Exploring the Management of Virtual Entrepreneurship at Boarding Vocational School during the COVID-19 Pandemic

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Abstract. Entrepreneurial competence is one of the competencies that must be owned by vocational students. This scientific study article aims to explore the management of virtual entrepreneurship in boarding schools. The case study is at SMK Negeri Jateng Pati with 96 students and 3 entrepreneurial teachers. How to manage virtual entrepreneurial learning during Covid-19 pandemic at SMK Negeri Jateng in Pati? The data is obtained through semi-structured interview techniques and questionnaires on teachers and students. The data is analyzed using descriptive techniques and contextualized with the theory of project-based learning models. The findings of this study show that the management of virtual companies of vocational school students is less effective. The ownership of gadget, the availability of credit and network stability become obstacles to virtual entrepreneurial learning. Based on the results of the above research, it is recommended that there is a virtual entrepreneurial management practice model in boarding schools that implements Project-Based Learning (PjBL) model with order and turnover that can increase the students' motivation to learn the practice and entrepreneurial competence.

Key words: virtual entrepreneurship management; pjbl; boarding school.

How to Cite: Sujatmiko, H., Raharjo, T. J., Fakhruddin, F., Suminar, T. (2021). Exploring the Management of Virtual Entrepreneurship at Boarding Vocational School during the COVID-19 Pandemic. *ISET: International Conference on Science, Education and Technology*, 7(1), 215-219.

INTRODUCTION

The Covid-19 pandemic has had a major impact on the world of education. As a result of the crisis, instructors around the world had to quickly adapt and turn to distance teaching(Ritonga et al., 2020). UNESCO monitoring shows that more than 181 countries have implemented school closures nationwide, impacting more than 1.5 billion students(Lynch, 2020). We don't know how long this pandemic will last or what the consequences will be for teachers, students, institutions, or society at large. However, we both recognize that we must face the challenges posed by this pandemic, finding strategies very important for our future, and for the future of education in particular(Stanistreet et al., 2021).

The Covid-19 crisis has an impact on education systems, activities, policies, and practices in Indonesia. The Covid-19 crisis is shaping the new role of schools and emerging new knowledge in schools, addressing critical needs. The school focuses on the implementation of the curriculum, in order to keep learning activities carried out. School is required to optimize the carrying capacity of more creative technology in order to still be able to grow the character education of students while at home(Tamesberger & Bacher, 2020). Articles about the impact of the Covid-19 pandemic on the field of education are already very much, but those related to the exploration of virtual entrepreneurial learning are still few, especially at vocational schools with dormitory systems. This article is expected to give new color to the management of virtual entrepreneurship with small group practices based on products during the Covid-19 pandemic, especially in boarding schools.

Entrepreneurship becomes an important set of learning goals. In the digital era, entrepreneurial education can be available in online and blended formats(Chen et al., 2021). Entrepreneurship has a positive and statistically significant relationship with the achievement needs of students, the courage to take risks and entrepreneurial interests (Ndofirepi, 2020). Entrepreneurial competence is one of the competencies that must be owned by vocational students. But in times of pandemic with Distance Learning the implementation of Entrepreneurial Learning becomes very difficult to do. Entrepreneurship practices with a full distance learning model are very difficult to do.

Distance learning shows lower learning outcomes than conventional learning (Foo et al., 2021), providing a list of learning materials and

resources that can be accessed independently by students into one way that teachers do on distance learning (Daniel, 2020). The use of E-learning, online discussions, online Online learning, exams and the use of Information and Technology Communication devices are particularly useful in these pandemic situations (Singh et al., 2021). According to a survey of 181 UK students involved with distance learning management systems during the pandemic showed the quality of service did not affect student satisfaction, but it was a quality of information and self-efficacy that fulfilled student satisfaction (Alzahrani &Seth, 2021).

Project-Based Learning is an increasingly popular pedagogical practice centered around students working collaboratively on projects while teachers facilitate learning activities and developments. Project-Based Learning embodies several factors that are considered centers of motivation in online learning(Hira &Anderson, 2021).

Project-Based Learning (PjBL) is learning to create projects suitable for everyday life so that students experience learning and acquire meaningful skills(Rahayu et al., 2021). PjBL projects are planned by teachers ranging from simple work pieces to complex ones. Its implementation can also be classified into three, namely pre-PjBL, PjBL with simple projects, and models with complex projects. The evaluation includes assessment of processes and products (Sudjimat et al., 2020). The management of Project-Based Learning for vocational education consists of 5 steps, namely preparation, topic definition, manufacturing and tests, presentation, and evaluation. While the PiBL's recommendation is to equip learners with skills in creating discovery and innovation in the form of projects(Nilsook et al., 2021).

