Preservice Mathematics Teachers' Performance and Challenges on Video-Based Microteaching Amid Pandemic

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Abstract

Microteaching is a teaching and learning training activity for preservice teachers to develop teaching skills and as a training medium for interacting with students. Microteaching can provide classroom-teaching experience on a micro scale before teaching actual classes. However, due to the current COVID-19 pandemic situation, the microteaching sessions is shifting from face-to-face mode in a microteaching laboratory to remote learning mode from home. This study aims to describe the performance, difficulties, and challenges of preservice mathematics teacher in video-based microteaching. This research is a descriptive qualitative study involving 54 preservice mathematics teachers in IAIN Kediri. The data were collected through observation, documentation, and interview conducted in February-April 2021. Based on the research results, 24.07% preservice mathematics teachers performed in the excellent category, 20.37 % in good category, 29,63% in fair category, and 25,93% in poor category. It was indicated that the performance difficulties were almost found in all observation aspects, but most commonly found in the aspects of giving apperception and motivation, applying the scientific approach, and closing learning. Furthermore, it was revealed that preservice mathematics teachers experienced 3 major challenges, namely pedagogical and psychological, infrastructure, and technical in creating video-taped microteaching.

Keywords: pandemic, preservice teacher, mathematics, microteaching, video-based

Abstrak

Microteaching adalah kegiatan belajar dan mengajar bagi calon guru untuk mengembangkan ketrampilan mengajar dan sebagai media latihan untuk berinteraksi dengan siswa. Microteaching memberikan pengalaman mengajar kelas dalam skala kecil sebelum mengajar kelas yang sesungguhnya. Namun, karena situasi pandemi COVID-19 saat ini, pelaksanaan microteaching bergeser dari mode tatap muka di laboratorium microteaching ke mode pembelajaran jarak jauh dari rumah. Penelitian ini bertujuan untuk mendeskripsikan kinerja, kesulitan, dan tantangan calon guru matematika dalam microteaching berbasis video. Penelitian ini merupakan penelitian deskriptif kualitatif dengan melibatkan 54 calon guru matematika di IAIN Kediri. Pengumpulan data melalui observasi, dokumentasi, dan wawancara yang dilakukan pada bulan Februari-April 2021. Berdasarkan hasil penelitian, 24,07% calon guru matematika menunjukkan kinerja dalam kategori sangat baik, 20,37% dalam kategori baik, 29,63% dalam kategori sedang, dan 25,93% dalam kategori kurang baik. Terindikasi bahwa kesulitan kinerja hampir ditemukan pada semua aspek observasi, namun paling banyak ditemukan pada aspek pemberian apersepsi dan motivasi, penerapan pendekatan saintifik, dan penutupan pembelajaran, dan. Lebih lanjut terungkap bahwa calon guru matematika mengalami 3 tantangan besar, yaitu pedagogis dan psikologis, infrastruktur, dan teknis dalam membuat rekaman video microteaching.

Kata kunci: pandemi, calon guru, matematika, microteaching, berbasis video

INTRODUCTION

At various levels of education, there are three important components of an effective instructional environment which are the students, the curriculum, and the teacher. The teacher, on the other hand is the glue that combines these items (Kelleci et al., 2018). The success of learning teaching process depends on their preparation, audition and performance quality. The teachers' role is called multidimensional and very complex. Their job is not only to teach but also to educate and to

train. Teaching means continuing and developing science and technology. Educating means continuing and developing the values of life. While training means developing the skills of students. (Khuriyah, 2017; Suryana, 2018)

