

LEARNING STRATEGIES OF PRODUCTIVE LESSON AT VOCATIONAL HIGH SCHOOL IN SERANG CITY

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Abstract

The purpose of this research are: (1) to know the design of delivery strategy of learning of productive lesson; (2) to know the implementation of delivery strategy of learning of productive lesson; and (3) to find out the result of applying the delivery strategy of learning of productive lesson. This research uses qualitative phenomenological approach with multi case design. Informants in this study are students, teachers, leaders of Vocational High School in Serang City. Data collection through interviews and observation. Data analysis technique is Miles & Huberman interactive model. The results of this study found that (1) The design of the delivery of learning strategies productive lesson conducted by teachers is to design learning strategies by involving the media and based on the goal; (2) At the time of learning activities of productive lesson take place, the strategy used by teachers is the use of instructional media by demonstrating to students in front of the classroom; and (3) The implementation of learning delivery strategy of productive lesson applied by the teachers from each of the research sites resulted in increased value.

Keywords: *learning strategy, productive lesson*

INTRODUCTION

Education is essentially an attempt to lead children in their physical and spiritual development toward maturity. Education has an important role in determining the development and manifestation of individuals, communities and the development of a nation and state. Progress of a nation has a strong relationship with the quality of education provided to learners and the community through educational institutions and non-educational institutions.

One form of education applied in Indonesia is vocational education. Vocational education is an educational program that prepares people to enter the workforce, both formal and informal. As a work-oriented education, vocational education has its own peculiarities that is the relationship between knowledge, skills or expertise, as well as the attitude that learners need to get into the world of work.

Based on the National Education System Act No. 20 of 2003 (Department of National Education, 2003), vocational education in Indonesia is divided into two levels: vocational education and vocational education. Vocational education is an education conducted in secondary education that aims to prepare learners primarily to work in a particular field. Vocational education is an education that is conducted in higher education which aims to prepare learners to have a job with a particular applied skill maximal equivalent to the undergraduate program.

Learning is basically an effort to direct the students into the learning process so that they can get the learning objectives in accordance with what is expected. Learning objectives can be achieved if formulated with the right strategy. Learning strategy is a systematic way of communicating the content of the lesson to the students to achieve certain learning objectives.

In teaching and learning activities for a teacher to perform their duties professionally, requires a solid and complete insight about teaching and learning activities. A teacher must know and have a comprehensive picture of how the learning process takes place, as well as what steps are needed so that the tasks of teacher training can be done well and obtain results in accordance with the expected goals (Mufarokah, 2009, p. 3).

A teacher as a major component in the learning process plays an important role. Teacher's duties include educating, teaching, and training. The teacher is the holder of the trust and responsibility.

The purpose of the strategy is first; so that educators and prospective educators are able to implement and, and address educational and teaching programs and issues; so that educators and prospective educators have an intact, smooth, purposeful, systematic, and effective insight (Ahmadi & Prasetya, 1997, p. 5).

In the learning strategy, there are four elements that need attention. First, define the specifications and qualifications for student behavior and personal changes as to what and how to achieve and be targeted from the learning activities based on community aspirations and views. Second, choose the main learning approach system that is deemed most appropriate in order to achieve the target so that it can be used by teachers in carrying out their learning activities.

Third, selecting and setting procedures, methods, and learning techniques that are considered the most effective and efficient to be used as a handle of teachers in carrying out their duties. Fourth, establish norms and minimum limits of success or criteria and measures of success as teacher guidance in implementing evaluation of learning outcomes which will then serve as feedback for improvements to the overall instructional system (Mansyur, 1991, p. 3).

Selection, and then the determination of learning strategies, should also pay attention to the purpose of learning, because the goal of learning is the target or target to be achieved. Both are a series. Learning objectives have a very important role in designing a subject. In addition, learning objectives may also affect the determination of the learning strategy to be applied. Incorrect strategy determination can be fatal, counterproductive and contrary to what it wants to achieve (Zaini, Munthe, Aryani, Djamaluddin, & Rosyad, 2002, p. 96).

