

The Effect of Guided Inquiry Learning Method VS Free Inquiry Against Learning Outcomes

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Abstract: This research is motivated by the lack of use of various methods in learning the basics of accounting which resulted in low student results. Issues that will be examined in this study is whether there are differences in student learning outcomes using guided inquiry learning methods and the methods of free inquiry learning? With the goal of his research which is to determine differences in learning outcomes of students who are taught using guided inquiry learning and free inquiry. Method of this research is a quasi-experimental. The experiment was conducted at the Department of Economic Education Faculty of Teacher Training and Education University of Nusa Cendana the population of all students of Economic Education FKIP Undana, and subject to the 70 students of the first semester, with 40 students in the grade A as an experimental class teaching methods guided inquiry and 30 students in the grade B as the control class using free inquiry learning methods. Purposive sampling is cluster random sampling technique. Data were analyzed using one-way ANOVA technique with the prerequisite test analysis is the normality and homogeneity test. The results of data analysis showed that there are differences in student learning outcomes using guided inquiry learning and free inquiry with $F_{count} = 21.352$, $p = 0.004 < 0.05$, for a value of $p < 0.05$, it can be concluded that there are differences in guided inquiry learning methods vs. free inquiry against student results.

Keywords: guided inquiry learning methods, free inquiry, learning outcomes

The learning method is expected to be used in learning the basics of accounting not only the method of direct learning / expository more oriented to lecturers, but also the indirect method of learning-oriented students. With the indirect method of learning expected of students are given the opportunity to develop critical thinking skills in defining the concepts of basic accounting and the ability to observe the environment associated with learning problems who want solved.

However, the reality in the classroom practice in general educators still embrace the learning paradigm centered on the lecturer is not in students where learning takes place more in the nature transmitting the information even slipped on the "news book" which only involves the ability to think critically low, memorize (Joni, 2008). Consistent with that view, Winkel (2004) explains that the learners (teacher / lecturer) still believes that students will be more clever when more and more to know the facts. This view would interpret learn as many facts to memorize activities. In a pattern of this kind of learning, learners tend to be more transfer of facts or concepts without students interpret or construct the concepts being taught. The learning method is called as the expository method, which according to Wahab (2009: 94) that is expository method, the teacher only requires students to provide answers by simply recalling what they had heard, read, or watch. Efforts to improve the quality of basics learning of accounting at school is a task that needs to be done by the learner. Learner is an important component to quality improvement of learning. Learner is a central factor in implementing the learning in the classroom. In the hands of learners who are professional, creative and innovative

learning process will go well, otherwise if learners are not professional in the line of duty will affect deploy learning inferior and in time will affect the poor results of student learning about the concepts of basic accounting, Student results decreased due to the lack of application of learning methods in economic education majors FKIP Undana less empowering students in learning activities.

Basically the implementation of learning was undertaken learners are learning with more conventional teaching methods directly. This is not in accordance with the principles of learning method which states that not all learning method is suitable for all purposes and circumstances (Sanjaya, 2011). Therefore, the learner is expected to choose a method suitable to the circumstances. In the implementation of classroom learning, lecturer in accounting basics are still predominantly use conventional teaching methods in this method of direct learning or teaching methods that give freedom to the students to be creative based on his ideas without direction or a clear indication of the lecturer. Direct instructional methods according Hamruni (2011: 73) is a learning method that emphasizes the verbal process of delivering material from a teacher (lecturer) to a group of students (student) with the intention that students (students) can master the subject matter optimally. Similar opinion was expressed Killen (1998) named this expository method in terms of direct instruction method (direct instruction). Expository method is effective for determining information or build skills step by step, so that the advantages of this method is easy to plan and use, but it has a major drawback in developing capabilities, processes and attitudes necessary for critical thinking and interpersonal relationships as well as the study group (Hamruni, 2011). In addition to learning dominated learning methods expository, state in organizing education according Setyosari (2009) is the educational process in schools tends to increasingly ignore the element of educating and education as the substitution of the activity was more emphasis on aspects that are "exercises sharpen the brain ". Educational activities should integrate the dimensions of cognitive, affective and psychomotor been overlooked and more emphasis on aspects of cognitive training alone. While learning provides critical thinking exercises (critical thinking) and social interaction (social interaction) only get a portion of the time very little because the teacher only busy with routine tasks to quickly finish the curriculum which they are responsible.

