The Effectiveness of Using a Case Study-Based Module on Learning Outcomes in Segmenting, Targeting and Positioning Strategies

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Abstract

This study aimed to test the effectiveness of case study-based modules on learning outcomes in segmenting, targeting, and positioning in vocational high schools. The type of research used is Pre-Experimental. In this study, the One Group Pretest-Posttest. In this research, the treatment given is using case study-based modules on segmenting, targeting, and positioning. This research was conducted at SMK Negeri 1 Bangkalan. Research subjects are students of class X Online Business and Marketing, totaling 20 students. Before treatment, the students were given a pretest. After the treatment, the students were given a posttest of 20 questions. Improving learning outcomes was analyzed using the T-Test and N-Gain formulas. The T-test is used to calculate whether the increase in learning outcomes is significant or not. In contrast, N-Gain is used to calculate the increase in learning outcomes. The improvement of learning outcomes based on the N-gain analysis shows that the learning outcomes are categorized as moderate, thus showing that pretest and post-test there are differences based on the results of the T-Test (Paired Sample T-test).

I. Introduction

Education quality is a relatively significant problem in efforts to improve the quality of national education. However, various efforts have been made to overcome these educational problems. Efforts are being made to cover all components of education, including curriculum discussions, improving the quality of teachers, and other efforts related to improving the quality of education. In-Law Number 20 of 2003 concerning the National Education System where education is one manifestation of a dynamic culture that will continue to develop. Changes to improve education must be carried out continuously at all levels of education as a form of anticipation for future interests.

According to Astuti et al (2019) Education is an obligation of every human being that must be pursued to hold responsibilities and try to produce progress in knowledge and experience for the lives of every individual. Education is one of the efforts to improve the ability of human intelligence, thus he is able to improve the quality of his life (Saleh and Mujahiddin, 2020). Education is expected to be able to answer all the challenges of the times and be able to foster national generations, so that people become reliable and of high quality, with strong characteristics, clear identities and able to deal with current and future problems (Azhar, 2018).

The concept of education feels increasingly essential when someone has entered the world of work or lives in society. Then he must be able to solve the problems faced by applying the teachings obtained from education. This is in line with research conducted by

Azizah et al. (2020) that education needs to be developed by considering students' readiness and needs, the content's suitability, and the learning evaluation process.

Entering the life of the 21st century, the challenges faced by the national education system are increasingly complex to prepare quality human resources (HR) to compete in the future era. They are impossible to predict in all parts of life, including transportation, economy, education, technology, communication, information, and others. According to Zekri et al. (2020), changes occur very quickly in this century. Changes that occur very quickly can provide a good opportunity if appropriately used but can also be fatal if it is not anticipated in a structured, systematic, and measurable manner.

According to Ambayon (2020), inadequate learning resources during learning can be overcome by procuring effective teaching materials. This is in line with research (Khalil et al., 2020) that one of the efforts that can be made to solve these problems is the development of teaching materials. Teaching materials are a set of tools/facilities used in learning that contain materials, methods, limitations, and ways of evaluating learning that is arranged interestingly and systematically (Widodo & Jasmadi, 2008). Currently, the teacher is a facilitator for students to understand various learning resources and teaching materials. Teaching materials are needed by the teacher as a guide to convey the material and to assist students in understanding the material during the learning process. Based on this information, efforts are needed to find solutions to existing problems.

A module is a form of teaching material in which a set of learning experiences are planned, thoroughly and systematically arranged, and designed to help achieve learning objectives effectively and efficiently (Daryanto, 2013). Then according to Hamdani (2011: 219), the module is a learning tool that contains material limitations, methods, exercises, activity instructions, and evaluation methods that are structured and made interesting in order to be able to learn independently and be able to achieve the required competencies. The general characteristics possessed by teaching materials in the form of modules, namely; there is a statement related to learning objectives/achievements in the introduction, and the knowledge/materials provided in the module are arranged in such a way that students actively participate in learning, there is an assessment system based on mastery, materials, and assignments are arranged in total, providing an opportunity to achieve complete learning objectives for every student (Parmin, 2009).

The use of modules in the learning process has several advantages, including being flexible, increasing students' sense of responsibility towards learning, assessments can be carried out throughout learning, providing *feedback* from learning, and providing opportunities to re-learn the material in the module (VidalRodeiro & Nádas, 2012; Mulyasa, 2005). This is in line with Ambayon's research (2020) with module-based learning that can provide exercises to stimulate and increase student curiosity and allow students to learn independently. So modules help maximize student involvement in a class by completing assigned tasks. Students can develop their learning based on their respective abilities and knowledge through the material presented in the form of modules.

