reigeluth, C.M. 1999. *Instructional Design Theory and Models A New Paradigm of Instructional Theory*. Volume II. New jersey: Lawrence Erlbaum Associates, Publishers.
- Semra, S. dkk. 2006. Improving Achievement Through Problem-Based Learning. *Journal*. Vol 4 (Online), (<http://www.JBE.Com>). diakses September 2013).
- Zadqujisti, E. 2010. Problem-Based Learning (Konsep ideal Model Pembelajaran untuk Peningkatan Prestasi Belajar dan Moivasi Berprestasi). *Forum Tarbiyah*. Vol 8(2): 87-948