

# Teaching Skills and Learning Discipline as Factors Affecting Students' Learning Outcomes

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**Abstract**—Teacher teaching skills and student learning discipline as external and internal factors empirically have a significant effect on student learning outcomes. This article discusses the results of research on the effect of two independent variables on one dependent variable. By using explanation survey method, data were collected by distributing questionnaires developed with Likert scale model to 62 students at a vocational high school in West Bandung regency as the object of research. Descriptive analysis indicates that teacher's teaching skill is in moderately high condition, students learning discipline is in high condition, and students' learning outcomes is in moderate condition. Multiple regression analysis shows that teacher's teaching skills and student learning discipline have a positive and significant influence on student learning outcomes. To improve the influence of the relationship between two independent variables and one dependent variable, the relationship between teacher and student must be continuously improved so that student learning outcomes can be obtained maximally.

**Keywords**—teacher teaching skills; student learning discipline; learning outcomes; vocational high school

## I. INTRODUCTION

One of the interesting issues to be studied today is the low student learning outcomes that will affect school quality. The quality of education in the context of outcomes is referring to academic and non-academic accomplishment achieved by the school [1]. The success of school quality is determined by the learning between teachers and students. Students who are successful in learning or students who achieve high learning outcomes are determined by two factors: external and internal. One of the external factors that support the success of student learning is the teacher's teaching skills, while one of the internal factors that support the success of student learning is the discipline of learning. A successful school is a school that is able to pass the graduates with higher learning outcomes. Vocational High School (VHS) is a school that prepares its graduates to be ready to work, whose student learning outcomes must be high. But in reality, there are still schools that the students' learning outcomes are yet optimal.

The results of preliminary study indicate that student learning outcomes in one of the productive subjects are still not optimal. From the score of students on the report card, it appears some students have not been able to reach the

Minimum Exhaustiveness Criteria (MEC). In 2015-2016, the average number of students who have not yet reached the MEC is 56%, and then fell 13% to 43% in the next academic year.

The immediate question is why the students' learning outcomes are not optimal yet? Referring to the perspective of social constructivism theory, many factors can affect student learning outcomes [2]. The teaching skills and discipline of student learning are two factors that allegedly affect student learning outcomes. If teachers are skilled in teaching and students have a high learning discipline, then student learning outcomes will be high, and vice versa. This study examines the effect of teaching skill and learning discipline on student learning outcomes.

## II. LITERATURE REVIEW

### A. Teaching Skills

Teachers play an important role in enabling effective teaching-learning processes [3]. Teachers need to manage effective teaching-learning processes so that students know how to learn and utilize their knowledge appropriately in everyday life [4]. Teachers' ability to conform to the standard demands of the tasks poses a positive effect on the outcomes, such as changes in academic outcomes, the attitudes of learners, the skills of learners, and the increasingly changing work patterns of teachers [5]. To that end, the teaching ability of the teacher becomes very important and must be mastered by the teachers in carrying out their duties and functions. Without good teaching skills it is highly unlikely that teachers will be able to innovate or create material from the curriculum, which in turn can provide a sense of boredom for both teachers and learners to perform their respective tasks and functions.

Teaching skills is a specific learning activities and procedures that can be used by teachers in class [6]. It is a set of interrelated teaching behaviors used in classroom interactions to facilitate the achievement of specific educational goals [7], that consist of: 1) skills in initiating learning; 2) skills in explaining; 3) skills in closing learning; 4) skills in asking questions; 5) skills in providing reinforcement; 6) skills in variation of learning model; 7) skills in demonstration, and 8) skill using blackboard and learning media.

**B. Learning Discipline**

Discipline is a very important element for the success of student academic achievement [8]. Discipline in learning is a process to maintain the desired behavioral change in students. Discipline in learning is considered as the key to effective learning and teaching [9]. One type of discipline of students in the classroom that can support student success is the discipline in learning.