The quality of teacher performance is related to teacher competence, it means that without having good competence a teacher will not be able to have good performance. In carrying out their duties in the classroom, a teacher must have at least 4 competencies, namely pedagogic, social, personality, and professional competencies. (Rahayu, 2020; Suryana, 2018). A teacher is not enough to only have the ability to master a number of learning materials but must also be supported by other abilities and skills in accordance with elements related to the learning system and process, namely basic teaching skills. Basic teaching skills is basically the ability or skills that are specific (most specific instructional behaviors) that must be possessed and applied by teachers in conducting the learning process.(Sukirman, 2012) The basic teaching skills are explaining, strengthening, leading class discussion, class controlling, asking questions, making variation, guiding small group discussion and learning. In addition to basic teaching skills which are the main abilities that must be mastered by every teacher, teachers must also master and be able to carry out the learning process logically and systematically from opening activities, core activities, and closing activities.(Nugraheni, 2019; Nurasiah & Suprianto, 2015; Sukirman, 2012). However, these competencies should not only be mastered by in-service teachers, but also had to be prepared since they were in teacher training development. One of the efforts to prepare competent preservice teacher to face complex learning tasks can be done through a training or learning process using a model or a more simplified learning approach. This approach is more popularly known as microteaching.(Sukirman, 2012)

Microteaching is current innovations in teacher training program which is practiced as a professional developmental tool in pre-service or in-service teacher training programs worldwide. Microteaching is a means of assistance and training for preservice teachers to train and improve their teaching skills with fewer number of students. This approach was originally motivated by the problem, whether every preservice teacher who has completed all lecture programs at the teacher education institution can have the ability to carry out complex teaching tasks professionally in the school where they work(Khuriyah, 2017; Reddy, 2019; Remesh, 2013)

Microteaching is an alternative way to foster and improve the teaching skills of preservice teachers and in-service teachers because these skills are not acquired instantly (Kusmawan, 2017). Microteaching course provides simpler learning and teaching situation, gives training and practice situation in the same time, , enables trainee teachers to learn and assimilate new teaching skills under controlled conditions, enable trainee teachers to gain confidence in teaching, understand the concept and principles underlying microteaching and allows student to develop their basic teaching skills in the safe way (Bodis et al., 2020; Reddy, 2019). This course usually was programmed by students of teacher training faculty before trying to teach in real class at school. Teacher training Students in microteaching class had to demonstrate their ability to create learning materials and teach

in a small-scaled class. After passing this course, they are expected to be competent to teach in schools. (Nugraheni, 2019).

In general, microteaching is organized as a short lesson, the preservice teacher delivers it to a reduced group of students (Three to ten) in a 5 to 20 minute lesson, then reflects on their teaching afterwards.(Reddy, 2019). Microteaching is usually conducted in a laboratory seted up like a classroom completed with various equipment to teach and several people who act as students. However, in the current COVID-19 pandemic situation, microteaching sessions cannot be conducted in microteaching laboratories as before.

An online microteaching was prompted as a new approach to Teacher Professional Development amid the pandemic. Video-taped microteaching is an alternative way to do microteaching from home.(Önal, 2019; Özcan & Gerçek, 2019; Reddy, 2019). Besides avoiding crowds to suppress the spread of the Covid-19 Virus, the task of video-recording microteaching provides several advantages, for example, because it is carried out asynchronously, participants can be more flexible in doing their task, it can develop autonomy as learners and teachers, and develop a community and fostering engagement. (Bodis et al., 2020), participants can do their best before submitting (Kusmawan, 2017), providing feedback after a video is submitted from a peer reviewer or trainer/lecturer can improve students' reflection, critical thinking, and teaching skills(Kelleci et al., 2018; Kusmawan et al., 2020; Önal, 2019; Özcan & Gerçek, 2019). Of course this is not easy, like online learning in general, it is reported that there are several challenges that students must face in carrying out microteaching from home, such as unpreceded technical problems including students' unfamiliarity with the online platform used. (Ersin et al., 2020), the maintenance of student engagement during times when students had major disruptions in their lives, and insecure internet connection, (Bodis et al., 2020)