The learning is based on small group projects with mentoring becomes one of the solutions in overcoming the problems of the entrepreneurial learning process in vocational schools, especially in vocational dormitory systems during the pandemic. Some groups of students carry out the practice of doing the existing work at school, namely making products that have been designed at the time of distance learning before. Students who are at school also make videos of the implementation of the practice and then they will share with students who study at home. This virtual entrepreneurial management combines Project-Based Learning, distance learning which is some groups of students will practice of doing the existing work at school. With this model, the implementation of creative and entrepreneurial product lessons is expected to continue in this pandemic period. This model is applied to make sure that the students still have entrepreneurship competence and to reduce the lack of the implementation of practical learning at boarding vocational schools.

METHODS

Research objectives

The purpose of this research is to find out more about the management of virtual entrepreneurial learning in SMK Negeri Jateng Pati. This exploratory research uses qualitative methods, with students and teachers data sources. The students of SMK Negeri Jateng Pati come from various regions in central Java. Students from around Pati county by 35% come to school alternately with small groups for practice. All students of SMK Jateng Pati come from underprivileged families as it is one of the main requirements, besides the intelligence, to become a student at this school.

Sample and Data Collection

The study sample was 96 students and 3 teachers. The data collection was conducted by spreading questionnaires through Google Forms to 96 students and in-person interviews with 3 teachers applying strict health protocols and direct observations to small groups of students in doing practice in workshops and supported with documentation.

The teachers of entrepreneurship teach creative product and entrepreneurship subjects in grades 11 and 12. All students carry out distance learning, but there are 20 students around Pati District which are carrying out distance learning and also doing practices of exsisting works at school by implementing strict health protocols.

Data Analysis

The data is processed and analyzed simply and described qualitatively. The students respond to the implementation of virtual entrepreneurship during pandemics. Analysis of data from interviews with teachers on the management of virtual entrepreneurship that implements productbased learning models, distance learning and small group practices is carried out by strict health protocols.

Result

The teachers do learning planning by making

a Learning Implementation Plan on creative and entrepreneurial product subjects, but have not been adapted to pandemic conditions. The teachers conduct distance learning on creative and entrepreneurial products subjects using Microsoft Teams and include the principal and deputy principal of the curriculum field as coteachers. Then, the teachers evaluate learning by creating questions and assignments to Microsoft Team in the Assigments menu, but there are some that have not been assessed and have not been given feedback.

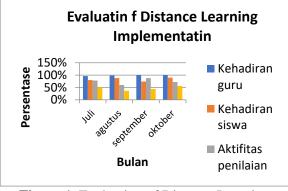


Figure 1. Evaluation of Distance Learning Implementation

Student response to the implementation of distance learning on creative product and entrepreneurial subjects are 7.4% of students feel less happy, 21.5 students feel happy and 1.1% of students feel mediocre.

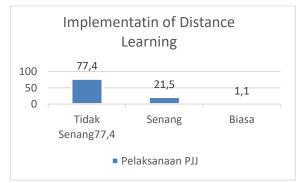


Figure 2. Student Response to Distance Learning

Students responses to distance learning constraints are; 40% of students are constrained by less standart devices, 25% are constrained by network and 35% are constrained by internet / credit.

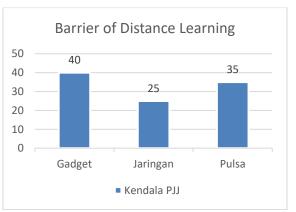


Figure 3. Obstacles of students Implementation of Distance Learning

Students responses to small group practices are; 85% of students feel happy 3% fell unhappy and 12% fell mediocre.



Figure 4. Student response to small group practices

Discussion

The results of this study show that the management of virtual entrepreneurial learning that combines distance learning, project-based learning and small group practices accompanied by strict health protocols becomes an alternative in this pandemic period. Project-based learning is an important approach in learning management for vocational and technical education. This kind of learning is believed to create learners who are able to learn how to create innovation, have the motivation to create new things, use scientific processes and have a strengthened way of thinking (Tongsakul, Jitgarun & Chaokumnerd, 2011).