Thus in general the selection of learning strategies occupy a fairly important position in the learning process. The essence of the learning process is to set learning strategies, among which are setting organizing strategies, delivery strategies, and learning management strategies (Degeng, 1990, p. 9).

Lesson in Vocational High School (*Sekolah Menengah Kejuruan/SMK*) can be divided into 3 kinds namely, learning lesson Adaptive, Normative, and Productive. Normative lesson are regularly allocated subject groups that include Religious Education, Citizenship Education, Indonesian Language, Physical Education of Sport and Health, and Cultural Art. Adaptive lesson consist of English, Mathematics, Science, Social Studies, Computer Skills and Information Management, and Entrepreneurship lesson. While the lesson Productive on a number of lesson are grouped in the Basic Competence of Expertise and Competence Expertise. Vocational High School has a specificity. The specificity lies in productive lesson.

The third learning strategy of these lesson is different from each other. SMK as a school that has the main goal is to produce graduates who are ready to work, certainly more dominant productive subjects received by students than on adaptive and normative subjects. Vocational teachers in delivering productive learning materials should be different when teaching adaptive and normative subjects.

In line with Bayu's research results, that learning using a particular approach will affect the active, creative, and productive classroom atmosphere. If it is linked to a scientific approach to learning in the Curriculum of 2013, then scientific learning will be appropriate if the teacher is able to organize to create an active, creative, and productive classroom atmosphere (Setiyadi & Ramdani, 2016).

One of the important dimensions of learning productive lesson is learning strategy. The use of appropriate and optimal learning strategies will encourage initiative and facilitate student learning. Therefore, the study of learning strategies and their implementation is an important requirement to be undertaken. A teacher must have the competence of designing the right learning strategy.

This is in line with the results of Nurtanto's (2016) study that a teacher must have competence in preparing the lesson: (1) reflecting personality values; (2) master the role of teachers and develop skills competence; (3) able to understand and develop learning tools; (4) able to arrange and implement the learning program; (5) able to

assess the process and learning outcomes; (6) arrange administration; (7) using various methods according to the characteristics of learners; (8) linking learning to society, industry, and college and adaptation to technological developments; (9) conducting classroom action research; and (10) publish the results of the study.

Based on the problems that occur in the process of learning productive lesson in vocational school, the researchers intend to examine the "Learning Early Productive Strategies In Electricity Engineering Expertise Program in Vocational School Serang City".

Strategy can be interpreted as an outline of the bow to act in an effort to achieve a predetermined goal. Strategy is a way or a method, whereas in general the strategy has the meaning of a outline of the bow to act in an effort to achieve a predetermined goal (Djamaroh, 2002).

Learning is an activity undertaken by the teacher in such a way, so that student behavior changes to the better. Learning can be interpreted as a process or way that is done so that a person can do learning activities, while learning is a change in one's behavior due to interaction with the environment and experience (Arifin, 2012).

The article entitled "Student learning strategies on industrial work practices in obtaining competence" shows that the strategies used by students in obtaining competence in industrial work practices are (1) learning to use the five senses; (2) learning to solve problems; (3) self-learning; (4) learning through work environment; and (5) continuous and repeated learning (Fatkhurrohman, 2016).

RESEARCH METHODOLOGY

Research on learning strategy of productive lesson in electric power engineering program of Serang City (multi case study in SMK Kota Serang) uses qualitative naturalistic research.

This research was conducted in Serang City Vocational School, SMK N 2 Serang City, SMK PGRI 1 Serang City, SMK PGRI 2 Serang City, SMK Pasundan, SMK Prisma, and SMK N 4 Serang City. This research was conducted for 7 months from April to October 2017. In this case, the units of analysis are

students, productive subject teachers, principals, and vice principals.

Techniques and instruments of data collection include participant observation data, in-depth interviews, and completed with documentation. Data analysis techniques used are interactive models Miles, Huberman, & Saldana (2014). This technique consists of 4 stages of data collection, data condensation, data display, and drawing and verifying conclusions.