Several educational researchers have studied online microteaching practices in remote learning. Before the pandemic, Onal examined the reflective report of pre-service teachers after completing task related to video-recorded microteaching. It revealed that the video-recorded microteaching increased the preservice teachers' reflective abilities (Önal, 2019). Amid pandemic, Ersin et al explored pre-service teachers' performance on a synchronous microteaching via zoom meeting. Based on the research result, the pre-service teachers perceived that the synchronous microteaching helped them boost their online teaching competence and readiness (Ersin et al., 2020). Meanwhile, Bodis et al studied the asynchronous microteaching practice through VoiceThread in ESL dan TESOL teacher training Programme in Australia during the pandemic. The research found that the student teachers satisfied the unit learning outcome related to practical application of teaching approaches through this practice. As well as that, it increased feedback literacy and ICT skills, built autonomy as learners and instructors, established a community and promoting participation (Bodis et al., 2020)

However, none of these studies have focused on research on the performance and difficulties of preservice mathematics teacher and the challenges they face in implementing microteaching during

the pandemic. As it was well known that Mathematics is a subject which is often regarded as complicated by students of all ages.(Katmada et al., 2014). In Indonesia, students' perception of mathematics is still not good enough (Ratnasari, 2017; Siregar, 2017). Indonesian students' learning outcomes are also not fully satisfactory. This is indicated by the National Examination (UN) results in 2019 for mathematics subjects which were still below the standard and the PISA results in 2018 where Indonesia ranked 72 out of 78 participating countries for the field of mathematics.(Alfons, 2019; Kasih, 2020). For this reason, it is necessary to prepare competent teachers to bring an increase in students' mathematics learning achievement. The results of some studies (Ariyanti, 2015; Falachi et al., 2017; Sahidin & Jamil, 2013) showed the influence of teacher competence in students' mathematics achievement. Teachers who have good competence tend to have a good influence on their students' mathematics learning achievement. Therefore, this study was conducted to analyze the preservice mathematics teachers' performance and difficulties on video-based microteaching during the pandemic, as well as the challenges they face during the completion of this task.

METHOD

To describe preservice mathematics teachers' performance, difficulties, and the challenges they faced to carry out microteaching amid pandemic, this descriptive qualitative study was conducted on February-April 2021 in IAIN Kediri, Indonesia. In this research, video-based microteaching refers to microteaching practice in which the participants video-record their performance on microteaching and submit the video to be evaluated and reviewed. The preservice teachers' performance refers to the implementation of performance observation items, preservice teachers' difficulties indicated by the missing or the inappropriate implementation of the performance observation item. While the challenges refer to the obstacles faced by participants in completing the video-recording microteaching tasks. The research partipants were 54 participants from the 6th semester students of mathematics education Study Program, IAIN Kediri. They were given a project to perform microteaching from their home and record it. Then, their video-taped microteaching and lesson plan file were uploaded on e-learning and youtube. The research data were collected through 1) observation and documentation of the participants' video-taped microteaching and lesson plans to get the data of their performance and difficulties, and 2) interview to all participants to get in-dept information about their challenges in project completion via zoom. The supporting instruments used in this research were observation form (adapted from Kemendikbud, 2014) and semi-structured interview guide. Based on the implementation of each performance observation item, the preservice teachers' performance can then be interpreted into the categories in Table 2. All the data were then analyzed using qualitative method, the findings credibility was determined through triangulation and member check. The triangulation used in this study was conducted by collaborating evidence from observation, documentation, and interview. Meanwhile, the member check was conducted by taking the finding back to participants and asking them to check the accuracy of the report.

