



Research Article

IMPLEMENTATION DISCOVERY LEARNING METHOD FOR ENHANCE LEARNING ACHIEVEMENT  
STUDENT ACCOUNTING PRACTICE MANUFACTURING IN ACCOUNTING DEPARTMENT STATE  
POLYTECHNIC OF MALANG INDONESIA

\*Indrayati

Lecturer Accounting Department State Polytechnic of Malang, East java, Indonesia

Received 18<sup>th</sup> January 2021; Accepted 25<sup>th</sup> February 2021; Published online 29<sup>th</sup> March 2021

Abstract

Learning PKA Manufacturing in Malang State Polytechnic has not been able to meet the cognitive, psychomotor and affective aspects to meet the needs of the world of work. The purpose of this study is to develop the Discovery method in the PKA Manufacturing learning process to meet the needs of superior resources at national and international levels in fulfilling the world of work. The research method used is qualitative interpretive research with primary data sources of data collection by distributing triangulation questionnaires from students who take PKA Manufacturing courses as many as 390 students. The results obtained are that students tend to agree and strongly agree with the Discovery learning method which is applied to the PKA Manufacturing course to create superior graduates. The results also showed that the students' grades were better than the previous lecture method.

**Keywords:** Discovery learning, student achievement.

INTRODUCTION

State Polytechnic of Malang is one of the vocational education programs that have a professional educational background in Indonesia which prioritizes improving education in the ability to apply (skills) or skills to prepare students to become members of society who have professional abilities who can apply, develop and disseminate knowledge and knowledge adequate technology. The accounting study program is one of the departments at Malang State Polytechnic which has the task of producing alumni who are ready to work, skilled in accounting and able to compete in the global market according to its vision and mission. In order to improve the quality of teaching at the State Polytechnic of Malang, the availability of high and adequate human resources (HR) is a necessary requirement in order to compete in national and international global markets. Assessment of the quality of educational products is first seen from the development of basic attitudes such as critical scientific academic attitudes and the willingness to continue to seek the truth. Therefore the concept of education must include aspects of knowledge (cognitive), aspects of skills (psychomotor) and aspects of basic attitudes (affective) in criticism, creativity and openness to innovation and various discoveries. All of that is necessary so that students are able to survive and answer the challenges that are always developing. Therefore educators are demanded not only as transfer of knowledge, but more than that as agents of enlightenment. The learning process that is practiced today is mostly in the form of lecturing. When attending lectures or listening to lectures, students only understood while taking notes and were sometimes sleepy and tended to be passive. Lecturers play a central role in the achievement of learning outcomes (teacher centered learning) and seem to be the only source of knowledge. Therefore, discovery method is used for further learning, where students learn systematically, critically, logically, analytically so that they can formulate their own findings confidently.

Discovery learning emphasizes the process of seeking and finding truth, learning emphasizes critical and analytical thinking processes to seek and find their own answers to a question in question. The thinking process is carried out through discussion, question and answer between peers and lecturers as agents of enlightenment. In learning discussions the validity and reliability of facts in the field are discussed. The PKA manufacturing course is a subject that must be studied with an understanding of knowledge and practice in the field in order to be more in depth. The following are the results of student scores in the PKA manufacturing course before using the discovery learning method (traditional / lecture method):

Score	%
A	30
B+	20
B	10
C+	25
C	15

REVIEW OF THEORY

Definition of Discovery Learning

Discovery Learning is a method of teaching cognitive theory by prioritizing the role of the teacher in creating learning situations that involve students learning actively and independently. Discovery learning method (discovery) is a teaching method that organizes teaching in such a way that children acquire previously unknown knowledge not through notification, partly or wholly discovered by themselves. The definition of Discovery according to Nosalmathedu (2012) discovery is learning where students are encouraged to learn largely through their own active involvement with concepts and principles and teachers encourage students to have experiences and conduct experiments that allow them to discover the principles. for themselves. This method is suitable to be applied in the Practice course where students must find

\*Corresponding Author: *Indrayati*

Lecturer Accounting Department State Polytechnic of Malang, East java, Indonesia.

their own answers to the questions that have been created by the teachers / lecturers. According to Ratumanan (2004) discovery is a learning method that encourages students to ask questions and draw conclusions from general principles of practical examples of experiences. And the basis for Ratumanan (2004) idea is the opinion which states that children should play an active role in learning in the classroom. For this reason, Ratumanan (2004) uses what he calls discovery learning, where students organize the material being studied in a final form. According to (Raturmanan (2004) discovery learning is learning that occurs partly because students manipulate, structure and transform information in such a way as to find new information. In learning discovery students can make estimates (conjecture) formulate a hypothesis and find the truth by using an inductive process or a deductive process to make observations and make extrapolations.

The main characteristics or characteristics of discovery learning developed from constructivism theory are Aina Mulyana (2020) :

1. Explore and solve problems to create, combine and generalize knowledge.
2. Student centered
3. Activities to combine new knowledge and existing knowledge.
4. Supporting cooperative learning
5. Encourage students to actively participate in dialogues or discussions with other students and teachers
6. Provide opportunities for students to build knowledge and
7. new understanding based on real experience.

