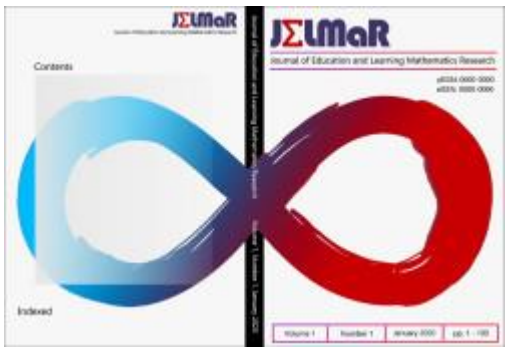


Journal of Education and Learning Mathematics Research (JELMaR)

Online ISSN : 2715-9787
Print ISSN : 2715-8535
Journal Homepage : http://jelmar.wisnuwardhana.ac.id/index.php/jelmar/index

Analysis of Microteaching Learning

Riki Suliana, Cicik Pramesti, Suryanti Suryanti, Ayu Silvi Lisvian Sari

To cite this article: Suliana, R., Pramesti, C., Suryanti, S., & Sari, A. (2022). Analysis of Microteaching Learning. *Journal of Education and Learning Mathematics Research (JELMaR)*, *3*(2), 172-189. https://doi.org/10.37303/jelmar.v3i2.89

To link this article : https://doi.org/10.37303/jelmar.v3i2.89

Publisher
Department of Mathematics Education,
Faculty of Teacher Training and Education,
Universitas Wisnuwardhana Malang

Journal of Education and Learning Mathematics Research (JELMaR)
Volume: 3, Number: 2, November 2020, pp. 172-189
p-ISSN: 2715-8535, e-ISSN: 2715-9787

Received: 08 November 2022 *Revised: 25 November 2022* *Accepted: 30 November 2022* *Published: 30 November 2022*

Analysis of Microteaching Learning

[1]Riki Suliana, [2]Cicik Pramesti, [3]Suryanti Suryanti, [4]Ayu Silvi Lisvian Sari
Universitas PGRI Adi Buana, Indonesia
Email: riki@unipasby.ac.id

***Abstract**: The basic skills of teaching students who are prospective teachers of Mathematics Education are needed to improve the competence of prospective teachers when entering the world of education. This study aims to determine the process of teaching and learning activities and basic teaching skills of prospective students of Mathematics Education teachers in microteaching at UNIPA Campus Blitar. This type of research includes descriptive research with a qualitative approach. The research subjects were 6 students. There are two techniques used in this study, namely observation techniques with open and closed answers. The activities of students of the Mathematics Education Study Program at UNIPA Campus Blitar regarding the Implementation of Microteaching in the teaching skills of prospective teacher students in the 5 main components of Basic Teaching skills have a total average of 76.1%, which is included in the good category.*

Keyword: Analysis, Microteaching

INTRODUCTION

Education plays an important role in preparing a superior generation that is qualified and able to compete in the development of science and technology, for that education must be carried out as well as possible in order to obtain maximum learning achievement. However, there are factors that influence obtaining high learning achievement as expected. Student achievement is influenced by internal (from within) and external (from outside) factors. Internal factors include physical factors and psychological factors. Physical factors such as state of health, and state of the body. And psychological factors such as attention, interest, talent, and readiness. While external factors are school factors such as curriculum, teaching methods, the interaction between students, discipline in schools, learning tools, building conditions, and libraries, (Salsabila & Pupitasari, 2020)

One factor that affects a person's learning achievement is an external factor. A teacher is a person who is involved in learning and outside the individual. Factors that come from the teacher include the ability to design learning to foster student learning motivation and create an interesting and fun learning atmosphere. But in reality, students still think of mathematics as a scary subject so it is difficult to understand. This happens because of the unpleasant experience of learning mathematics. So that educators in this context are mathematics teachers, are expected to be able to reduce students' initial assumption that mathematics is a difficult subject,(Gazali, 2016)

Future teachers are teachers who inspire and educate students, who must be prepared through a modern and quality education system in LPTK using a curriculum that is adaptive to the future. For this reason, the LPTK curriculum is designed and implemented with the principles of active, innovative, creative, effective, and fun learning.

Starting from the formulation of teacher competencies which include pedagogic, personality, social, and professional competencies, the direction of KKNI, and the concept of the teacher competence integrity as a profession, with reference to the universal prevalence of the profession, basically the integrity of teacher/educator competencies include educational and academic competence. professional competence, (Law of the Republic of Indonesia Number 14 of 2005 concerning Teachers and Lecturers, n.d.). To achieve these competencies which contain basic teaching skills, teachers must have basic teaching skills and be able to resemble the learning process well and attractively so that it

fosters the willingness of students or to make them study hard, (Frasetyana et al., 2015) In line with this, students as prospective teachers must have basic teaching skills that can be achieved through Microteaching learning.