Table 1. Category Criteria of Microteaching Performance

Category	Score Criteria
Excellent	$90\% < Score \leq 100\%$
Good	$80\% < Score \leq 90\%$
Fair	$70\% < Score \leq 80\%$
Poor	$Score \leq 70\%$

(Kemendikbud, 2014)

FINDINGS AND DISCUSSION

Based on the observation and documentation of microteachingvideo submited by 54 students in Tadris Matematika Department, IAIN Kediri, 13 students showed excellent performance and 11 students showed good performance. In addition, there were 16 and 14 students in the fair and poor category, respectively. The percentage of the participants' performance were presented in the chart below.
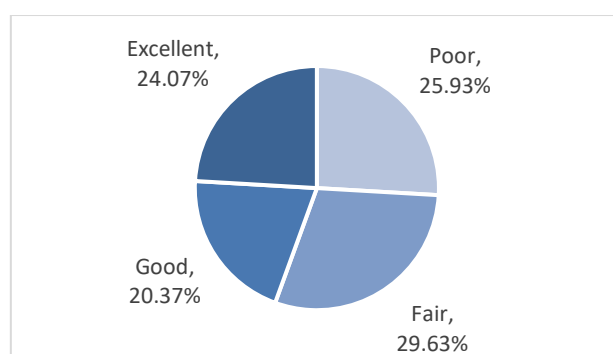
Picture 1. Preservice Mathematics Teachers' Performance on Video-Taped Microteaching

The data of preservice teachers' performance on video-based microteaching for each aspect of observation can be seen in the following table.

Table 2. Preservice Mathematics Teachers' Microteaching Performance

No	Performance Observation Aspect	Performance Percentage
	PRELIMINRY ACTIVITIES	
	Giving Apperception and Motivation	
1	Preparing students physically and psychologically by praying and greeting	78%
2	Giving contextual learning motivation to students	57%
3	Connecting the material with previous learning materials/prerequisite knowledge	50%
	Informing Competencies and Activities	
4	Delivering the material scope	80%
5	Stating the competencies to be achieved	78%
6	Informing the activity plan	61%
	CORE ACTIVITIES	
	Mastering Concept/Learning Materials	
7	Adapting the material with the learning objectives.	87%

No	Performance Observation Aspect	Performance Percentage
8	relating the material to other relevant knowledge, science and technology developments, and real life.	67%
9	Presenting the discussion of learning material appropriately.	85%
10	Presenting material systematically	89%
	Applicating Educational Learning Strategies	
11	Conducting learning according to the competence to be achieved	91%
12	Conducting learning in order	76%
13	Controlling class	69%
14	Implementing learning that develops the students' skills according to the learning materials	83%
15	Implementing contextual learning	85%
16	Implementing learning that fosters students' active participation	80%
17	Implementing learning that enable the growth of a positive habits and attitude	85%
	Applying Scientific Approach	
18	Facilitating and presenting activities for students to observe	69%
19	Encouraging students to formulate questions	74%
20	Facilitating and presenting activities for students to collect information	57%
21	Facilitating and presenting activities for students to associate the data and information collected to formulate conclusions	46%
22	Facilitating and presenting activities for students to communicate the knowledge and skills they have acquired	69%
	Utilizing Learning Resources/Media	
23	Demonstrating skills in the use of learning resources/media	93%
24	Using technology and information for teaching and learning	69%
25	Involving students in the use of varied learning resources	83%
26	Involving students in the use of learning media	83%
	Implementing Process and Learning Outcomes Assessment	
27	Implementing Attitude Assessment	91%
28	Implementing Knowledge Assessment	96%
29	Implementing Skills Assessment	83%
	Involving Students in Learning	
30	Fostering active participation of students through the interaction of teachers, learners, learning resources	65%
31	Responding positively to student participation	81%
32	Showing an open attitude towards the students' response	80%
33	Growing the students' joy or enthusiasm in learning	61%
	Using Correct and Appropriate Language In Learning	
34	Using spoken language clearly and fluently	80%
35	Using good and correct written language	94%
	CLOSING ACTIVITIES	
	Closing The Learning	
36	Facilitating and guiding students to summarize the subject matter	61%

No	Performance Observation Aspect	Performance Percentage
37	Facilitating and guide students to reflect on the process and subject matter	50%
38	Giving an oral or written test	87%
39	Collecting students' work as portfolio material	76%
40	Providing follow-up by giving direction for the next activity and enrichment tasks	76%

From observations and documentation, it was also found the partipants' difficulties in carrying out video-based microteaching, indicated by the low percentage of performance on certain observation items. The following are preservice teachers' difficulties found, in addition to the absent of performance observation items.