Based on this fact, there should be efforts to improve the quality of education, especially the quality of teaching in classes conducted by the learner (lecturer) in order to improve their understanding of science concepts that lead to the achievement of optimal learning results and the formation of a scientific attitude. Therefore, the researchers raised the issue of the quality of learning is titled "Influence of free guided inquiry learning methods of inquiry are non-smoking versus the learning outcomes of students in the subject of accounting basics first semester of economic education majors Faculty of Teacher Training and Education University of Nusa Cendana Kupang.

Problem

Based on the background of the above problems, it can be formulated research problem, namely whether there are differences in student learning outcomes using guided inquiry learning methods and free inquiry learning method?

Purposes

Generally, this study aimed to examine the effect of teaching methods to the learning outcomes of students in the subject of accounting basics first semester of economic education majors Faculty of Teacher Training and Education University of Nusa Cendana Kupang. In

detail, the purpose of the study to determine differences in student learning outcomes between groups that receive guided inquiry method and the group that received free inquiry method.

Methods

This research was conducted at the Department of Economics of Education Faculty of Teacher Training and Education University of Nusa Cendana Kupang Academic Year 2015/2016 using a quasi-experimental methods to study the entire student population on Economic Education Faculty of Teacher Training and Education University of Nusa Cendana Kupang and research subjects were 70 students of the first semester, with 40 students in the grade A as a experiments class using guided inquiry learning method and 30 students in the grade B as a control class using by the method of free inquiry learning. Purposive sampling is cluster random sampling technique. The collection of data was using questionnaires and tests of learning outcomes. Analysis of data using one way Anova technique the prerequisite test analysis is the normality test using significant Lilliefors corection of Kolmogorov-Smirnov Test and Test of Homogeneity with Test F.

Result

Before giving the actions in each group, researchers conducted a pre-test to determine the ability of elementary students. Obtained an average pretest for experimental class taught using guided inquiry learning methods of 50.83 with a standard deviation of 14.651, while the result of the pre-test to control classes taught using methods of free inquiry learning gained an average of 50.22 and a standard deviation of 15.706. It can be concluded that the difference in the average pre-test student results are not very significant.

Description of data is a picture of the data obtained to support the discussion of research results. Data after treatment posttest load data for guided inquiry method of learning and free inquiry learning methods. Students' test data which will be described consists of a data posttest. Posttest is a test that is given to the two groups after the treatment carried out. This test aims to determine student results will understand of basic accounting concepts after treatment. Here is a test post data acquisition descriptive learning outcomes either by using guided inquiry learning method or by using free inquiry learning methods. The average posttest student learning outcomes are taught using guided inquiry learning methods of 67.00, with a standard deviation of 10.80 and the average value of post test results of student learning is taught using the method of free inquiry learning 63.33, with a standard deviation of 15.58. If the average value of posttests results of this study in comparison with the results of pre-test then there is an increase in the average obtained by the students taught using guided inquiry learning methods and free inquiry learning methods.

Data analysis performed in this study to elaborate score learning outcomes based guided inquiry learning method versus free inquiry learning methods to the learning outcomes of students in each - each group to determine the effectiveness (influence) learning method. After determining the effect of teaching methods, it will be followed by one way ANOVA statistical analysis of the two groups to carry out two different test groups. However, before testing the hypothesis first will be tested for normality and homogeneity test where the test is the assumption that must be met before data analysis.

Testing normality of the data in this study was using the Kolmogorov-Smirnov test. Pre achievement test for the experimental group using guided inquiry learning method and the control group using the method of free inquiry learning have value or significance probability greater than 0.05 ($0.999 > 0.05$). These results indicate that pre-test results of student learning

to the experimental group and the control group with normal distribution. The data post test results of student learning to the experimental group and the control group with normal distribution, because the significance value (0.351) greater than 0.05. Furthermore, the data will be analyzed to determine homogeneity of variance both for the experimental group or the control group. Test of homogeneity of variance in the experimental group with guided inquiry learning method and the control group by the method of free inquiry learning in terms of learning outcomes. To test the homogeneity statistic known Lavene value of 8.77 with a significance of 0.104. The significance value is compared with a significance level of 0.05, than $0.104 > 0.05$. Thus H_0 is accepted or matrix variants for the experimental group with guided inquiry learning methods, and the control group with free inquiry learning methods are the same or homogeneous.

