



Exploratory Study of the Application of Online Learning in Teaching Skills and Microteaching Courses

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Abstract. *This study aims to explore the implementation of online learning of Teaching Skills and Microteaching courses, focusing on three main aspects: preparation, implementation, and evaluation of learning. This study also considers the challenges that arise due to student involvement in the Merdeka Belajar Kampus Merdeka (MBKM) program, which often affects the consistency of their participation in regular learning. This study was conducted using a qualitative descriptive method with a case study design. The results showed that online learning was quite effective in conveying teaching skills theory through digital materials and asynchronous activities. However, teaching practice simulations faced several limitations, such as the difficulty of observing non-verbal elements, classroom management, and spontaneous responses of students during online simulations. Technical constraints, especially unstable internet connections, were also major obstacles in implementing learning. In addition, students involved in MBKM reported difficulties in dividing time between program assignments and regular course preparation, which impacted their participation and engagement.*

Keywords Online learning, teaching skills, microteaching, MBKM, learning evaluation.

1. INTRODUCTION

The development of education in the digital era has a significant impact on learning methods at various levels of education, including in higher education. In the digital era, technology has brought many changes and innovations to learning methods. One of the roles of technology in education is the application of online learning methods which are increasingly used in the implementation of courses. Online learning is indeed not something new for universities, because many universities have innovated and developed online learning to improve their quality (Harti, et al., 2021). Online learning methods are also used in the implementation of Teaching Skills and Microteaching courses. This course examines school-based management, clinical supervision through presentations and discussions, and facilitates students in developing learning tools based on the applicable curriculum, needs and diversity of students. In addition, this course also has the main objective of equipping students with practical Teaching Skills through simulations and direct practice. However, the effectiveness of online learning for this practicum course is often questioned, especially because of its nature which requires direct interaction, intensive feedback, and in-depth practical experience (Rapanta et al., 2020).

The implementation of online learning in the Teaching Skills and Microteaching courses is one of the adjustments to the independent learning curriculum. Where the implementation of these courses coincides with the Independent Learning Independent Campus (MBKM) program. The MBKM policy provides students with the opportunity to develop their competencies outside the campus through various programs such as internships, research, humanitarian projects, and entrepreneurship (Minister of Education and Culture, 2020). Although it has positive intentions, the implementation of MBKM sometimes poses challenges in scheduling. Students who take the MBKM program often have difficulty managing their time to optimally attend regular courses such as Teaching Skills and Microteaching. This challenge can affect the attendance, engagement, and effectiveness of online learning, because students have to divide their focus between on-campus courses and MBKM activities. Online learning cannot completely replace direct interaction, especially in terms of providing detailed feedback and training in non-verbal skills needed in teaching (Hodges et al., 2020). These limitations often result in students being less confident in applying the skills they have learned.

This research is important because several studies have shown that online learning has limitations in facilitating the hands-on practical experience required in skills-based courses (Rapanta et al., 2020). In addition, teacher education students who study online often feel less confident in applying the Teaching Skills they have learned, which affects their readiness as prospective teachers (UNESCO, 2021). From this explanation, it is necessary to conduct research to evaluate the effectiveness of online learning for Teaching Skills and Microteaching courses in conditions where students have dual activities with MBKM activities. This research is expected to provide practical recommendations to improve the quality of online learning so that it remains relevant and effective amidst these challenges.

2. LITERATURE REVIEW

Online Learning in Higher Education

The purpose of learning is to provide understanding to students and the understanding in question can be in the form of knowledge, experience, and application of existing values and norms so that there is a change in attitude and behavior and an increase in knowledge in students (Harti, et al., 2021). To achieve this goal in the application of distance learning methods, a media is needed that can distribute knowledge and as a container for the teaching and learning process. Online learning has become the main

approach in higher education, especially to increase flexibility and accessibility. According to Ally (2019), online learning allows students to learn independently through digital content that can be accessed anytime and anywhere. However, the effectiveness of online learning is highly dependent on curriculum design, teaching methods, and technological support. The study by Hodges et al. (2020) highlighted that well-designed online learning is different from emergency remote teaching, which is often carried out without adequate planning. In the context of practical courses such as Teaching Skills and Microteaching, online learning faces special challenges, such as limitations in practicing practical skills that require direct interaction.

