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Education in the New Normal Era: The Implementation of an Accounting Living Laboratory During the COVID-19 Pandemic

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Abstract

Students and lecturers in various fields (including accounting) need to adapt to the new normal life resulting from the COVID-19 pandemic. This highlights the need to maximize the use of technology as the main learning media, not least in student activities. A living laboratory model for accounting education was created through cooperation between universities and MSMEs. The living laboratory learning process has been proven to support students' skills. However, carrying out laboratory learning in the midst of a pandemic is a challenge. This study aimed to determine the contribution and advantages of living laboratories for accounting education during the COVID-19 pandemic. Descriptive-qualitative methods were used with a case study approach. Data were collected through online interviews and focus group discussions. Participants were students who used a living laboratory model in MSMEs. Data were reduced, presented and verified. The living laboratory was designed and implemented based on procedures and real work standards. Based on the results, it can be concluded that even though the living laboratory accounting learning was carried out online during a pandemic, students still obtained significant benefits. Learning activities of the living laboratory were in addition to achieving mastery of competencies. The results also emphasized the development of soft skills that were instilled in the individual students, including intellectual, emotional, spiritual and social intelligence.

Keywords: COVID-19, Accounting, Education, Living Laboratory

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1. Introduction

Financial reports are important for the company. Apart from being a condition for being able to take the floor on the stock exchange, financial reports are a measure of management performance. Accounting is a key indicator of the performance of any business because the information provided by accounting records is useful in making decisions, including in MSMEs (Ediraras, 2010). Based on this, the role of accountants as

compilers of financial reports is vital. Accountants are required to produce appropriate financial reports for the company. Accountants must have self-competence to produce the financial reports needed by the company. In addition to competence in academic matters, accountants are also required to have good communication skills. This demand is a challenge for students who graduate from accounting major. Accounting students focus on theory in the classroom and practicum in the laboratory, so that they are not fully familiar with the real work environment. Based on this, a learning mechanism is needed, which can encourage accounting students to learn from real conditions.

One of the learning lessons, which can be done at the college level through the Living Laboratory method, is a learning scheme that requires students to go directly to existing companies or businesses. This scheme is another way for students to apply the knowledge they can study. This scheme is expected that students can directly apply the knowledge they get in lectures and it is hoped that student competence will also increase. A living laboratory or often called a living laboratory is a research and innovation concept. A characteristic of the living laboratory is a user-centered, open innovation ecosystem, generally used in a regional or local context (e.g. cities and regions), which simultaneously integrates research and real-life innovation in the form of public-private-community partnerships) (Almirall & Wareham, 2011; Bilgram, Brem, & Voigt, 2008; Chesbrough, 2003; Hippel, 1986). This concept is based on a systematic co-creation approach by integrating research and innovation processes. It is integrated through co-creation, exploration, experimentation, and evaluation of the use of innovative ideas, scenarios, concepts, and related technologies in real-life cases. It is usually used in cases involving the public using it, not only as an observed subject but also as a source of creation. In practice, the life laboratory places the public at the center of innovation and offers new concepts and solutions for people's needs. The living laboratory transforms its users, in this case, society, from the object being observed to being co-creators of value, ideas, and innovation (Mc Phee, Inglis, Gundersen, & Coyne, 2012). Therefore, the concept of a living laboratory is often put forward as a way to involve private companies, communities, researchers/academics, and public organizations to establish mutually beneficial cooperation. Living laboratory activities in accounting education in this study refer to the four main activities put forward by Pallot (2009), namely creation, exploration, experiment, and evaluation.

The Living Laboratory in this study focuses on Micro, Small, and Medium Enterprises (MSMEs) because a brief observation shows that the MSME sector has several problems. The development of this sector does not always run smoothly. The obstacles that are often faced by MSME actors include limited capital, low awareness, marketing difficulties,

limited supply of raw materials, lack of skills or experience, inappropriate business location, and other problems. In addition, SMEs are also faced with various challenges in this global era, such as wide-open market opportunities, the entry of new technologies, efficiency, and productivity, as well as intense competition with new players. With the variety of problems that arise by MSMEs, it is a suitable place for students to apply the knowledge gained in lectures. Students are required to think professionally to solve problems that exist in MSMEs. This is in line with the opinion of Kusiak (2007) that in solving problems that require appropriate innovation, the innovation is born from a group of people who work together in a Living Innovation Laboratory.