Hypothesis testing is a step or procedure to determine whether the proposed hypothesis is accepted or rejected. Test assumptions or prerequisites that have been described, obtained that the number of assumptions required for the testing of hypotheses have been met. Thus further analysis feasible. For more details refer to the table below.

ANOVA					
Student learning outcomes					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	230.581	1	230.581	21.352	.004
Within Groups	11595.432	68	170.521		
Total	11826.013	69			

In this study, the first thing to be investigated is the effect of the application of the method of guided inquiry learning and free inquiry to the learning outcomes of students. Limits are used to determine whether there is any effect of applying a learning method seen from the thoroughness of students in learning by using guided inquiry learning methods and the methods of free inquiry learning to improve student results. From the table it can be seen that the value of F count by 21, 352 or significance with p value of 0.004. The significance value is less than the significance level used is 5% or 0.05. This shows that there are differences in learning outcomes of students taught using guided inquiry learning methods and learning outcomes of students taught using free inquiry learning methods.

Discussion

The results of data analysis, both of descriptive analysis and statistical tests showed that there were significant differences learning outcome of students taught using learning method guided inquiry to contribute better to the students of the Department of Economic Education course on the basics of accounting when compared with the results of students learn was using free inquiry learning methods. Based on test results was obtained descriptive statistics that the average achievement of students taught using guided inquiry learning method is better than the students who are taught with methods of free inquiry learning. It is possible that the improvement of student learning outcomes triggered by the guided inquiry learning methods in the implementation, always observing the principles and characteristic guided inquiry. Through the principle of guided inquiry learning focused on the ability of students in the rediscovery (Reinvention) educational values accounting fundamentals and can foster an attitude or think critically about the problems encountered. The process of rediscovery of educational values and critical thinking are packed in the student worksheet (MFIs). Context is developed in accordance with the characteristics or syntax guided inquiry learning methods. According to

Sund & Trowbridge (1973: 63), guided inquiry learning methods, teachers provide guidance or instructions are spacious enough to students. Teachers prepare the formulation of the problem as well as tools and materials. Investigation procedures are designed with the teachers and students, and then students make observations to obtain data and test hypotheses. Data obtained from observations, then analyzed to make conclusions through group discussion. Kuhlthau (2007: 6) explains that guided inquiry used to (1) study that prepare students for lifelong learning, (2) integrate with the content being studied, (3) to transmit the concept to obtain information, (4) using a variety of learning resources, (5) students actually perform the steps of learning from planning to final product, (6) connect directly between what is learned to the real world of students, (7) makes student learning communities that work together, (8) students and teachers collaborate, and (9) is process-oriented and results. With this method, students carry out an investigation based on the issues that have been well-prepared teachers, and selection steps are determined by the student investigation. Thus it can be said that the difference in student learning outcomes in this study are influenced by the accuracy in the implementation of learning by using guided inquiry learning methods.

This result is consistent and reinforces the results of previous research results are consistent with the results of research conducted by Marheni, et al. (2014), Agile (2012), Muhammad, et al. (2015). Marheni (2014) concluded that there is a difference in student learning outcomes using guided inquiry learning methods and the use of free inquiry learning methods. Agile (2012) showed that there are significant differences the result of understanding the concept and science process skills among students with the model group and the group of students guided inquiry learning model directly. Results of research Mohammed (2015) shows that there is influence between guided inquiry learning and free inquiry modified on learning achievement. However, these results contradict research Mudalara (2012) which concluded that the learning outcomes of students taught using free inquiry learning method is higher compared to using conventional teaching methods.