The effectiveness of online learning can be measured through various aspects, such as the level of student understanding, their engagement in learning, and achievement of learning outcomes. The Community of Inquiry (CoI) model by Garrison et al. (2000) offers a relevant framework for evaluating online learning. This model includes three main elements: 1) Cognitive Presence: The ability of students to construct and develop knowledge. 2) Social Presence: The level of interaction and communication between students and lecturers. 3) Teaching Presence: The role of lecturers in managing, facilitating, and providing feedback in online learning. Research shows that these elements are interrelated in creating an effective learning experience. In online Teaching Skills learning, teaching presence is very important to provide relevant guidance and feedback.

Teaching Skills and Microteaching

The Teaching Skills and Microteaching course aims to train students in mastering basic teaching skills, such as communication, classroom management, and lesson planning. According to Arends (2012), Microteaching is a training method that focuses on mastering specific skills through short-term teaching practices, followed by evaluation and feedback. In the context of online learning, microteaching simulations are often carried out through digital platforms. However, online simulations have limitations in replicating real classroom experiences. Non-verbal interactions, classroom management, and spontaneous responses to students are difficult to train effectively in online learning. Previous studies have shown that practical courses have different characteristics from theoretical courses, because they emphasize the development of practical skills. According to Vygotsky (1978), social interaction is an important component of learning. In an online environment, this interaction is often limited to verbal or written communication, reducing the effectiveness of practical skills training. Hodges et al. (2020) noted that unstable internet connections and lack of adequate technological devices can interfere with the online learning process.

Rapanta et al. (2020) showed that online teaching simulations are less able to replicate real classroom situations, which results in low student confidence in applying their Teaching Skills. Therefore, innovative approaches are needed to ensure the success of Microteaching in an online environment.

Independent Learning Independent Campus (MBKM) Program

The MBKM program is an educational revolution based on the development of Industry 4.0 (Syarifuddin, 2021). In implementing the Merdeka Belajar Kampus Merdeka policy, students are given the right to study for three semesters outside their study program. It is hoped that universities will develop and facilitate the implementation of this program by preparing academic guidelines. The form of learning activities in accordance with Permendikbud No. 3 of 2020 Article 15 paragraph 1 can be carried out inside or outside the study program, which include: 1) Student Exchange, 2) Internship/Work Practice, 3) Teaching Assistance in Educational Units, 4) Research, 5) Humanitarian Projects, 6) Entrepreneurial Activities, 7) Independent Study/Projects, 8) Building Villages/Thematic Real Work Lectures, and 9) Defending the Country (Misnawati & Zuraini, 2023; Suwandi, 2020). The Independent Learning Independent Campus (MBKM) policy aims to provide students with a broader learning experience through activities such as internships, research, or humanitarian projects (Minister of Education and Culture, 2020). The MBKM program is very important because it helps students develop their competencies, experiences, broad insights, communicate, collaborate in working together, and can develop their soft skills and hard skills and of course certificates that are very useful for them when they enter the world of work (Ariani, et al., 2024). However, this program also poses challenges in managing time between MBKM activities and regular courses. Synchronization between the MBKM program and the lecture schedule is an important issue that needs to be considered by higher education institutions to ensure that students can optimize both activities.

Planning, Implementation, and Evaluation of Learning

Planning can be defined as a process of preparing an anticipatory step to minimize the risk of failure so that activities can run well and achieve goals in an effective and efficient manner. Uno (2014) states that learning has the essence of planning or design as an effort to teach students. That is why students in learning, students do not only interact with teachers as one source of learning, but may interact with all learning sources used to achieve the desired learning goals.