Discipline of learning is a very necessary thing for every student; with the discipline of learning, the goal of education will be more easily achieved [10]. The discipline of learning is the adherence of a person in following the rules or discipline in learning, which is driven by the consciousness of a person [11]. There are four factors that influence the discipline of learning: self-awareness, followers and obedience, educational tools, and punishment [12].

The discipline of learning can be grouped into: discipline in compliance with school rules, discipline in following the learning process, and student self-discipline [13]. The discipline in compliance with school rules relates to the standards that must be met by students, covering things that are in the school environment in general and in the classroom, especially in following the teaching and learning activities, both school rules and regulations in the classroom. The discipline in following the learning process refers to the implementation of the students discipline in the classroom. The student self-discipline refers to providing opportunities for students to do what is desired in their environment by taking into account the rules and benefits of the activities undertaken so that students can determine a behavior that is meaningful to themselves.

**C. Learning Outcomes**

The general education program contained in the educational curriculum is to discipline students to become graduates enriched with strong skills, knowledge and mental [14]. To be able to achieve these goals, the learning outcomes obtained by students must be maximized. Maximum learning results can be obtained from the learning process undertaken by teachers and students. Learning outcomes are the result of an interaction of learning and teaching [15]. From the teacher side, the teaching activity ends with the evaluation process of learning outcomes, while from the students side, the learning outcomes is the end of the breaking and the peak of the learning process.

In general, the factors that influence the learning outcomes are divided into two: internal and external factors [16]. The internal factors consist of the ability of student attention, attitudes and study habits, interests and attention, persistence, social economy and physical and psychological, while the external factors consist of the teachers, curriculum, environment, media, students, and learning models. Learning outcomes include cognitive, affective and psychomotor domains. The cognitive domain consists of knowledge, comprehension, application, analysis (describes, determines relationship), synthesis (organizes, plans, forms new buildings) and evaluation. The affective domain consists of receiving, responding, valuing, organization, and characterization. The

psychomotor domain consists of productive, technical, physical, social, managerial and intellectual skills [17].

It can be said that teacher teaching skill and discipline of student learning is external factor and internal factor which have important role in reaching learning goal, one of which formulated in the learning outcomes. A third reason urges for rapid boosting the teaching skills of beginning teachers relates to student outcomes [18]. The achievement of good learning outcomes, in addition to the existence of a sufficient level of intelligence, good and very good, is also supported by the consistency of school discipline, individual discipline in learning and good behavior of the student [12].

**III. RESEARCH METHOD**

This research is to describe and analyze the impact of teacher’s teaching skills and student’s learning discipline on student learning outcomes. The method used is explanatory survey, with a population of 62 students of class X on the Office Administration program, on the subject of Introduction to Office Administration. Data were collected using questionnaires. The variable of teacher’s teaching skills is measured through eight indicators: 1) skills in initiating learning; 2) skills in explaining; 3) skills in closing learning; 4) skills in asking questions; 5) skills in providing reinforcement; 6) skills in variation of learning model; 7) skills in demonstration, and 8) skill using blackboard and learning media in 33 items. The variable of student’s learning discipline is measured through three indicators: 1) discipline in compliance with school rules; 2) discipline in following the learning process; and 3) student self-discipline in 15 items.

Data were processed by descriptive analysis and inferential analysis. Descriptive statistics are used to present an overview of the respondent’s views on teaching skills, learning discipline, and learning outcomes depicted in terms of frequency, percentage, and average scores. Inferential statistics are used to see the impact of teacher’s teaching skills and learning discipline on learning outcomes, and to test hypotheses using simple regression, multiple regression, and hypothesis testing.

**IV. RESULTS**

The descriptive analysis describes the average score of each indicator of variables studied. The average score of the percentage of teachers’ teaching skills is 72%, which can be categorized as moderately high, presented in table 1.