RESULT AND ANALYSIS

In this chapter is presented the description of the discussion in accordance with the results of research, so that in this discussion researchers will integrate the results of research with theories that have been described previously. As stated in the descriptive qualitative data analysis technique (exposure) of the data obtained through documentation, observation, and interviews are identified to fit the intended objectives, the results of the research are linked to existing theories and discussed as follows: (a) design the strategy of delivering the learning of productive subjects in improving students' learning achievement (b) applying the delivery strategy of learning productive subjects in improving students' learning achievement and c) the result of the implementation of learning strategy of productive subjects in improving student achievement.

The Design of Delivery Strategy of Learning Productive Lesson

In research, the researcher reveal the design of delivery strategy of learning productive lesson in improving student learning. From the research results can be seen that. First, the design of the delivery strategy of learning productive lesson by teachers is by designing the learning strategy by involving the media. Second, in designing the delivery strategy of learning productive lesson is the selection of learning forms tailored to the conditions, characteristics and abilities of students.

Based on the observation of the researcher, the design of the delivery strategy of productive lesson made by the teacher is the preparation of planning the use of learning media and the learning form based on the

purpose. Planning the use of learning media is poured in a Learning Implementation Plan (*Rencana Pelaksanaan Pembelajaran/RPP*). In making the RPP must be made with a detailed design so that the learning objectives can be achieved. This is in line with the research (Abizar, 2016) that in making the RPP device needs which needs a detailed design so that it can produce RPP that is suitable to be used as a reference for learning. The same thing is also conveyed by Hariyanto (2012) that in the Development of Implementation Plan of Learning in the field of productive construction of stone and concrete that has been integrated entrepreneurship by incorporating the method of learning is able to make students active in learning activities so as to form the soul of students to entrepreneurship.

In choosing learning media, basically the principle used by the teacher is its effectiveness in achieving the learning objectives other than that the principle that is in use is the interactivity and flexibility. This means that the direction of all the formulation of a strategy is the achievement of goals. Thus the learning steps, the utilization of various facilities and learning resources directed in efforts to achieve learning objectives (Sanjaya, 2008).

Therefore, before determining a strategy, it is necessary to formulate a strategy that can be measured its success, because the goal is the core of the implementation of learning strategy. In designing learning, teachers need to create conditions so that students can learn energetically and motivated. All of that can be designed through the approach of classical learning form in large groups, small class groups and even learn independently. But while teachers use different forms of learning, ultimately the ultimate goal is how each individual learns.

The results showed that the design of classroom learning was designed to create conditions so that students could learn effectively energetically so as to achieve the goal. Conditions can be defined various learning experiences designed so that students achieve goals. Similarly, in making the design of learning in the classroom, the characteristics of students' abilities are also a concern of teachers in setting learning groups. Understanding students' abilities needs to be understood to determine from which the design of learning strategies should begin.

Referring to the opinion of Dick and Carrey as quoted by Sanjaya (2008) "Learning strategy is a set of materials and learning procedures that are used together to cause learning outcomes in students". So teachers should not only do or make the design of learning delivery strategy only at the stage of the activity or procedure, but the teacher must also design and mangatur material or package program that will be delivered to students.

Implementation of Learning Delivery Strategy Productive lesson

In research, the researcher revealed the implementation of delivery strategy of learning productive lesson. From the research results can be seen that. First, the implementation of learning productive lesson conducted has been referring to the rules and rules that have been planned and defined in every activity or learning process in an educational institution. Just as any good learning activity requires clear decision actions from the teacher during the planning, during the learning process, and the time to assess the outcome.

Second, the learning of productive lesson class begins with preliminary activities beginning with prayer and apperception, followed by the core activity of the teacher conveying the purpose of explaining the material to the students and ending with the closing activities of the teacher together with the students concluded the material being studied. The position of the strategy in learning is the plan, the rules, the steps and the means by which practice will be played and will be passed from opening to closing in the process of learning in the classroom in order to realize the goal.