Table 3. Preservice Mathematics Teachers' Performance Difficulties

No.	Observation Aspect	Difficulties
1	Giving Apperception and Motivation	• starting learning immediately, without praying, greeting, or giving students time to prepare their books and stationery • relating insufficient prior knowledge or prerequisite material in math • fail to provide an appropriate context for motivation
2	Informing competencies and activities	• no conveying competencies to be achieved or conyeing them but in less meaningfull way • unclear activities outline explanation
3	Mastering concept/learning materials	• incorrect solution of worksheet or assessment instrument • mistakes in the mathematical concepts taught • less material improperly associating with other relevant knowledge and science and technology development
4	Applicating educational learning strategies	• inconsecutive learning step implementation such as giving aperseption when students were in process of assosiating data collected, etc. • sitting/standing in the same spot during the lesson • fail to attract students to answer teacher's questions verbally or asking teacher
5	Applicating scientific approach	• activities are not designed to observe • activities are not designed to collecting data • insuffisient needed media/tools to facilitate students collecting data activities • not following scientific steps such as the student activities were only given materials followed by example and mathematical problem solving. • Lack of teacher's guide both in worksheet and verbally (directly) in facilitating students to associate data to formulate conclusions • no chance for students to present their work in front of class to discuss
6	Utilizing of learning	• no learning media used

No.	Observation Aspect	Difficulties
	resources/media	• less use of IT for learning • media were demonstrated by the teacher only, not the students • one and only one learning resource
7	Implementing Process and Learning Outcomes Assessment	• no knowledge, skills, or attitude assessment instruments • less appropriate instrument to assessmathematical skills
8	Involving students in learning	• less visible teacher-students interactioan or students-students interaction • monotonous response or inappropriate mimic of teacher • less appropriate response to students' incorrect answers • less teacher'senthusiasm
9	Using correct and appropriate language in learning	• awkward, clumsy, or less fluency in speaking • reading the writting in slide show or lesson plan too frequently • writing error in worksheet, slideshow, or whiteboard
10	Closing the learning	• immediately summarizing on their own without giving students the opportunity • no reflection or asking for student reflection without giving them feedback • appointing students to answer the oral test before giving questions • unclear homework instruction • unclearnext activities plan

Based on the results of interviews with the research participants via zoom, the data of the challenges of their work on this video-based microteaching were obtained. The challenges could be categorized into 4 aspects namely pedagogical and psychological, infrastructure, technical, and other challenges. The description of the four categories is presented in the table bellow.

Tabel 4. Preservice Teachers' Challenges on Video-based Microteaching

No	Aspect	Description
1	pedagogical and psychological	• lack of self eficacy in teaching • lack basic teaching skills mastery • no experience to act in front of video recorder • lack of ability to select and present media according to learning objective
2	infrastructure	• Lack of classroomproperties such as blackboards, table, chair, etc • Hard to get "students" actor • lack of procurement of adequate video recording and editing tools
3	Technical	• No one helps recording • Less ability in video editing

No	Aspect	Description
		• Unsupported recording situation (noise, dark, etc.)
4	Other	• Lack of preparation • Less understanding of video-taped microteaching task

Based on the research data above, it can be known that 24.07% participants showed excellent performance and 20.37% participants showed good performance. On the other hand, 20.37% and 25,93% of all participants delivered microteaching in the fair and poor category, respectively. There was slight differences among the share of each category, with the largest share being in fair and the lowest one in good category. There were still a numerous participants performing in the fair and poor category. This fact could not be separated from the various difficulties and challenges they faced through this video-based microteaching, which will be discussed further in another part of this discussion.

