The Effectiveness of the Entrepreneurship MBKM Lecture Model: Alternatives to Improve Student Creativity Competencies during the Pandemic Covid-19

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Abstract

This study aims to produce an effective Entrepreneurship MBKM model in increasing student creativity by producing lecture outputs by students in the form of business plan drafts, startups, and entrepreneurship PkM proposals. The MBKM Entrepreneurship model used is said to be effective if there is an increase in creativity competence and it produces lecture outputs by students which are statistically significant and the average n-gain is at least in the moderate category. The research design in this study used a pre-experiment with a one group pre-test and post-test design. The research subjects were 30 students of Unesa physics in the 2021/2022 academic year. The instrument used in this research is a creativity assessment to assess student portfolio results. Data were analyzed using paired t-test and N-gain to see the increase in creativity. The results showed that there was a difference in creativity before and after the model was applied and a significant increase in student creativity and the average N-gain increase in student creativity in the medium criteria. In addition, students are able to produce creative products in the form of business plan drafts, startups, and entrepreneurship PkM proposals with a minimum score of B+.

Keywords: Entrepreneurship MBKM model; business plan; startup; PkM proposal; creativity


INTRODUCTION

Merdeka Learn Campus Merdeka (MBKM) which was launched by the Government to increase access to higher education and increase the link and match between graduates and the world of work in the era of the industrial revolution 4.0 is very appropriate. Improving the quality of graduates, the quality of lecturers, the quality of the curriculum and learning must be done if you want not to be crushed by the times and so that you can contribute to increasing the nation's competitiveness and being reliable in living in society. Lecturers become transformative agents who are tasked with conducting research activities and guiding students to become adaptive, creative and innovative agents of change.

The COVID-19 pandemic that has hit the entire world has had a profound impact on all levels of society, in the fields of economy, health, and education. The reduced job opportunities make it difficult for students who have just graduated to find a solution. In the midst of the economic downturn in the entrepreneurial sector, pioneering various types of business startups is an option. Managing the entrepreneurship course model is one way out of this problem by creating a creative economy, forming entrepreneurial characters, creating an atmosphere that can encourage students' independent attitudes. Raising the participation of students and related partners in developing the economy sustainable creative. Designing creative, innovative, and collaborative learning programs through the involvement of students...
and collaborating with research partners as an effort to minimize the impact of the Covid-19 pandemic is necessary.

The application of the Indonesian National Qualifications Framework as a reference for education in higher education is expected to equip students to be competent to compete in the industrial revolution 4.0 by acquiring 21st century skills; Communication, Collaboration, Critical Thinking and Problem Solving, and Creativity and Innovation needed in the world of work. The era of globalization requires making useful innovations that are able to solve problems, increasing literacy by utilizing information and communication technology (Griffin, J. 2016; Suyidno et al., 2018; Turiman et al., 2012; Zulkarnaen et al., 2017). Universities are required to develop a curriculum so that students have superior competencies with various 21st century skills and are adaptive to catastrophic changes. (Jatmiko et al., 2018; Prahani, et al., 2018; Sunarti et al., 2018).

The MBKM which was launched by the Government to increase access to higher education and increase the link and match between higher education graduates and the world of work in the era of the industrial revolution 4.0 at Unesa began to be carried out in the even semester of 2020/2021. Through the implementation of the Main Performance Indicators, it is expected to improve the quality of graduates, improve the quality of lecturers, and improve the quality of curriculum and learning. Improving the quality and relevance of higher education so that it can contribute to increasing the nation's competitiveness and being reliable in living in society. It is hoped that lecturers will become transformative agents in charge of conducting scientific research activities and guiding students to become adaptive, creative and innovative agents of change with various ideas and creativity to support the implementation of MBKM.

The presence of the Independent Learning Campus (MBKM) of Higher Education can even garner the participation of students and related partners in developing entrepreneurial research. Entrepreneurship must also be encouraged for sustainable creative economic development so that students who graduate from lectures will later have business startups so that they do not become educated unemployed.