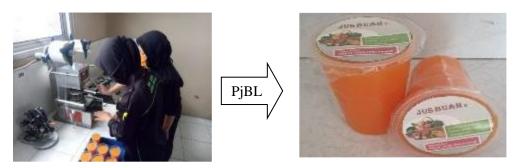


Figure 5. PjBL Department of Agrobussiness Processing Agricultural Products



Figure 6. PjBL Department of Automotive Body Technique

CONCLUSION

The management of virtual entrepreneurial teaching is to combine distance learning models, project-based learning and small group practices accompanied by strict health protocols. Management of virtual entrepreneurial learning includes planning, implementation and evaluation.

The implementation of distance learning in the subjects of creative products and entrepreneurship of boarding school students is less effective because of some obstacles, including the ownership of standard gadget, lack of credit and signals /networks. The activeness of students in distance learning of creative product and entrepreneurship subjects is classified as very high even though participation is less due to technical constraints. The student learning activation is by applying product-based learning models, small group practices with strict health protocols. The students works on projects and activities that they find interesting and relevant to everyday life.

It is recommended that teachers will be more creative and innovative using ways and strategies to keep students in a spirit of learning by distance learning during pandemics. Optimizing the carrying capacity of technology and providing challenges to students when they are studying at home and practicing at school with small groups.

REFERENCES

Alzahrani, L., & Seth, K. P. (2021). Factors that affect student satisfaction with the continued use of learning management systems during the COVID-19 pandemic: An empirical study. *Educational and Information Technology*,0123456789.

https://doi.org/10.1007/s10639-021-10492-5

- Chen, L., Ifenthaler, D., & Yau, J. Y.-K. Online and mixed entrepreneurship education: a systematic review of applied educational technology. In *entrepreneurial education* (Vol. 4, number 2). Springer Singapore. https://doi.org/10.1007/s41959-021-00047-7
- Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects*, 49(1–2), 91–96. https://doi.org/10.1007/s11125-020-09464-3
- Foo, C. chung, Cheung, B., & Chu, K. man. (2021).
 A comparative study of distance learning and conventional face-to-face approaches conducted problem-based learning tutorials during the COVID-19 pandemic. *BMC Medical Education*, 21(1), 1–6. https://doi.org/10.1186/s12909-021-02575-1
- Hira, A., & Anderson, E. (2021). Motivate online learning through project-based learning during the COVID-19 2020 pandemic. *IAFOR Journal of Education*, 9(2), 93-110. https://doi.org/10.22492/ije.9.2.06
- Lynch, M. (2020). E-Learning selama pandemi global. Asian Journal of Distance Education,

15(1), 2020. http://www.asianjde.org

- Ndofirepi, T.M. (2020). The relationship between entrepreneurial education and entrepreneurial goals: the psychological nature of being a mediator. *Journal of Innovation and*Entrepreneurship, 9(1). https://doi.org/10.1186/s13731-020-0115-x
- Nilsook, P., Chatwattana, P., & Seechaliao, T. (2021). Project-Based Learning Management Process for Vocational and Technical Education. *Higher Education Studies*, 11(2), 20. https://doi.org/ 10.5539/hes.v11n2p20
- Rahayu, P. T., Ilma, R., &Putri, I. (2021). Project-Based Math Learning: Fruit Salad. *Journal of*MathematicsEducation, *12*(1), 181-198.
- Ritonga, A.W., Ritonga, M., Nurdianto, T., Kustati, M., Rehani, Lahmi, A., Yasmadi, &Pahri. (2020). E-learning process maharah qira'ah in universities during the COVID-19 pandemic. *International Journal of Higher Education*, 9(6), 227-235. https://doi.org/ 10.5430/ijhe.v9n6p227
- Singh, M., Adebayo, S.O., Saini, M., & Singh, J.

(2021). The Indian government's E-learning initiative in response to the COVID-19 crisis: A case study on online learning in india's higher education system. In *Educational and Information Technology* (Number 0123456789). Springer As. https://doi.org/ 10.1007/s10639-021-10585-1

- Stanistreet, P., Elfert, M., & Atchoarena, D. (2021). Education in the COVID-19 era: Implications for the future of the *International Review of*Education, 67(1-2), 1–8. https://doi.org/10.1007/s11159-021-09904-y
- Sudjimat, D. A., Nyoto, A., & Romlie, M. (2020).
 Implementation of Project-Based Learning Model and Workforce Character Development for the 21st Century in Vocational High Schools. *Journal of International Instruction*, 14(1), 181–198. https://doi.org/10.29333/IJI.2021.14111A
- Tamesberger, D., & Bacher, J. (2020). COVID-19 crisis: How to Avoid the 'Lost Generation'. *Economics*, *55*(4), 232–238. https://doi.org/ 10.1007/s10272-020-0908-y