Appropriate learning methods achieves the goal of learning in subjects accounting basics is necessary to use in order to achieve the desired learning by learners and learners. This is in line with expert opinion on inquiry learning. Kuhlthau (2007), describes that the inquiry is a learning approach where students discover, use a variation of resources and ideas to better understand, an issue, topic or issue. According to Sund & Trowbridge (1973: 62) built on the basis of inquiry learning discovery, because a student must use discovery capabilities and other capabilities in learning. Sanjaya (2011: 196) defines the method of inquiry learning is a series of learning activities that emphasize critical thinking and analytical processes to seek and find you on issue that is questionable. This indicates that learners not only answer questions but also investigate, exploration, looking, asking questions, researching, and studying. Inquiry does not stand alone but together with the interest, the challenge for students to connect the curriculum with the real world. Many experts discuss social science inquiry learning as Jarolimek (1977), Barth and Shermis (1978), Sunaryo (1989), Saripudin (1989). However, a more comprehensive explanation of the inquiry as proposed by Jarolimek (in Sumaatmadja, 1984: 30) that "the major goal of inquiry-oriented teaching is to develop in pupils Reviews those attitudes and skills that will enable them to be independent problems solvers. This involves more than simply knowing where to go to get needed information. It requires an attitude of curiosity, the ability to analyze a problem, the ability to the make and test "hunches" (hypotheses), and the ability to use information in validating Conclusions. Inquiry always involves a search for information that is related problem, such problem being in part generated by the pupils Themselves. Thus, understanding the inquiry is not just limited to the inquiry or examination; it covers all the processes of research, curiosity, analysis, come to the conclusion about things inspected or investigated.

Guided inquiry method of learning and free inquiry is in accordance with the principles of dialogical learning-critical, direct experience (direct experiences) collaborative, and cooperative. This learning method refers to a number of basic principles of learning. Basic learning principles in question are learning principles of active students (student active learning), group learning cooperative, and learning participatory. In addition, the learning method is one of the changes the mindset of teacher centered towards student centered. The methods learning were guided inquiry and inquiry-free is a lesson designed to help learners (students) understand the theory in depth through an understanding of learning patric-empirical. the learning method is based learning problems that can be a program approach in order to encourage increased competition, responsibility, participation learners, learning and impacts assess public policies (public policy), ventured to participate in activities between them, between schools, and community members.

Guided inquiry based learning has the objective to develop and apply the skills that are important that problem-solving skills by studying alone or teamwork and obtain extensive knowledge and develop creativity and critical thinking of learners. Learners have a role as inspirational to raise the potential and abilities of students as learners. Through the development of these skills students are expected to be able to solve the problems faced by their environment well. Guided inquiry learning method can improve student learning outcomes, in this case has meaning can increase student participation. Guided inquiry learning method emphasizes the mastery of inquiry skills to overcome the problem, so that students are trained to think, solve problems and become independent learners. In addition to guided inquiry learning methods, the method of learning that can improve critical thinking skills in problem solving is free inquiry learning methods. Free inquiry learning method is a model of student centered learning. Students are directed to the learning objectives to be able to master a skill and ability in accordance with the competencies targeted. Free inquiry method in the learning process of students positioned in challenging conditions to hone skills in scientific reasoning and knowledge in previously belonged to discover something new independently or to find solutions to the problems encountered. With the method of free inquiry learning students are in the competitive environment in completing tasks to get the job as well as good from another person or from the other groups. Students in the learning process more find yourself something new to him then he will further improve motivation in looking for something related to new things he knew, because the more knowledge he get himself he felt honored that he could find something the new before everyone else finds.

The results of this study indicate that all variables have an influence on the improvement of student learning outcomes, and therefore the study on economic education, lecturers need to optimize the application of appropriate learning methods for each indicate a strong influence on the learning achievement of students in basic accounting subjects.

Conclusion

Based on the results of hypothesis testing and discussion can be concluded that there is influence between student learning outcomes using guided inquiry learning methods versus free inquiry of learning the basics of accounting majors FKIP Undana economic education. In more detail, the data of this research also support the conclusion that there are significant differences in learning outcomes between groups of students treated guided inquiry learning methods and student groups treated with free inquiry learning methods.

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