

THE EFFECTIVENESS OF LEARNING MODELS TO INCREASE STUDENTS' INTEREST IN ENTERPRENEURSHIP

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ABSTRACT

This study aims to determine the effectiveness of learning models to increase students' interest in entrepreneurship. This research was conducted on class XI at SMK N 1 Surakarta in the academic year of 2020/2021. This research is a quasi-experimental research. The sample in this study was 184 students and it was taken using purposive sampling technique. Researchers used a questionnaire to collect data. The results of this study indicated that the learning model had a significant effect on students' interest in entrepreneurship. This was indicated by a significance level of 0.002. Based on the average entrepreneurial interest of students who were taught using project-based learning model, the result was 89.91, while the average entrepreneurial interest of students taught using the problem-based learning model was 88.35. So, it can be concluded that the learning model that had the most influence to increase students' interest in entrepreneurship was project-based learning model.

KEYWORDS: Project-Based Learning, Problem-Based Learning, Entrepreneurial Interest

INTRODUCTION

The number of unemployed in developing countries is currently influenced by several aspects and one of them is the aspect of education. The government chose SMK (vocational school) education level as one of the formal education levels with the hope that students are ready to work after graduation. Data from BPS (Central Statistics Agency) in 2019 showed that the highest unemployment rate was at the SMK education level at 8.63%. Viewed from the educational aspect, unemployment is caused by an imbalance or disconnection between the world of education and the world of work. The number of vocational graduates from certain majors is not proportional to the number of jobs available. Hariyanto (2013: 286) also revealed that the large number of unemployed people from SMK level was one of them caused by the lack of entrepreneurial provisions for students, so that after graduation they wanted to immediately get the desired job. In other words, student's mental job seekers were still strong; they have not thought of becoming a job creator.

Through the subject of Creative Entrepreneurship, the government provides theoretical and practical provisions to students so that they have certain skills or expertise. It is also intended to foster an entrepreneurial spirit so that it is expected to minimize the number of unemployed people in Indonesia, especially from SMK sector.

Based on the results of field observations through a tracer study, it was known that the interest of students was still low. According to research conducted by Syam and Winarno (2013: 2), the low interest in entrepreneurship was influenced by several things, namely: (a) lacked of competence and teacher understanding of the subject matter of entrepreneurial creativity products; (b) lacked of facilities and infrastructure; (c) the teacher's lack of understanding of the learning methods used. Referring to the government's target for the successful implementation of entrepreneurship programs in schools, it needs to be emphasized that the learning that is carried out must be optimal, starting from compiling a curriculum that is in harmony with the world of work or industry to how to teach material with the right learning model. Based on the Regulation of Permendikbud No. 22 of 2016, there are several learning models that are expected to be able to shape scientific, social behavior and develop curiosity so that students are able to think critically, logically, metacognitively and reflectively. The learning models are project-based learning and problem-based learning.

Based on this background, this study would examine the effect of project-based learning and problem-based learning models on students' interest in entrepreneurship. The formulation of the problem in this study is: Is there a difference in the influence of the entrepreneurial interest of students who use a project-based learning model with students who use problem-based learning.

LITERATURE REVIEW

a. Entrepreneurial Interests

Interests can be said to be closely related to one's personality. Yuliawan and Ginting (2012: 109) also say that a person's interest can be expressed through a statement that shows someone is more interested in a certain object through participation in these activities, while entrepreneurial interest according to Tung (2011: 34) can be interpreted as a person's personal commitment to starting a new business or venture which then becomes a bridge between attitudes, subjective norms, and behavioral control over actual behavior. Entrepreneurial interest is the first step in the process of establishing a business (Lee and Wong, 2004: 276). Entrepreneurial interest can be seen from a person's willingness to work hard and diligently in achieving business progress, willingness to bear all risks that arise, willingness to take new paths or ways, and willingness to do as he has learned and experienced.

According to Zain (2010: 34), Alma (2012: 12) and Siswadi (2013: 9) the factors influencing entrepreneurial interest, namely:

1) Internal factors are factors that grow from within the individual concerned and in the form of motivation or encouragement that plays a strong role in determining the realization of a planned action. Motivation according to Mc Clelland (1987: 40) is grouped into three, namely achievement, power, affiliation motivation (cooperation).

2) External factors are ones that grow from outside a person. There are two external factors that influence interest in entrepreneurship, namely, family environmental factors and social factors.

3) Educational factors, which aim to increase understanding of entrepreneurship through attitudes, knowledge, and skills so that they are expected to equip a person in carrying out his entrepreneurial activities. According to the results of research by Dugassa (2012: 258), students who had taken entrepreneurship education or learning would have a stronger interest in entrepreneurship.