Meanwhile, the best student performance in microteaching videos was found in the Implementing Knowledge Assessment ability with a 96% implementation percentage. Almost all participants designed a knowledge assessment and its instruments according to the mathematics Basic Competence (KD) of the Knowledge Core Competence (KI 3) in Kurikulum 2013, the current education curriculum in Indonesia. They attached the instrument in the lesson plans which were then applied in microteaching through the assessment of student worksheets or posttests. This implementing assessment ability is the ability that preservice teachers must possess to become professional educators according to the UU Guru dan Dosen (Indonesian Law on Teachers and Lecturers). Furthermore, KI and KD of mathematics subjects in Kurikulum 2013 are dominated by KI and KD in the realm of knowledge and skills. The results of this mathematics learning assessment can be used as the basis for making decisions about students' abilities or the quality of learning in mathematics (Sesanti & Ferdiani, 2017)

Another performance item with a high percentage implementation was Using good and correct written language. Only a few participants did not use good and correct written, mostly because of typos in symbols in the worksheet. The teacher's written communication skills are indeed needed to avoid students' misconceptions because, as is well known, mathematics is a subject that uses many symbols and other visual representations. The mathematical representation ability of preservice mathematics teachers is very useful in facilitating students to understand difficult mathematical ideas(Astuti, 2017)

On the contrary, there are several microteaching performances item need to be improved. One of them was Facilitating and presenting activities for students to associate the data and information collected to formulate conclusions which stood at a percentage of 47%. Participants who managed to show good performance at this item prepared worksheets that they designed using a scientific approach. It made them easier to direct and guide students' work in collecting data and associating

data to produce a conclusion on a mathematical concept being taught. This is in line with the benefits of worksheet which can assist teachers in directing their students to be able to find concepts through their own activities or in work groups; and make it easier for teachers to manage the learning process because the learning process is usually teacher centered but has now turned into student centered.(Ermi, 2017)

Another performance need to be improved is Facilitating and guiding students to reflect on the process and subject matter, where only half of the subjects do it correctly and adequately. Some strategies participants performed in this item were asking what they have learned and what they did to get the new knowledge or skills, and what they felt about the just ended-learning process. The participants who succeeded in this performance item gave direct feedback to students' reflective response, as well, by emphasizing students learning experience and validating students feeling.

The results of this study also indicated that participants found difficulties in every aspect of performance observation but the most commonly found were on aspects of Giving Apperception and Motivation, Applicating Scientific Approach, and Closing the Learning. It was shown by the low percentage implementation of participants' performance. The average percentage of each performance observation item in these three aspects were 60.49% for the Giving Apperception and Motivation aspect, 62.96% for the Applicating Scientific Approach, and 71.48% for Closing the Learning.

The hardest performance for the students is giving Apperception and Motivation aspect. The difficulties in this aspect include some students immediately starting learning directly to the core activities, skipping conditioning the students, giving apperception and motivation, and informing competencies and activities plan. In addition, the lack of recalled prerequisite materials for apperception has also become one of the difficulties for some prticipant. Whereas, provision of sufficient and appropriate apperception can improve students' readiness to learn new lessons(Ningsih et al., 2013). Some participants have not shown the ability to present the proper context to motivate students to learn mathematics, the context used is still too abstract. Even though, giving the proper and appropriate motivation at the beginning of learning are able to help students clarify their learning goals and to increase student learning perseverance (Uno, 2011)

The second most difficult performance aspect was Applicating Scientific Approach in One of the difficulties was in the form of not designing learning using a scientific approach. Some participants still designed conventional learning so that in the practice of microteaching, their ability to execute a scientific approach in their mathematics class did not appear, especially in observing, collecting data, associating information to get conclusions, or communicating the concepts learned. Another difficulty found was that participants did not provide guidance to students, either in worksheet or in verbal way, in order students could associate the results of collecting information or their experiments so that they could conclude the concepts being studied. This was potentially making students lose their way too far and not 'arrive' at the expected concept. Looking back to the past research, difficulties in applying the scientific approach were not only experienced by preservice

mathematics teachers, but also by in-service mathematics teachers. One of the difficulties experienced by teachers in applying the scientific approach was the lack of creativity in applying learning methods with a scientific approach so that teachers tended to continue to use the lecture/conventional method. (Husadaningsih, 2019)