Learning implementation is the process of realizing learning planning (design). Rusman et al. (2011;41) Learning implementation is the result of integration of several components that have their own functions with the intention that the achievement of learning objectives can be influenced. The relationship between learning implementation and distance learning is different considering that the learning process in distance learning in particular does not involve direct face-to-face meetings in its implementation. As stated by Dogmen in (Munir;2009) distance learning is learning that emphasizes independent learning methods (self-study). Independent learning is organized systematically in presenting learning materials, providing guidance to learners, and supervision for the success of learner learning.

In the learning evaluation stage, there is a process of determining the value of the implementation of learning through assessment activities. Devies in (Dimiyati and Mudjiono; 2015) defines evaluation as a simple process of giving/setting values to a number of goals, activities, decisions, performance, processes, people, objects, and many others. Meanwhile, Warn and Born state that evaluation is a process of giving or determining values. Evaluation itself according to Hamalik (2003) is a continuous process of collecting and interpreting information to assess decisions made in designing a teaching system.

3. METHODS

This study uses a qualitative approach with a case study design to explore the experiences of students and lecturers in online learning. The stages of the method that will be applied are as follows:

- a. Research Participants: Lecturers and students of the Business Education program, Surabaya State University who took the Teaching Skills and Microteaching courses and were involved in the MBKM program for one semester.
- b. Data Collection Techniques: In-depth interviews with students and lecturers, online class observations, and surveys to obtain data on perceptions and learning experiences.
- c. Data Analysis: Data will be analyzed using thematic analysis to identify key patterns and themes related to learning effectiveness, challenges, and student perceptions of online learning that focus on preparation, implementation and evaluation of learning.

4. RESULTS

The results section summarizes the data collected for the study using descriptive statistics and reports the outcomes of relevant inferential statistical analyses (e.g., hypothesis tests) conducted on the data. Report the results in sufficient detail so that the reader can understand which statistical analyses were performed, why they were conducted, and to justify your conclusions. Mention all relevant results, including those that contradict the stated hypotheses.

Learning Planning

The results of the Interview Data with Lecturers show that lecturers' plans in implementing online learning of courses start from preparing the learning plans, materials and media. The methods used in the assessment are assignments, teaching practices, and final exams. The second lecturer said that Modules, Media, learning plans, Assessments, Assignments, and Final Exams are its attributes. In preparing the material, what kind of material is delivered by lecturers in online learning, it is arranged the same as the learning plans, in general it is almost the same, but in its implementation, it must be reconsidered how the practice can be controlled. For media in terms of being an intermediary for online learning, lecturers prefer the LMS implemented by the university, because its features are simpler and easier to understand and also easy to access. "For learning media, I use PowerPoint, videos, and virtual meeting applications such as Zoom and Google Meet."

Most lecturers prepare teaching materials in the form of digital modules, learning videos, and PowerPoint presentations that are uploaded to the Learning Management System (LMS) platform. Platforms such as Google Meet and Zoom are used for synchronous classes.

Lecturer response: *"I organize the material modularly so that students can access it at any time, and teaching simulations are carried out via Zoom or Google Meet."*

The main obstacle in preparation is the lecturer's limited time to design interactive learning simulations. In addition, some lecturers feel that the available technological tools are not optimal for replicating real classroom conditions. Students prepare devices (laptops/smartphones) and internet connections to take online classes. However, 40% of students reported that they often face connection problems, especially during teaching simulations.

Student response: *"Sometimes I have difficulty following the class because of the slow internet connection."*

Students involved in the MBKM program face challenges in dividing their time between MBKM assignments and preparing for course learning. Several students admitted that they were not optimal in preparing for teaching simulations.

Learning Implementation

In the implementation of learning, lecturers said that learning activities were carried out flexibly, adjusted to the conditions of students. Because the MBKM implementation schedule is carried out every day and follows the working hours of the student's internship location, so lectures are usually held in the afternoon or evening. In addition, the difference in MBKM internship locations also becomes an obstacle for students in making schedules for lectures or doing group assignments. The lecturer said that the implementation was made simple but according to the portion where indeed in distance learning or online learning there are still many things that need to be fixed..

70% of students felt that the delivery of material online was quite clear, but less than optimal in developing practical teaching skills. They stated that simulations carried out through video recordings or presentations did not sufficiently describe the actual classroom situation.