A country becomes developed when the number of entrepreneurs in the country is 2% of the population (McClelland, 2012). When Indonesia's population was 200 million, the number of entrepreneurs in Indonesia reached 400 thousand people or less than 1% of Indonesia's population, so it was still below the advanced criteria. The United States, for example, has 11.5% of its population as entrepreneurs or a neighboring country, namely Singapore, with 7.2% of its citizens working as entrepreneurs. The effect is not surprising if the two countries become one of the countries with the most advanced economic developments in the world.

Entrepreneurship course discusses entrepreneurial concepts, definition of entrepreneurship, types of entrepreneurship, entrepreneurial values and behavior, various theories about entrepreneurship, ideas and opportunities, creativity, innovation, business planning, entrepreneurial triggering factors, entrepreneurial process models, characteristics and functions of entrepreneurs and entrepreneurial competencies. Preparation of business plans and implementing them. The competencies to be achieved by students are: Have an understanding of the basic theory of entrepreneurship, challenges, opportunities, business opportunities, and strategies to capture business opportunities; Have the ability to create creative and innovative ideas; Able to draw up a business plan and communicate orally and in writing; Implement business planning practices in the field of entrepreneurial practice (startup), and communicate the results of entrepreneurial practices in writing and orally; Having intelligent, independent, honest, creative, cooperative, tough, thrifty, and caring character in entrepreneurial practice activities (adaptive).

In developing creativity in the entrepreneurial learning process, students are given the opportunity to propose changes based on their knowledge and thoughts (Cruz, 2015; Daud et al., 2012). Students are given creativity tasks to provide space for creativity development and
responsibility for applying, discovering, comparing, connecting, imagining, creating, and planning activities creatively (Rotteram, 2014).

The development of creativity in entrepreneurship courses can be done through: (a) autonomy-based learning, involving the role of students' responsibility for success in their own learning process, (b) the availability of a creative environment that supports students' creative learning needs, (c) scientific investigations, where creativity depending on scientific knowledge and process skills, (c) scientific creativity tasks, students are given the responsibility to explore various impacts of the development of science and technology along with several alternative solutions, and (d) scientific communication, students are accustomed to convey ideas and share creative ideas with others (Torrance, 2013).

The implementation of the first batch of MBKM in the physics education department at the State University of Surabaya (Unesa) was carried out in the even semester of the 2020/2021 academic year in collaboration with 2 state universities, namely Semarang State University (Unnes) and Ganesha Education University (Undiksha) Bali involving 6 courses (Electric Magnets), Waves, Physics of Solids, Programmable Logic Controller / PLC, Innovative Learning Planning, Integrated Science) in each of the collaborating universities (Unesa Physics, 2021). Involving 61 students from physics study program and physics education. Meanwhile, the implementation of the second wave of MBKM in the physics education department of FMIPA Unesa is being carried out in the odd semester of the 2021/2022 lecture year in collaboration with partner universities and involves 10 courses (Entrepreneurship, Quantum Physics, School Physics, Statistics Physics, Physics Experiment II, School Curriculum, Media Learning, Local Wisdom of Physics, Audio-Fisual Physics, Physics E-Learning) in each collaborating university (Unesa Physics, 2021).

This research is in line with the milestone of achieving Unesa's vision which in 2016-2020 is a reference for innovative learning models at the national level (Unesa, 2018). In the 2021 period, the implementation of MBKM increased in the number of courses involved but the standard form of the Semester RPS Learning Plan) and the learning model used did not yet have a standard. Seeing such conditions, for the entrepreneurship course, an integrated model trial was conducted and adjusted to the specified output. As an alternative solution, it is to implement the Entrepreneurship course lecture model by producing the output of business plan draft lectures, startups, and student PkM proposals. Lecturers mobilize the participation of students and related partners in developing a Sustainable Creative Economy in an MBKM atmosphere.