Entrepreneurial interest can be built from an early age and is not an innate talent, so that everyone has the same opportunity to become an entrepreneur. To be able to grow and increase interest in entrepreneurship, certain strategies or steps are needed. The strategy of developing entrepreneurial interest is a learning process carried out with appropriate and project-based learning methods, has business partners who will be business incubators, has a structured learning design and has competent educators (Alimudin, 2015: 10). The strategies are described by Mopangga (2014: 89) as follows:

- 1) Increasing the frequency of entrepreneurial practices, socialization, and access to information about entrepreneurship both within schools and outside schools.
- 2) Carrying out periodic contextual learning in the form of field studies at MSME.
- 3) Providing entrepreneurship facilities in schools such as laboratories, workshops, galleries and so on.
- 4) Organizing special programs such as business incubators or entrepreneurial competitions.
- 5) Building entrepreneurship development networks or networking with stakeholders who have similar programs.
- 6) Distributing the budget to groups of students through certain selections.

This study took internal, external, and educational factors as indicators that would be used to measure students' interest in entrepreneurship.

b. Learning models

1) Project-Based Learning (PjBL)

According to Lattimer and Riordan (2011: 18), project-based learning is learning that requires students to respond to questions about real problems and requires them to solve certain problems or topics. The questions given to students are questions that are relevant to real life so that they will stimulate students to develop their abilities. Project-based learning places problems as the key to the learning process. The problem is given in the form of an assignment and resolved with a scientific approach. Roessingh and Chambers (2011: 60) suggest that there are five important elements in project-based learning, namely: (1) project description with its rationalization; (2) a set of clear learning objectives; (3) a list of materials and resources; (4) a set of tasks and (5) assessment criteria and rubrics. Thus, it can be said that project-based learning is a learning model that focuses on the main concepts and principles of a scientific discipline by involving parties that are relevant to the needs in the field. This learning model also provides opportunities for students to learn independently so that they are able to construct their own knowledge.

The application of project-based learning in learning is adjusted to its characteristics. According to Sani (2014: 173-174) there are seven characteristics of project-based learning model, namely: (1) directing students to investigate; (2) is an inquiry process; (3) related to students' needs and interests; (4) centered on students by making products; (5) using critical and creative thinking skills; (6) seeking information, conducting investigations, drawing conclusions, and producing products; and (7) related to real and authentic problems. By looking at the characteristics of the learning model it is hoped that it can increase students' interest in entrepreneurship. Other research conducted by Aksela and Haatainen (2019: 9) also stated that project-based learning could motivate students, train time management, solve problems and collaborate between teachers and students, and gain the achievement of learning goals. This is in line with the results of research by Chiang and Lie (2016: 709) which stated that the application of the characteristics of project-based learning in learning could encourage students to work together, train independently seeking information, increase interest in learning, and encourage students' thinking skills in developing their knowledge.

There are advantages and disadvantages of project-based learning model. According to Wena (2011: 147) there are five advantages of this learning model, namely: (1) increasing students' enthusiasm for learning; (2) improving the ability to solve complex problems and students become more active; (3) increasing the ability of students to obtain broader information; (4) developing communication skills; (5) providing a learning experience of organizing and time management of a project. This is in line with the findings of research conducted by Bedrad (2012: 28) which stated that project-based learning was able to generate interest in learning, increase thinking skills, be independent and encourage students to collaborate in groups. Meanwhile, the weaknesses of project-based learning model according to Majid and Rochman (2015: 164) were as follows: (1) it took a lot of time; (2) required a relatively large amount of money; (3) required a lot of equipment in carrying out activities; (4) there was a possibility that students were less active; (5) differences in the level of ability between students in analyzing problems could cause difficulties in understanding the topic. To minimize some of the weaknesses in the application of this learning model, the teachers should facilitate students in the process of completing the project by providing a time limit for completing the project, providing simple supporting equipment, and must be able to create a pleasant learning atmosphere so that students feel comfortable in participating in the learning activities.

2) Problem Based Learning (PBL)

Problem-based learning is a learning model that requires students to be active, creative in solving problems (Stankunas and Babich 2016: 399). According to Downing (2011: 64) problem-based learning is an approach that involves metacognitive processes in solving problems to stimulate students to find ways to solve these problems. Problem-based learning refers to the process of solving real or hypothetical problems, student-centered, collaborative and then the problems given will stimulate students to collect information, synthesize their knowledge and skills to be applied in solving problems in learning (Chen, Lin, and Chang, 2011: 518). According to El-Shaer and Gaber (2014: 74) problem-based learning is a shift in traditional learning patterns where the process of gaining knowledge lies in

the active role of the teacher (teacher centered) then changes to being centered on students. With these various descriptions it can be concluded that problem-based learning is a learning model that presents problems in real life as learning materials that will be discussed by students. This model also does not focus on learning outcomes only but also trains other skills such as the ability to solve problems, think, communicate, cooperate, and make decisions. The opinion above is reinforced by Arends and Klicher (2010: 328) who state that problem-based learning can increase curiosity, interest, and motivation of students in learning.