TABLE I. THE AVERAGE SCORE OF THE PERCENTAGE OF TEACHERS’ TEACHING SKILLS

<b>Indicators</b>	<b>No. Items</b>	<b>Mean of %</b>	<b>Interpretation</b>
Skills in initiating learning	1 – 3	77%	Moderately high
Skills in explaining	4 – 7	73%	Moderately high
Skills in closing learning	8 – 10	75%	Moderately high
Skills in asking questions	11 – 13	84%	High
Skills in providing reinforcement	14 – 17	67%	Moderately high

Table 1. Cont.

Skills in variation of learning model	18 – 21	71%	Moderately high
Skills in demonstration	22 – 27	71%	Moderately high
Skill using blackboard and learning media	28 – 33	55%	Moderate
<b>Mean</b>		<b>72%</b>	Moderately high

The average score of the percentage of students' learning discipline is 81%, which can be categorized as high, presented in table 2.

TABLE II. THE AVERAGE SCORE OF THE PERCENTAGE OF STUDENTS' LEARNING DISCIPLINE

Indicators	No. Items	Mean of %	Interpretation
Discipline in compliance with school rules	1 – 3	83%	High
Discipline in following the learning process	4 – 11	74%	Moderately high
Student self-discipline	12 – 15	87%	High
<b>Mean</b>		<b>81%</b>	High

Student learning outcomes were obtained from the value of student report cards X class on Introduction to Office Administration at SMK Bina Wisata Lembang academic year 2016/2017, which is presented in the following table 3.

TABLE III. DESCRIPTION OF STUDENT LEARNING OUTCOMES

Range	Frequency	Percentage
65,0 - 72,7	1 – 3	8%
72,8 - 80,5	4 – 11	74%
80,6 - 88,3	12 – 15	18%
Total	62	100%

The results of hypothesis testing using multiple regressions are formulated in the equations below.

$$Y = 36,103 + 0.168 (X_1) + 0.334 (X_2) \quad (1)$$

$$\alpha + \beta = \chi. \quad (2)$$

R-square ( $R^2$ ), in terms of the variance of endogenous constructs is explained by exogenous constructs. R-square value of 0.388 indicates a significant influence of teaching skills and learning discipline on learning outcomes, meaning that 38.8% variance of learning outcomes can be explained by teaching skills and learning discipline, and that 61.2% is influenced by other factors not examined in this model. The value also indicates the importance of teaching skills and learning discipline to improve the learning outcomes at the vocational high school.

**V. DISCUSSION**

From the calculation, it is found that the more skillful teacher in teaching, the higher the students' learning outcomes. It can be stated that there is a significant and positive influence of teaching skills on learning outcomes of the students of class

X on the subject of Introduction to Office Administration. The students perceived that the teacher's skills of asking question are relatively higher than other indicators while the skills using blackboard and learning media is relatively lower. The instructional reform may strengthen the teaching skills on students' learning outcomes [19]. In order for media to be used most effectively, teachers should possess skills that boost the learning outcome [20]. To effectively using learning media, the integration of ICT into teaching and learning should be considered [21]. The learning media will improve the clarity of teaching [22]. In this case, school administrators may promote teacher skills and competencies since they have successfully contributed in student learning outcomes [23].

It is also found that the more discipline the student in learning, the higher the students' learning outcomes. It can be stated that there is a significant and positive influence of learning discipline on learning outcomes of the students of class X on the subject of Introduction to Office Administration. The students show the high discipline in compliance with school rules and the student self-discipline, while the discipline in following the learning process is still moderately high. Students may have a significant advantage when taught in an across discipline team-taught programme [24]. The discipline as cultural basis is also important for student to achieve higher learning outcomes [25].

**VI. CONCLUSION**

In conclusion, the teaching skills and learning discipline are the significant factors affecting students' learning outcomes. To effectively improve the learning outcomes, the teaching skills must be strengthened so the teacher can apply the learning discipline to the students, and finally the synergy between teaching skills and the learning discipline will intensify the students' learning outcomes.

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$$\alpha + \beta = \chi. \quad (1) \quad (1)$$

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