Based on this background, the research problems to be solved are as follows. How is the effectiveness of the Entrepreneurship MBKM lecture model developed in the Physics Department, FMIPA Unesa and how the increase in creativity is related to the results of lecture products in the form of business plan drafts, startups, and Entrepreneurship PkM proposals. The purpose of this research is to analyze the effectiveness of the MBKM Entrepreneurship Lecture model for students in the Physics Department, FMIPA Unesa. The next goal is to increase creativity in producing college products in the form of business plan drafts, startups, and Entrepreneurship PkM proposals.

**METHOD**

This study continues the research on the development of the Entrepreneurship MBKM model to be tested in real classes to test its effectiveness. This type of research is a pre-experimental research with a one group pre-test and post-test design (Fraenkel et al., 2012).

![Figure 1. Research Design](image)

Description: O1 = pre-test score; O2 = Post-test score; X = Learning by Model MBKM Entrepreneurship
The research subjects with the Entrepreneurship MBKM Model were 30 2019A class students who took the course at the Physics Department, FMIPA Unesa for the 2021/2022 academic year. The sampling technique used is purposive sampling in accordance with the selected research scheme. The time of this research is for one odd semester 2021/2022. The place of research was carried out in the Department of Physics, FMIPA, State University of Surabaya.

The effectiveness of the Entrepreneurship MBKM Model is the success of the model in lectures to increase students' scientific creativity in producing drafts of business plans, startups, and entrepreneurship PkM proposals in terms of: 1) There is an increase in student scientific creativity which is statistically significant at = 5%; and 2) The average N-gain of students' scientific creativity is in the category of at least moderate (Escarti, 2015). To collect data using a creativity test instrument, a portfolio of business plan draft results, startups and Entrepreneurship PkM proposals from each student. Students are given a pre-test of entrepreneurial creativity, after learning entrepreneurship students are given a post-test again.

The research data obtained from the portfolio of business plan drafts, startups and the PkM Entrepreneurship proposal from each student were analyzed descriptively. Research data in the form of pre-test scores and post-test scores that have been collected after going through a series of prerequisite tests, namely: normality test and homogeneity test are then analyzed using paired t-test, namely to determine the difference in the mean pre-test scores and post-test scores. -test (Griffin & Care, 2015). After that, there was a significant difference between the pre-test scores and the post-test scores for scientific creativity. Followed by calculating the average level of increase in pre-test scores and post-test scores using the calculation of normalized gain (N-gain).

RESULTS AND DISCUSSION

Student creativity is obtained from the results of the assessment of creative products from each student. This research produces lecture outputs by students in the form of business plan drafts, startups, entrepreneurship PkM proposals. Student creativity data is presented in Table 1 below.

<table>
<thead>
<tr>
<th>No</th>
<th>Aspect</th>
<th>Beginning</th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mark</td>
<td>Completeness</td>
<td>%</td>
<td>note</td>
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<td>Σ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>creative process</td>
<td>64.88</td>
<td>22</td>
<td>78.45</td>
<td>TT</td>
</tr>
<tr>
<td>2</td>
<td>creative personality</td>
<td>68.33</td>
<td>8</td>
<td>28.76</td>
<td>TT</td>
</tr>
<tr>
<td>3</td>
<td>Creative environment</td>
<td>50.23</td>
<td>4</td>
<td>15.44</td>
<td>TT</td>
</tr>
<tr>
<td>4</td>
<td>creative product</td>
<td>50.45</td>
<td>4</td>
<td>15.44</td>
<td>TT</td>
</tr>
</tbody>
</table>

Description: T = Completed, TT = Not Complete

Table 1 shows that the application of the Entrepreneurship MBKM model can increase the completeness of indicators of creative personal aspects that previously had not been completed to become complete. In addition, the N-gain value shows the level of improvement in each indicator of the creative personality aspect in the medium criteria. This can happen because of the creative process presented by the lecturer in the MBKM lecture model (Rotteram, 2014; Dwikoranto et al., 2020). Creative personality is raised and associated with the final bill of lectures so that students are moved by new situations that are formed and appear in lectures consistently (Suyidno et al., 2018). The habituation process starting from the beginning will create a conducive classroom atmosphere so that a creative environment is formed in the entrepreneurship class (Jatmiko et al., 2018; Prahani, et al., 2018; Sunarti et al., 2018).