Each learning model certainly has its own characteristics so that it can be distinguished from one another. According to Arends (2010: 349) there are several characteristics of problem-based learning models, namely: (1) presenting the real problems of social life which are meaningful; (2) only applied to certain subjects; (3) requiring students to carry out authentic investigations; (4) requiring students to produce certain works; (5) there is collaboration between students through group work. Based on these characteristics, problem-based learning model can encourage the activeness and cooperation of students to construct knowledge in order to obtain solutions and train communication skills and develop an attitude of responsibility to solve the problems at hand.

There are advantages and disadvantages in problem-based learning model. Bell (2010: 39) mentions some of the advantages of the problem-based learning model, namely: (1) challenging students to develop their interests and pursue deeper learning; (2) challenging the students to find new knowledge; (3) can increase learning activities; (4) fully developing ideas and knowledge; (5) developing critical thinking skills and forming the responsible attitude of students. Another opinion is expressed by Nur and Pujiastuti (2016: 135) who stated that there were four weaknesses of the problem-based learning model, namely: (1) there were still some teachers who had not been able to lead students in problem solving; (2) it took a long time and was expensive; and (3) good communication skills were needed for the transfer of knowledge in order to be accepted by students. In its implementation, there is no learning model that is most appropriate to be applied in the learning process, but this learning model will be realized if you pay attention to the conditions of students, teaching materials, facilities, and infrastructure as well as teacher conditions.

METHOD

This type of research is a quasi-experiment, that is, research using an experimental group and a control group but not randomly dividing (nonrandom assignment) participants into two groups. The experimental class used a project-based learning and the control class used problem-based learning. This study presents the results of the effect of project-based learning and problem-based learning models on the entrepreneurial interest of class XI students of SMK Negeri 1 Surakarta. This research used purposive sampling technique. The population in this research were all students at SMK Negeri 1 Surakarta, amounting to 874 with a sample of 184 students. The questionnaire was measured using a Likert scale with the criteria 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree.

The statistical test used in this research consisted of testing the instrument, testing the requirements analysis and testing the hypothesis.

FINDING AND DISCUSSION

The measurement of entrepreneurial interest in this study was carried out using a questionnaire processed using SPSS. Based on the data analysis carried out, it was obtained data on the differences in entrepreneurial interests of students who were taught using project-based learning and problem-based learning models as follows:

Table 1. Paired Samples Test

Treatments	Difference in average	df	Level of significant
PjBL dan PBL	1,56	184	0,002

Source: Data processing about interest in entrepreneurship in 2020

Table 1 showed a significance value of 0.002 <0.005. In other words, there are differences in entrepreneurial interest between students who were taught using project-based learning and problem-based learning models.

Furthermore, to find out which learning model has the most influence on interest in entrepreneurship, it can be seen in table 2 below:

Table 2. Paired Sample Statistic

Treatments	N	Average Score
PjBL	93	89,91
PBL	91	88,35

Source: Data processing about interest in entrepreneurship in 2020

Table 2 shows the magnitude of the differences in the entrepreneurial interests of students who were taught using project-based learning and problem-based learning models.

The average entrepreneurial interest of students taught by project-based learning was 89.91, while students who were taught with problem-based learning only received 88.35 results. So it can be concluded that the learning model that has the most influence to increase students' interest in entrepreneurship was project based learning.

Project-based learning model is an innovative learning model suggested in the 2013 curriculum (revised). The model focuses on the core concepts and principles of a discipline, facilitate students to carry out investigative activities, problem solving, and other meaningful tasks, (Mulyani, 2014: 54). In this learning, the project is carried out collaboratively and innovatively, is unique and focuses on solving problems related to real life in the field. Learning projects in this study are designed to foster entrepreneurial values to increase students' interest in entrepreneurship by taking Business Opportunity Analysis topics / materials in accordance with the learning syllabus. In project-based learning, students collaborate with other students in teams and students with teachers. The teacher's role is only as a facilitator, not as a learning center (teacher centered). The skills that are needed and can be developed by students in teams / groups are the ability to plan, organize, negotiate and carry out consensus / agreement on tasks to be done, work on agreed upon parts of the task, and gather information needed in the investigation. The advantages of using project-based learning model are that students can make their learning experience more interesting and meaningful and are able to optimize student participation in learning activities. With the characteristics and stages of systematic learning, project-based learning can help students find information, ideas, skills, ways of thinking, and how to solve problems until the realization of a learning outcome product. This is in accordance with research conducted by Chiang and Lee (2016: 709) which stated that the application of the project-based learning model could encourage students to be able to work together, train independently seeking information, increase interest, and encourage students' thinking skills in developing their knowledge.

CONCLUSION

Based on the research that has been done, it can be concluded that there were differences in the influence of students' interest in entrepreneurship. The experimental class taught by project-based learning showed an average interest in entrepreneurship of 89.9 and the control class taught using problem-based learning model only received a score of 88.35. Thus, it can be concluded that the entrepreneurial interest of students who were taught using project-based learning was higher than students who were taught with a problem-based learning model.

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