Third, when the learning activities of productive lesson take place, the strategy used by the teacher is the use of learning media by demoting to the students in front of the class. The learning process aims to facilitate students in understanding abstract productive subject mathematics material. This is in accordance with the opinion of Hengki Irawan that the value of learning outcomes is better because in learning using props so that learners are more active in following the learning (Irawan, 2016).

Media is anything that can be used to channel the message from the sender to the

recipient so that it can stimulate the thoughts, feelings, attention, and interests of students that lead to the learning process. Given the learning media is important in this strategy, teachers use learning media and provide flexibility of students to express themselves. That is why this component is more concerned about the study of what learning activities are done by students and how the role of media that stimulates learning activities.

The media used in various productive lesson, such as Job Sheet, Work Sheet, Module, and Lab Sheet. The media is very helpful for a teacher in the process of learning productive lesson. This is in line with the results of the study Armansyah, Saputro, & Rohman (2017) that the implementation of learning using Work Preparation Sheet can improve the results of students' machining practices.

According to the researcher, when using teacher learning media should pay attention to the principle of media usage is the availability of time to use it. So the media is really useful for students at the time of learning productive lesson took place in the classroom. Fourth, the form of learning by varied teachers tailored to the material, conditions and characteristics of students. At the time of learning productive lesson take place in the classroom, the learning model used classical and group. This is because the arrangement, arrangement, and style of teaching is very dependent on the teacher and his skills in managing the form of learning in the classroom, and is strongly influenced by differences in situation, condition and characteristics of students.

This is in accordance with Sanjaya's opinion. "In classroom learning the teacher needs to create conditions so that students can learn with full motivation. It can be done with a classical or group learning approach". Presentation of the material on the process of classical learning more emphasis to explain something material that is not known or understood students. Group learning is carried out in a group process. The group members are interconnected and participate, contributing to achieve common goals. However, the application of classical learning strategies and group strategies used in productive learning activities in the target class is ultimately how each individual can learn. therefore, it can not

be said that all particular strategies are best and most suitable for all learning situations and conditions.

Based on the observation of the researcher, when the learning took place the teacher used the variation of methods in the learning activities. The teacher uses a variety of methods so that students do not feel bored and cultivate learning motivation. Variations are the skills of teachers in using the ability to realize the goals of student learning and effective learning activities. The purpose of the use of variations such as increasing the motivation and attention of students, facilitate the achievement of learning objectives.

The use of variations include the use of lecture, demonstration and discussion methods in the learning activities of productive lesson in class. According to the researcher, as a characteristic learning subject has an abstract object of study, the presentation of the lesson of productive lesson should not begin with theorem or definition, but must be adjusted to the level of the students' thinking development. The learning process does not need to use many methods of lecturing, the most important is to demonstrate in front of the classroom by using instructional media. Using concrete objects is an appropriate means to teach productive lesson.

Based on observations of researchers at the time of learning took place, teachers also provide motivation to learn to students. To generate student learning motivation in the classroom, which is done by the teacher is: provide a direct assessment and give praise to students who ask or answer. In the learning activities, motivation is one of the factors that determine the success of student learning, in addition to characteristic factors such as the initial ability and attitude of students to subjects and teachers.

Motivation is a function of task stimulus, and encourages students (individuals) to try or strive for success or avoid failure. The motivation to learn is "Internal and external encouragement to students learning to change behavior, generally with some supportive indicators or elements".

Based on the results of research the use of learning strategies can improve student learning motivation to facilitate the achievement of learning objectives. This is in line with Nurdjito's research that the use of

advanced engineering practicum approach approach with Pretest application approach and preparing the Work plan and the use of standard module can encourage the motivation, independence and readiness of learning and the attitude of student learning cooperation increased and effective, so that the achievement of advanced materials laboratory students with mastery of advanced engineering materials competence (Nurdjito, 2013).

The results of the Implementation of the Strategy of Submission of Learning Productive lesson

In this study, researchers revealed the results of the implementation of delivery strategy of learning productive lesson. Based on the observations of researchers, the results of the implementation of learning strategies productive lesson made by teachers can improve student achievement. This can be seen from the average value of students from each class in the location of the study based on documentation studies, observations and interviews conducted by researchers. Achievement can be interpreted as an educational assessment of student progress and progress regarding the mastery of the lesson material presented to them and the values contained in the curriculum.