Discovery Learning learning objectives Maria L. Martens (2019):

1. Can develop active student learning methods
2. By discovering and investigating the concepts learned by themselves, the results obtained will last a long time in the memory and are not easily forgotten by students
3. A self-discovered meaning is one that is really mastered and easy to use or transfer in other situations
4. With the discovery method children learn to master one of the scientific methods that will be developed by themselves
5. Students learn to think analytically and try to solve their own problems, this habit will be transferred to real life.

Types of Discovery Learning according to Ea Ihsanudin (2014):

**1. Pure discovery:** In learning with pure discovery learning is student-centered and not teacher-centered. It is the students who determine the goals and learning experiences that the teacher wants only to give students problems and learning situations. Students study the facts or relations contained in the problem and draw conclusions (generalizations) from what students find. This discovery activity requires almost no guidance from teachers / lecturers and is usually carried out in smart classes.

**2. Guided discovery:** In this guided discovery the teacher / lecturer directs the subject matter, the form of guidance provided can be in the form of instructions, directions, questions or dialogues, so that students are expected to be able to conclude (generalize) according to the teacher / lecturer

design. In this way students must be really active in learning to find the material they are learning in accordance with the teacher / lecturer instructions.

**3. Laboratory findings:** Laboratory findings are findings that use direct objects (concrete media) by studying, analyzing and finding inductively, formulating and making conclusions. This method can be given to students learning individually or in groups, this method can increase students' desire to learn.

The steps for using Discovery Learning according to Eka Ihsanudin (2014):

**1. Stimulation / giving stimulation:** At this stage the teacher / lecturer begins to ask questions, recommend reading books and other learning activities that lead to problem-solving preparation.

**2. Problem statement / problem identification:** Provide opportunities for students to identify and analyze the problems they face to find answers to problems.

**3. Data collection / data collection:** Students are given the opportunity to collect various relevant information, read literature, observe objects, interview resource persons, conduct their own trials and connect problems with the knowledge they already have.

**4. Data processing / data processing:** At this stage, students generalize to gain new knowledge about alternative answers to problem solving which need to be proven logically.

**5. Verification / proof:** This stage is a proof of the concepts, theories and rules of examples that have been encountered in life.

**6. Generalization / draw conclusions:** Students learn to draw conclusions from mastery of learning related to the principles underlying a person's experience.

The advantages and disadvantages of Discovery Learning

According to Roestiyah (Roestiyah, 1998) the advantages of the Discovery Learning method are

1. Able to help students to develop readiness and mastery of skills in cognitive processes.
2. Students gain knowledge that is very personal / individual so that it can be solidly deep in the soul of the student
3. Can generate enthusiasm for student learning
4. Able to provide opportunities for students to develop and advance in accordance with the abilities of each student
5. Able to direct the way students learn so that they have a strong motivation to study harder
6. Helping students to strengthen and increase confidence in themselves through the process of self-discovery
7. This strategy is student-centered, not the teacher / lecturer, only as a study partner, to help when needed

The weakness of the Discovery Learning method is

1. Students must have mental readiness and maturity for this way of learning.
2. If the class is too large the use of this method is less successful

3. If students are accustomed to traditional methods with this method will feel disappointed
4. This method pays less attention to the development of attitude formation
5. Does not provide opportunities to think creatively

#### Constraints on using Discovery Learning

1. In its application, mental preparedness is needed
2. Not suitable for classes with large numbers of students / large classes
3. Specific topics can be developed with a guided discovery model.

## RESEARCH METHOD

### Types of research

This type of research is a qualitative research that implements the discovery learning method into learning PKA manufacturing courses in the accounting department of State Polytechnic of Malang.

### Population and sample

This study used a population of 13 classes with a total of 390 students taking manufacturing PKA courses

### Data sources and data collection and measurement techniques

This study uses primary data and is collected by means of documentation and triangulation from questionnaires that have been filled in by accounting students taking PKA Manufacturing courses.

### Data processing methods and data analysis

The method of data processing and data analysis used in this study is an interpretive qualitative method.

## RESULTS AND DISCUSSION

The result of the development of the discovery learning method is that it can increase student grades to be better than the traditional method. The following table shows the PKA Manufacturing value using the Discovery learning method

Score	%
A	35
B+	40
B	20
C+	5

## CONCLUSION

The research was successful in applying the Discovery Learning method to learning PKA manufacturing courses in the Accounting Department of Malang State Polytechnic. With this discovery learning method, it has succeeded in increasing student interest in learning, increasing the competence and quality of students in learning manufacturing PKA courses. Improve student learning achievement so that they can meet the needs of the world of work in the end.

## REFERENCES

- Nosalmathedu, 2012. Discovery learning model.
- Ratumanan, T. G. 2004. Learning and Learning second edition. Unesa University Press.
- Muchlisi Riadi, 2017, Discovery Learning Model.
- Aina Mulyana, 2020, Learning Model Discovery Learning or Discovery.
- Maria L. Martens, 2019, Model Discovery Learning for Fun Learning.
- Eka Ihsanudin, 2014, Model Discovery Learning.
- Roestiyah. 1998. Teaching and Learning Strategies. Jakarta, Rineka Cipta.

\*\*\*\*\*