Student response: *"The theory given is quite helpful, but when it comes to teaching simulations, it doesn't feel the same as direct practice in class."*

For online interactions, only 50% of students felt that interactions with lecturers and classmates were effective. Most students felt that they did not get enough in-depth feedback during online teaching simulations.

Student response: *"The lecturer gave input, but sometimes it felt less detailed because our simulation was done online, so maybe the non-verbal communication aspect was less visible."*

For the evaluation of the effectiveness of online learning, lecturers stated that online learning had met most of the cognitive objectives (understanding the theory), but was still less effective for affective and psychomotor objectives.

Lecturer response: *"It is difficult to monitor students' non-verbal abilities such as voice intonation, eye contact, gestures, or class management in real time through the online platform."*

Meanwhile, obstacles in online learning, 40% of students experienced technical difficulties, such as unstable internet connections and limited devices to participate in online simulations.

Student response: *"My internet connection often disconnects during the simulation presentation, so it is difficult to complete smoothly."*

Students who participate in MBKM find it difficult to divide their time between MBKM assignments and online learning. As a result, some students are often late or even absent from teaching simulations.

Student response: *"My internship assignments are quite busy, so I have difficulty attending the simulation class in full."*

Both students and lecturers admit that online teaching simulations are less realistic than direct practice in class. This affects students' confidence in teaching.

Learning Evaluation

In the Formative learning evaluation activity, lecturers give assignments and collect them on the same day, they can summarize or quizzes, sometimes projects. Meanwhile, for summative tests, they are carried out through integrated mid-term and final exams. In the final assessment percentage, the same thing applies as the previous policy at the University and there are additional assignments or improvements if student learning outcomes are below the standard value. Lecturers consider online learning to be quite effective in delivering theory, especially through asynchronous materials such as modules and learning videos.

Lecturer Response: *"The delivery of theory can be done well through online learning, but for practical simulations it is still less than optimal."*

The evaluation of students' practical skills is less in-depth due to limited observations during online simulations. Elements such as eye contact, classroom management, and voice intonation are difficult to evaluate comprehensively.

Student Response: *"The theory taught is quite clear, but I feel I need more direct practice to be truly ready to teach."*

Table 1 Questionnaire result.

Responds Results					
Statements	1	2	3	4	5
I understand the theoretical material delivered through online learning.				30%	70%
Online teaching simulations help me practice practical teaching skills.			30%	20%	50%
Interaction with lecturers during online learning is effective.			50%	20%	30%
My internet connection is stable during online learning.			40%	10%	50%
The MBKM program schedule does not interfere with my involvement in online classes.				25%	75%

The MBKM program provides valuable experience for developing my competencies.	10%	90%	
I am able to manage time between the MBKM program and online learning.	10%	10%	80%
I need more interactive learning technology for simulations.	25%	75%	
Adjustment of the schedule between the MBKM program and regular courses is needed.	0%	0%	0%

The results of the discussion response questionnaire showed that online learning in the Teaching Skills and Microteaching courses was quite effective in delivering theoretical material, but inadequate in training practical skills such as teaching simulations. Students felt that the interaction with lecturers during online learning was quite helpful, although it still needed improvement, especially in providing more in-depth feedback. The obstacles faced were unstable internet connections and the schedule with the Merdeka Belajar Kampus Merdeka (MBKM) program, which could reduce student involvement in online classes. On the other hand, students considered that the MBKM program provided valuable experience for developing their competencies, although it took time to manage time between the program and regular learning. Based on these results, the adoption of more interactive learning technology, such as virtual reality-based simulations, and adjusting the schedule between the MBKM program and regular courses are recommendations to increase the effectiveness of online learning and reduce existing obstacles.

5. DISCUSSION

This study aims to evaluate the effectiveness of online learning in the Teaching Skills and Microteaching courses, focusing on three main aspects: preparation, implementation, and evaluation. The results of the study indicate that although online learning has the potential to deliver theory effectively, there are several challenges in its implementation, especially in the context of practical skills and time management of students involved in the Merdeka Belajar Kampus Merdeka (MBKM) program.