Marketing is one of the primary subjects of the expertise program (C2) contained in the Online Business and Marketing department in class X. There are several essential competencies in marketing subjects, one of which is Basic Competence 3.5 Analyzing *segmenting, targeting,* and *positioning* strategies and 4.5 Performing strategies *segmenting*, *targeting*, and *positioning*. In the material of *segmenting, targeting,* and *positioning*, students are expected to be able to foster curiosity, develop conceptual understanding, and solve problems related to *segmenting, targeting,* and *positioning* as well as the surrounding environment.

Efforts to improve the quality of marketing learning are seeking real learning experiences for students. Learning that is separated from experience or real everyday cases will make many lessons only accepted as memorized knowledge. Learning experiences that come from everyday life or cases can help students quickly understand the meaning of the concept that is being given. Thus, the marketing concept of *segmenting, targeting,* and *positioning* is no longer an abstract concept. Alternatives were developed to include the case study method. According to Saftina et al. (2019), this method focuses on scientific efforts in thinking about why and how to solve the cases or problems presented or can be said to be learning that starts from the case. The teacher implements this method using solvable cases as lesson material. The case in question can use cases contained in textbooks or other sources, even from events that occur in the environment around students (Sanjaya, 2006)

Then the available textbooks used by the SMKN 1 Bangkalan school have a limited number. Hence, the opportunity for students to learn is not optimal because the textbooks provided by the library can only be borrowed during marketing hours. This causes students not to be able to study except with the teacher, and students also only receive explanations from the teacher. In addition, the value of student learning outcomes on the material is less than optimal, and most of the scores are still low. Only 5 out of 20 students have succeeded in achieving the KKM score. At the same time, the rest got a reasonably low score below the KKM students learn independently and help make it easier for students to master the material more realistically so that students can understand the material in the module more deeply by the demands and needs of the curriculum at school. The case in question can use cases contained in textbooks and other sources, even from events that occurred in the environment around students (Sanjaya, 2006:163). This is in line with the research of Saftina et al. (2019), showing that the development of teaching materials based on the integrated case study method of Islamic values is considered very feasible to be used as a learning resource for students in Madrasah Aliyah.

Independent learning is a learning process carried out in and outside the school environment by studying and understanding knowledge by the material being studied (Putra et al., 2017). The module developed is in the form of self-instructional, which prioritizes student learning independence. With this case study-based module, students are expected to be able to learn independently at their own pace of learning. Thus, the purpose of this study was to determine the effectiveness of using case study-based modules on learning outcomes in the material of *segmenting, targeting,* and *positioning* in Vocational Schools majoring in Online Business and Marketing.

II. Research Method

This study used a quantitative approach. The type of research used is Pre-Experimental. In this study, *the One Group Pretest-Posttest.* This research was conducted at SMK Negeri 1 Bangkalan. The research subjects were 20 students of class X Online Business and Marketing. Teaching materials are in the form of print modules that are used directly or *offline*. The modules are based on case studies. Before treatment, the students were given a *pretest*. After the treatment, the students were given *a posttest* of 20 questions. Improving learning outcomes was analyzed using the N-Gain formula and T-Test. N-Gain was used to calculate the increase in learning outcomes. In contrast, the T-test was used to calculate whether the increase in learning outcomes was significant or not.
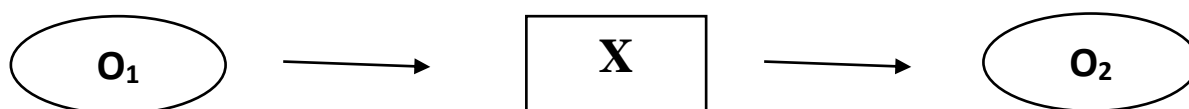
Description:

X= Treatment, namely learning marketing strategies for *segmenting, targeting,* and *positioning* using case study-based modules.

O_1= Pretest (measurement of cognitive learning outcomes before learning with case study-based modules)

O_2= Posttest (measurement of learning outcomes cognitive after learning with case study-based modules)

III. Results and Discussion

Effectiveness is the impact that arises from action. In this study, the impact of the use of the case study module on student learning outcomes. The effectiveness test is used to see the level of success in module learning activities that can be said to be effective if the case study-based module can have an impact on student learning outcomes where student learning outcomes increase before and after using the case study module. The results of case study-based modules that have been designed as learning media before being used in learning have been tested on material experts, linguists, and graphic experts with perfect criteria.