Achievement will not work as long as a person does not perform an activity, because the achievement must struggle with various challenges. Adapaun value seen is: daily test value, the value of the task and the value of UTS Semester UTS Exam. Preparation of daily test questions is carried out at the end of each subject, and at the end of the second subject. The semester midterm (UTS) is an activity undertaken by the teacher to measure student achievement after performing eight to nine weeks of learning activities. Repeat coverage includes all indicators that present all basic competencies in the period.

Based on the result of the research, the students' learning achievement in the study sites increased after applied the learning strategy of productive lesson by each class teacher. The average grade of productive lesson per class shows above the Minimum Exhaustiveness Criteria (*Kriteria Ketuntasan Minimal/ KKM*) score of first and second class productive lesson. It shows that the strategy of applying the learning of productive lesson applied

by the classroom teachers from each of the research locations is paying off. Thus the learning strategy can be used as an effort to achieve student competencies that have been planned effectively and efficiently.

The learning strategy has a positive effect on student learning outcomes. This is in line with the research Aini & Sudira (2015) that based on the data analysis results show that the learning strategy variables obtained the highest score achieved by students of 98, the lowest score of 32. From the statistical calculation obtained mean/M (62) 86, Medium of 63, Mode (Mo) of 65, and standard deviation (SD) of 13.55. Ideally the lowest score of 21 and the highest score 105 to obtain the ideal ideal (Mi) of 63 and the standard deviation (SDi) of 14. This is also in line with the results of research Martubi and Amir Fatah that Achievement learning CAD students in classes treated learning strategies using the "Word Tree" command in the Auto CAD Program is better than the CAD student learning achievement in the untreated class with the "Word Tree" command in the Auto CAD Program (Martubi & Fatah, 2010).

Position of learning strategies in the interaction of the process of interaction or interrelated processes conducted between teachers with students in the learning process. Learning strategies that include the interaction between educators and learners is one of the factors of success in learning. A key element in applying learning strategies is teachers, where teachers should design procedures to interact with students, manage the learning environment and provide students with opportunities to engage in learning.

This is in line with the results of research from Mursid (2017) that the development of learning models in this case the strengthening of vocational life skills with entrepreneurial knowledge is the development of learning materials by using learning models of vocational life skills reinforcement with entrepreneurship with learning tools that accompany it, in the form of modules, learning strategies, learning methods, as a form of pre-sentation (presentation) by considering the aspects of learning and media as a collaborative and constructive learning message design principle refers to constructivism in learning.

The same thing was also conveyed by Mutaqin et al in applying cooperative learning

strategy in the eyes of the installation of lighting training by using innovative interactive media, it was found that the learning method used with interaction group discussion method of learning gave the highest score (Mutaqin, Maryadi, & Haryanto, 2009).

Research Findings

From various data exposes in vocational high schools on learning strategies of productive lesson the following general findings of the study may be presented.

Based on the above research finding diagram (Figure 1) can be explained as follows.

Plan

- a) The design of delivery strategy of learning productive subjects made by teachers through the process of selecting instructional media that is adapted to the objectives and standards of competence of productive subjects.
- b) The principle of selection of instructional media is the effectiveness, interactivity and flexibility of learning media.
- c) Selection of structure or learning adjusted to the situation and conditions, characteristics of students, learning resources and media.
- d) The design of the delivery strategy that the teacher makes is composed of syllabus and RPP.

Action

- a) Implementation of learning productive subjects conducted in schools have been referring to the rules and rules that have been established in every activity or learning process in an educational institution.
- b) Implementation of learning strategy of productive subject by teacher is started with preliminary activity starting with prayer followed by apresepsi then explaining material to student.
- c) At the time of the learning, the strategy used by the teacher is the use of learning media by demoting to the students in front of the class. The teacher utilizes instructional media and gives students the flexibility to express themselves. The learning process aims to facilitate students in classroom learning.