Organizing the living laboratory learning method during the COVID-19 pandemic is a challenge in itself for the world of education. World Health Organization (WHO) as a reference center for the latest health information in the world noted that the COVID-19 virus pandemic has infected nearly ten million people in various countries, with a mortality rate of more than 400,000 at the end of June 2020 (World Health Organization, 2020). The world has also tried to adopt various ways to improve tracking, forecasting, and developing treatment methods to combat the pandemic. So far, the use of advanced technologies such as Machine Learning and Artificial Intelligence is also considered as one of the ways employed by various healthcare providers) (Lalmuanawma, Hussain, & Chhakchhuak, 2020). Not only in the health sector, but the use of technology is also maximized to facilitate teaching and learning activities. This is also one of the impacts of new normal life in order to break the spread of the COVID-19 pandemic. The era of new normal life that is currently being promoted also requires the use of technology platforms that are more innovative and user-friendly. The COVID-19 Pandemic period demanded a rapid change from face-to-face learning to online. This certainly becomes a challenge for the implementation of an accounting living laboratory. This study examines the implementation and the contribution of living laboratory for accounting education during the COVID-19 Pandemic.

2. Method

This research is a qualitative study using a narrative method. Narrative research can take the form of themes in a particular text or discourse in the form of inquiry in qualitative research (Chase, 2005). The results are a description of the students experience in the online living laboratory learning during the COVID-19 pandemic. Narrative research according to Schreiber and Asner-Self (2011) is the study of the lives of individuals as told through stories of their experiences, including discussions about the meaning of

experiences for individuals. Types and sources of data used in this study include primary data and secondary data.

Primary data was processed from the results of online focus group discussion (FGD) studies with student related to the implementation of online living laboratory learning during the Pandemic. The FGD was conducted online because this research was carried out during the COVID-19 Pandemic. Interviews were conducted with the student who are members of living laboratory class. The student selected as a resource is a student who already take the entrepreneur subjects.

Secondary data in this study, are (a) government regulations regarding the learning process in schools at the COVID-19 Pandemic; (b) online learning content during the COVID-19 Pandemic; (c) online student learning outcomes at the time of the COVID-19 Pandemic; and (d) news related to the teaching and learning process at the COVID-19 Pandemic. Secondary research data obtained from the study of literature through search engines. Data analysis in this study is using an interactive model revealed by Miles and Hubarman (1992). It is hoped that the model can narrate how evaluating online learning during the COVID-19 pandemic and the readiness of the campus and students to face new learning trends after the pandemic. The components of the interactive model, namely; (1) data collection; (2) data reduction; (3) data presentation; and (4) drawing conclusions.

3. Result and Discussion

The existence of living laboratory learning is expected that students can implement accounting learning and gain more experience about MSMEs and provide assistance in the implementation of accounting in MSMEs. Living laboratory learning is defined as a learning model in which students engage in the process and carried out in the context of problem solving efforts. It is expected that by applying this learning model, students will increasingly understand the material and students can also be more skilled in solving problems. Living laboratory is a learning model that tries to apply problems in real life as a context for students to practice how to think smart and critically. The characteristics of this learning model are: (1) teaching and learning activities begin with the giving of problems from MSMEs that are made into research objects, (2) problems is related to real life of students, (3) organizing and discussing a problem not a scientific discipline (4) students are given a form of responsibility in carrying out direct learning, (5) students are divided into several groups, (6) at the end of the activity students are instructed to demonstrate the results or products they have learned. The steps of the living laboratory

learning model are: (1) student orientation towards the existing problems in running a business, (2) organizing students to learn, (3) the ability of students to think critically and analytically. Students are trained to solve problems, develop their own knowledge, develop and analyse a problem, especially a problem in MSMEs

Each MSMEs is managed by two students who are in charge of handling business problems. The results of this study concluded that the students who attended the living laboratory felt that they had received many new experiences and lessons. For them this learning model makes them understand how they will work later.