Student learning outcomes studied in this study were in the form of *pretest* and *posttest* and completeness of learning outcomes. The minimum completeness criteria (KKM) BDP class X is 70. Student learning outcomes can be seen in the following table:

Table 1. The amount of improvement and N-Gain

Average value - Average		increase	N-Gain	Highest		value Lowest	
Pretest	Posttest			Pretest	Posttest	Pretest	Posttest
48.5	81	32.5	0.63	65	90	40	70

Student learning outcomes are used to determine the effectiveness of case study modules on segmenting, targeting, and positioning. The table above shows that the learning of *segmenting, targeting* and *positioning* with the average score of students before using the case study-based module was 48.05 and after using the case study-based module was 81. From the results scores, *pretest* and *posttest* seem to experience differences. Based on the N-Gain analysis, student learning outcomes showed a value of 0.63 with a medium category, meaning that learning using the case study module improved student learning outcomes.

Assessment of student learning outcomes aims to determine whether the learning activities have been running effectively. The effectiveness of students can be seen in the ability to achieve the learning objectives that have been determined. *The pretest* was given to know the mastery of the initial concept before being given treatment with the module. In contrast, the *posttest* was given to know the concept's mastery after being given treatment in the form of learning by using the case study module. The student's score after using the module has increased, where the average *pretest* is 48.5, then the *post-test* is 81, so it can be said that the use of the case study module is going well because the average learning

outcome has increased to 32.5. Furthermore, hypothesis testing was carried out using the T-test.

Paired Samples Test

					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Pre Test - Post Test	-32.500	6.177	1.381	-35.391	-29.609	-23.529	19	.000

Based on the data above, in the *paired sample test,* the value of Sig. (*2-tailed*) is 0.00<0.005 and tcount is 23,529, for the value of t_{table} with confidence level = 0,05, dk= (n-1)= 20-1= 19, the value of t_{table} is 2,093, thus $t_{count} > tt_{able}$, which is 23,529 > 2,093, it can be concluded that there is a significant difference between learning outcomes before and after using the case study module. If it is seen from the achievement of the KKM, no students reach the KKM, while in the *posttest,* as many as 20 students get a score that reaches the KKM.

This is because in the case study-based module, there are illustrations, pictures, examples, and additional features such as focus, marketing info, economic info, link browsing, and did you know to make it easier for students to understand the material. Module-based learning can provide exercises to stimulate and increase student curiosity and allow students to learn independently (Ambayon, 2020). Learning outcomes can increase from before the case study module to after using the case study-based module because students' knowledge develops after learning to use the case study module.

Case study-based modules are arranged in easy-to-understand language, with pictures and examples, and the module's appearance is also attractive so that it can help students more easily understand the material. In general, learning using modules is independent learning in which the teacher acts as a facilitator while students build their knowledge. Meanwhile, according to Darwin et al. (2020), the module can be used as an alternative way to increase the activeness and independence of students in learning. Setiyadi et al. (2017) also stated that the use of modules in learning is efficient, helping the learning process be more effective and accelerating the process of students' understanding of the learning material they are studying. This is said to be effective because learning carried out using case study-based modules can make learning less boring and fun so that students' interest and motivation in learning also increase.

The improvement of learning outcomes based on the N-gain analysis shows that the learning outcomes are categorized as moderate, thus showing differences between the pretest and posttest scores. The T-Test results (Paired Sample T-test) showed a significant difference. The results can be seen from the increase in learning outcomes in the *posttest*. Learning outcomes using teaching materials in the form of modules can overcome learning difficulties and increase students' enthusiasm for learning. According to (Handayani, 2018), the use of modules can improve student learning outcomes because the use of modules will involve students creatively in the learning process to develop their thinking skills so that there is an increase in student learning outcomes. This is in line with Hamdani's opinion (2011: 219) that a module is a learning tool that contains material limitations, methods, exercises, activity instructions, and evaluation methods that are structured and made interesting in order to be able to learn independently and be able to achieve the required competencies.

From previous research, the results of this study are also relevant to previous research. Research by Zekri et al. (2020) showed an increase in students' collaboration skills with project-based simulation learning modules and digital communication in suitable categories. This is in line with the research by Setiyadi et al. (2017), which showed that the development of scientific-based biology learning modules received a good response from students and teachers and was practical, valid, and effective. Then supported by research (Badawi & Qaddafi, 2015), environment-based modules are effectively used because the value of student learning outcomes is 75% reaching the KKM standard.

IV. Conclusion

Based on the study results, it was concluded that the module's effectiveness based on case studies of *segmenting, targeting,* and *positioning* strategies were effective in which effectiveness could be seen based on learning outcomes. The average score of students before using the case study module was 48.5, and after using the case, study module was 81. Based on the N-Gain analysis, student learning outcomes showed a value of 0.63 in the medium category, meaning that learning using the case study module improved learning outcomes. Student. Based on the difference in the *pretest* and *posttest* results, it obtained a significant value so that it was declared effective. Test results *Paired sample t-test* revealed that $H0_{was}$ rejected and Ha_{was} accepted, so it could be concluded that there were significant differences in learning outcomes after students used the case study-based module.

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