Student creativity data related to student portfolio results are obtained from the results of creative product assessments on three types of products, namely: business plan drafts, startups, and entrepreneurship PkM proposals.
startups, and PkM Entrepreneurship proposals. The student creativity data is presented in Table 2 below.

**Table 2** Assessment Results of Student Creative Products

<table>
<thead>
<tr>
<th>No</th>
<th>Creative Product Indicator</th>
<th>Types of products</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A Mark</td>
<td>description</td>
<td>B Mark</td>
<td>description</td>
</tr>
<tr>
<td>1</td>
<td>Relevance to MBKM topic</td>
<td>76</td>
<td>B+</td>
<td>77</td>
<td>B+</td>
</tr>
<tr>
<td>2</td>
<td>Compliance with standard format</td>
<td>76</td>
<td>B+</td>
<td>97</td>
<td>A</td>
</tr>
<tr>
<td>3</td>
<td>Swit Analysis Accuracy</td>
<td>76</td>
<td>B+</td>
<td>78</td>
<td>B+</td>
</tr>
<tr>
<td>4</td>
<td>Strength</td>
<td>92</td>
<td>A</td>
<td>79</td>
<td>B+</td>
</tr>
<tr>
<td>5</td>
<td>Weak</td>
<td>90</td>
<td>A</td>
<td>98</td>
<td>A</td>
</tr>
<tr>
<td>6</td>
<td>Opportunity</td>
<td>77</td>
<td>B+</td>
<td>97</td>
<td>A</td>
</tr>
<tr>
<td>7</td>
<td>Thread</td>
<td>78</td>
<td>B+</td>
<td>78</td>
<td>B+</td>
</tr>
<tr>
<td>8</td>
<td>Originality of creative ideas</td>
<td>94</td>
<td>A</td>
<td>79</td>
<td>B+</td>
</tr>
</tbody>
</table>

Note: A=draft business plan, B=startup, C= PkM Entrepreneurship proposal

Table 2 shows that students are able to produce creative products well; because all aspects of creativity assessment include the relevance of the material to the MBKM topic, conformity with the standard format in the PkM guidebook, student accuracy in doing swot analysis, Strength, Weak, Opportunity, Thread and originality of creative ideas get a minimum assessment criteria of B+. Creative products in the Entrepreneurship MBKM lecture model can achieve a minimum score of B+ which is a good result through the independent process of students and their own study groups (Dwikoranto et al., 2018). By giving them responsibility in their learning process and continuous control, they will produce lecture products in accordance with the targets set at the beginning of the lecture (Suyidno et al., 2018).

**CONCLUSION**

The conclusion of this research is that the MBKM Entrepreneurship model has been developed effectively so that it is feasible to increase student creativity in producing lecture products in the form of business plan drafts, startups, and Entrepreneurship PkM proposals. The conclusions above are based on the following findings. The Entrepreneurship MBKM model is included in the effective category, because the increase in student creativity in the real class is significantly in the moderate criteria and students are able to produce creative products.

**RECOMMENDATION**

Creativity involves the 4 aspects of fluency, flexibility, originality, and elaboration. should be carried out in detail. This is suggested to be researched and followed up by other researchers. Students may not be able to compete in scientific and technological innovation without mastering and having good creativity. The MBKM Entrepreneurship model is expected to be widely applied in the world of education as an alternative model to increase student creativity that is adaptive and solution-oriented.

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