> *"I come to know how every business has different problems and solutions, I also use the advice that I will give to the MSMEs partners to the businesses I run so that the business I run can run optimally" (N2)*

> *"Through this visit to MSMEs, I can find out that in fact the problems experienced by MSMEs are relatively simple or it can be said that they are not as difficult as the theory that has been studied. so that by doing so I can have experience not only through theory but in practice as well as for the actual problems experienced by an organization in managing its business "(N3)*

> *"Train yourself to be able to explore MSMEs business problems and know how the business processes are carried out directly because they are involved in overcoming the problems in the MSMEs. By helping with the problems that exist in MSMEs, I can share accounting knowledge with MSMEs which can make it easier for MSMEs to take notes as a basis for decision making "(N10)*

Some of the benefits that students get are (a) being able to apply the knowledge they can learn by providing advice on problems that MSMEs experience; (b) knowing that accounting practices in MSMEs are not as difficult as theorized because they adjust to the needs of these MSMEs; (c) can train communication soft skills and develop thinking by sharing with MSMEs. With this learning model, students provide some of their views regarding this Living Laboratory learning model.

> *"Provide classification for MSMEs problems so that mentoring can run optimally according to the students' abilities" (N4)*

> *"My suggestion in the future for this living lab project can reach a wider area. Because out there there are still "Provide classification for MSMEs problems so that mentoring can run optimally according to the students' abilities" (N4)*

"My suggestion in the future for this living lab project can reach a woman MSMEs that need assistance both in learning and mentoring for the advancement of their problems"(N1)

"Because we are still in a pandemic era, we feel that we have only a few opportunities to visit MSMEs, so our communication is quite limited and as a result, the information we receive may not be widely disclosed. It is hoped that if the pandemic ends, the next research can provide more opportunities for students. Maybe with the addition of the number of MSMEs, they will be able to compare between MSMEs so that new information will be obtained "(N8)

Based on the results of focuss group discussion and in depth interviews with students, it can be concluded that the Living Laboratory learning model is very useful for students. With this learning model, students can immediately apply the knowledge they can study, by directly engaging in real business. Apart from the student side, the benefits were also felt by the MSMEs because they felt helped by the existence of a learning model like this. According to Suparti et al. (2018) in implementing this learning model, it helps business owners to find out the condition of their business in more detail which is useful in making decisions. Even though this learning model has been very beneficial for students, there are still deficiencies that are still felt by students regarding the application of this learning model. The weaknesses felt by students are based on technical and non-technical aspects. The technical shortcomings experienced by students are more due to the adjustment of learning models like this. Another technical shortcoming is the lack of open information provided by MSMEs to students, this is the same as according to Setiaji (2019) in his research states that there are still deficiencies in the implementation of Living Laboratory because students receive very minimal information from MSMEs. Apart from technical shortcomings, there are also non-technical shortcomings that are felt by students. Non-technical shortcomings are caused by conditions that are still in a pandemic period so that the application of this Living Laboratory is a little disturbed.

4. Conclusions

Financial reporting or financial reports have been seen as very important for business continuity. Therefore, accounting graduate students are very much in demand by companies to help them make good and useful financial reports for the company. However, currently, there are still many accounting graduates who cannot immediately adapt to

the environment they will face. Therefore, learning on campus should be designed as closely as possible to the actual working environment conditions. With this background, the researchers finally tried to apply the Living Laboratory learning model which is intended to provide students with knowledge of the real world of work, especially accounting. This learning model is applied in Micro, Small, and Medium Enterprises (MSMEs). MSMEs are considered suitable as an initial step in implementing this learning model because there are relatively many problems and different types of problems that make students feel real community conditions. In applying this learning model, students feel upgraded in terms of soft skills and hard skills in making financial reports. On the other hand, the drawback from this learning model is due to pandemic conditions that make it impossible to make frequently meet to the MSMEs.

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