Preparation for Online Learning

Lecturers and students have made adequate preparations for online learning, such as the use of digital materials and technological devices. However, technical constraints, such as unstable internet connections, are a significant obstacle, especially for students who live in areas with limited internet access. This finding is consistent with the research of Hodges et al. (2020), which states that the availability of technological infrastructure is one of the key factors in the success of online learning. In addition, students involved in MBKM reported difficulties in dividing their time between preparing for courses and MBKM

assignments. This finding underscores the importance of time management and flexibility in managing lecture schedules, as recommended by the Minister of Education and Culture (2020) in the MBKM implementation guide. Institutional support in providing class recordings or alternative assignment submissions can be a relevant solution.

Implementation of Online Learning

Online learning is quite effective in delivering theory through digital modules and asynchronous materials. The majority of students feel that the theory taught can be understood well. This supports the findings of Ally (2019), which states that online learning can improve understanding of theory if it is well designed and supported by adequate resources.

Teaching simulations conducted online face several limitations. Students and lecturers expressed that important elements in Teaching Skills, such as non-verbal communication, classroom management, and spontaneous responses to students, are difficult to evaluate through online platforms. This is in line with the study by Rapanta et al. (2020), which showed that online learning is less effective in training practical skills that require direct interaction.

Students also complained about technical constraints during the simulation, such as lost connections, which disrupted the smoothness of their presentations. Lecturers noted that online simulations reduced the effectiveness of providing feedback, because some aspects of skills could not be observed optimally through digital platforms.

Online Learning Evaluation

The learning evaluation showed a difference in results between theory and practical skills. Lecturers stated that online learning was successful in evaluating theoretical understanding, but less than optimal in assessing students' psychomotor skills. The Community of Inquiry (CoI) model by Garrison et al. (2000) is relevant in explaining these results, where cognitive presence can be achieved through asynchronous materials, but teaching and social presence are often limited in the online environment. Students involved in MBKM showed lower levels of participation in the evaluation, due to scheduling conflicts with MBKM activities. This indicates the need for schedule flexibility or alternative evaluation methods to support full student engagement.

Implications for Online Learning

Technologies such as virtual reality (VR)-based simulations or other interactive tools can help enhance the learning experience and provide more realistic teaching simulations. This solution has also been proposed by Ally (2019) as a way to overcome the

limitations of online learning in the context of practicums. Furthermore, institutions need to align the MBKM schedule with regular courses, especially those that are practicum-based. Providing class recordings or additional sessions can help MBKM students stay engaged in learning. and more detailed and in-depth feedback is essential to help students understand their strengths and weaknesses. Approaches such as individual discussions or rubric-based assessments can support more effective evaluation.

6. CONCLUSION

This study evaluates the effectiveness of online learning of Teaching Skills and Micro Learning courses, especially when students are also involved in the Merdeka Belajar Kampus Merdeka (MBKM) activities. From the results of the study, it can be concluded that online learning is quite effective in conveying theories and concepts of teaching skills. Students feel that the material delivered through the online platform can be understood well if supported by a structured method. Online teaching simulations are inadequate in training students' practical skills, such as non-verbal communication, classroom management, and interaction with students. This is a major challenge in achieving psychomotor learning goals. The MBKM program provides great benefits for students, but this activity often clashes with the regular course schedule. Schedule conflicts cause a decrease in student attendance and engagement in online classes. More interactive technology support and flexibility in scheduling are needed to improve the effectiveness of online learning, especially for students taking MBKM. Institutions need to align MBKM policies with regular learning so that students can optimize both activities.

7. LIMITATION

This study was conducted in one higher education institution, so the results may not be generalizable to other institutions with different curricula or learning conditions. The qualitative approach provides in-depth insights, but lacks quantitative and measurable data. Further research could use mixed methods to provide more comprehensive results. This study was conducted over a period of one semester, so it cannot evaluate the long-term impact of online learning on students' readiness to teach in the field.

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