Then, the closing learning aspect also need our attention because the research data shows that some difficulties also occured in this aspect. The frequently found difficultieswere that the participants missed the closing activities or did it in a hurry so that they did not provide chances for students to jointly conclude what they have learned at the meeting and provided unclear explanations regarding homework or activity plans at the next meeting. In addition, participants rarely did reflection or did it but unfollowed by appropriate feedback on the students's reflections. By its nature, reflective practice, indeed, is difficult to teach, difficult to encourage and not a process that students and indeed some staff are entirely comfortable with. But reflection is an important part of learning. through reflection, a student can make sense of what they have learned, why they learned it, and how that particular increment of learning took place.(Murphy, 2016; Önal, 2019; Philip, 2006).

The above explanation describes some difficulties in preservice teachers's performance in video-based microteaching. This was inseparable from the challenges they faced in completing the video-based microteaching project. Based on this research data, the major challenges were identified as pedagogical and psychological, infrastructure, and technical issues.

One of the challenges in the pedagogical and psychological aspect was the participants' nervousness in carrying out microteaching because this was the first time they act as teacher. Moreover, they have to act in front of the camera. Not all students feel comfortable in front of the camera. In addition, the fact that basic teaching skills have not been mastered optimally was also a challenge for students to complete this video-based microteaching task.

In the infrastructure challenge, limitations in teaching equipment such as blackboards, projector, tables, chairs, were also very problematic. Procurement of this property requires a large amount of cost, but without this property, of course, the implementation of microteaching cannot be optimal. However, some participants were looking for alternative solutions, for instance using paper board instead of a blackboard or editing the video so that "writing activity on the blackboard" appears on the video. Another very problematic challenge was bringing in the "student actors" in microteaching. Many participants reported that it was not easy to find someone who were willing to become student actors. Because of this, there were participants who only involve 1 student so the performance of certain items, for example in controlling the class, was less visible in the microteaching video

Besides the pedagogical and psychological, and infrastructure challenges, the technical issue also complicated in video-based microteaching. For example, no one helps to video-record the microteaching so that one of the student actors which was limited in number, did the recording. To add to this, unsupportive situations during recording such as noise and poor lighting were also

obstacles to the video-based microteaching. Ideally, microteaching is conducted in a laboratory that has been set up like an ideal classroom without any distractions, while the condition of each participant's home varies so that it cannot be controlled according to ideal conditions.This technical issue is also a challenge for online learning globally, not only for the video-taped microteaching, including the use of online learning technology and unsupportive environments. It was reported that the crowd, the noise, and the parents' requests to help the household disturbed the online learning.(Agustina et al., 2020; Ersin et al., 2020; Yuzulia, 2021).

CONCLUSION

This research result concludes that 24.07% preservice mathematics teachers performed in the excellent category, 20,37 % in good category, 29,63% in fair category, and 25,93% in poor category. 20,37 % in good category, 29,63% in fair category, and 25,93% in poor category. It was revealed that the main difficulties experienced by teachers were in giving apperception and motivation, applying the scientific approach, and closing learning. This research also indicated the major challenges preservice mathematics teachers faced in completing video-based microteaching projectwhich were pedagogical and psychological, infrastructure, and technical. The finding of this study may give an initial description about the remote microteaching practice of preservice mathematics teacher. It can be taken into consideration for trainers/lectures to implement video-based microteaching as a substitute for face-to-face microteaching in laboratory during the pandemic. Then, the recomendation for the later work could be to extent this research in other field or by using other perspective of performance.

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