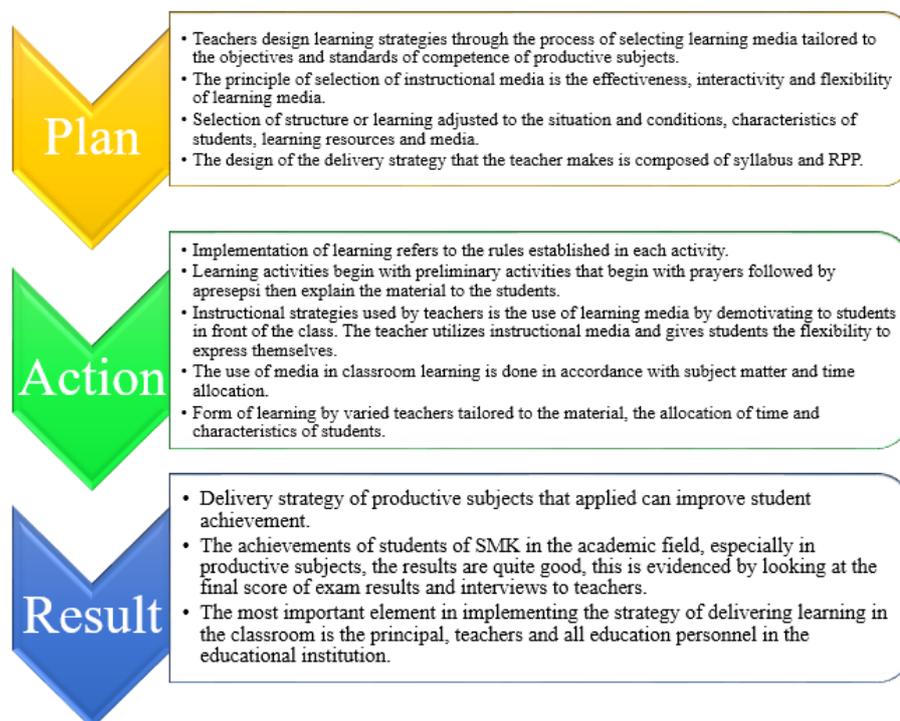


Figure 1. Reseach Findings

- d) The use of media in classroom learning is done in accordance with subject matter and time allocation.
- e) Form of learning by varied teachers tailored to the material, the allocation of time and characteristics of students.
- f) Form of classical learning is a common strategy used in applying the delivery strategy of learning productive subjects in school.

3) **Result**

- a) Delivery strategy of productive subjects that applied can improve student achievement.
- b) The achievement of the students of SMK in the academic field, especially in productive subjects according to the researcher's observation, the result is quite good, it is proven by looking at the final score of test result and interview to the teacher.
- c) The most important element in carrying out the delivery strategy of learning in the classroom is the principal, classroom teachers and all education personnel in the educational institutions.

From various data exposes in Vocational High School school about learning strategy of productive subjects in improving student's learning achievement, can be put forward special findings of research as follows:

- a) In the delivery of learning productive subjects in the classroom, teachers design and modify the material presented to the students by providing problems in everyday life related to the material and convey in simple language for easy understood learners.
- b) Teachers involve students taking an active role in the process of learning activities by requesting to provide immediate responses and summarize lesson messages.
- c) Teachers provide special guidance to students who have difficulty understanding the material individually.

CONCLUSIONS

Based on the results of field research conducted by researchers, it can be drawn conclusion as follows:

First, the design of delivery strategy of productive lesson by teachers is by designing learning strategy by involving media.

Second, implementation of learning productive lesson that have been done has been referring to the rules and rules that have been planned and defined in every activity or learning process in an educational institution. At the time of learning activities productive lesson take place, the strategy used by teachers is the use of learning media by demotivating to students in front of the class.

Third, implementation of delivery strategy of learning of productive lesson applied by the teacher from each of the research location is paying off. The average grade of productive lesson per class expressed above the Minimum Exhaustiveness Criterion (KKM) score of productive lesson.

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