Microteaching aims to provide educational attitudes, knowledge, and practical skills as an effort to prepare prospective professional teachers, both formal education and informal education. Microteaching is a course related to the academic competence of the main study substance (content knowledge) which is in accordance with the curriculum of the Mathematics Education Study Program, UNIPA Blitar.

In general, Microteaching aims to improve the ability of the learning process or the professional ability of prospective teachers and/or improve the ability of education personnel in various specific skills. Practicing teaching in laboratory situations is for students or prospective teachers can practice various teaching skills in controlled situations to improve their competence.

Meanwhile, the specific objectives of Microteaching are to 1) improve the skills of the trainees on how to prepare for Microteaching or Lesson Plan Implementation (RPP); 2) improve the skills of effective teaching techniques for the trainees; 3) Analyze their teaching behavior, and 4) improve the teaching competence of prospective teachers to avoid the "clumsy" feeling when practicing learning in front of the class, (Tim, 2019)

Microteaching aims for students (prospective teachers) to improve their basic teaching skills to get ready for real teaching so students have basic teaching skills when they carry out PPL (Syafi'i, 2014). Microteaching experience provides benefits for prospective teachers, namely, prospective teachers in actual teaching, helps prospective teachers see the importance of implementing learning, decision making, implementing instructional activities, which allows prospective teachers to develop and improve their skills and assist prospective teachers in building confidence to teach, (Peter & Sudjana, 2009)

Teachers in the classroom are very much needed in order to establish the learning optimally. Optimal learning condition can be achieved if the teacher manages students and teaching facilities as well as controls them in a pleasant atmosphere to achieve learning objectives (Pamela et al., 2019). The ability to establish learning in the classroom can be referred to as classroom management skills. Classroom management is an effort to empower the class potential of a series of learner skills to create a conducive, positive, and productive atmosphere and control it if there is a disturbance in learning to optimize the learning process so that it obtains satisfactory results (Agus R, 2015). There are several basic teaching skills, including: 1) questioning skills, 2) reinforcement skills, 3) variation skills, 4) explaining skills, 5) skills and closing lessons. (set induction and closure), 6) guiding small group discussions skills, 7) managing classes skills, and 8) small groups and individuals skills, (Usman, 2010).

Based on the results of initial observations to the students regarding knowledge of the 9 components of teaching skills held in April 2021, data showed that for opening and closing lessons and questioning skills students are very good and know 100%, while for providing reinforcement skills are 92%, explaining skills are 75%, and for the giving variety, using learning media, guiding small group discussions, teaching individually and in groups and managing classes skills are below 67% each. The students' initial opinion about Microteaching was: "…when I was in front of the class, immediately after that I was confused about what I should do or I was blank for a moment…". Another opinion stated that: "Microteaching courses teach and train how to speak in front of students, practice to convey the material as well as possible. It's just that the time to prepare the performance I is still not enough." Microteaching is very good for developing the teaching potential of students, practicing to explain the material, training to establish the class, practicing speaking to students. From the description above, it can be seen that students know

enough about the 9 components of teaching skills but they are still hesitant and have difficulties in carrying out Microteaching activities.

Students who perform teaching practices in schools both in junior high and high school, are prospective teachers whose teaching abilities are still lacking, and some of them do not make lesson plans, or not providing feedback. This is as conveyed by the civil servant teacher that average teacher candidate who is practicing the ability to explain the material, class management, and mastery of the material is very far from what is expected (Robiah, 2015).

A brief interview with the PPL student tutor teacher in 2020 results that practical students often experience difficulties in several ways, namely 1) lack of confident, 2) lack of material mastery 3) less able to convey subject matter and 4) unable to master the class. . This is in accordance with the information conveyed by lecturer who is in charge of the Microteaching course during the study program meeting that students are still lack of teaching skills and are less able to make innovations. The difficulties experienced by student teacher candidates are strongly influenced by the basic teaching skills owned by the students themselves.

As a prospective teacher, students must be able to master basic teaching skills in order to create creative and fun learning. Teaching skills are initial abilities or initial skills that teachers must have before entering or starting learning in the classroom, (Rhamayanti, 2018). Basic teaching skills are implemented through the stages of learning carried out by teachers in learning activities, namely initial activities, core activities and closing, (Syafi'i, 2014). In the implementation of these three, there are basic teaching skills that play a very important role and determine the quality of learning, but the implementation of these skills are usually neglected.

A study also explained that students as models gained an increase in their pedagogical competence in terms of preparing learning implementation tools so that students could be well guided in understanding the material presented by students, better lesson planning, preparation of good learning strategies, good classroom management, good material, evaluation and mastery as well as good student motivation. It has a positive impact on student achievement in the learning process, student interaction with students, and students with learning materials as students get a lot of input in all preparations to develop pedagogic competencies in the classroom, (Arifin & Gultom, 2016)

Based on the description above, the researchers are interested in conducting research entitled "Analysis of Microteaching Learning Implementation for Students of Blitar Campus Mathematics Education Study Program for the 2020/2021 Academic Year".

METHOD

This research aimed to know the implementation of Microteaching learning for students of the Mathematics Education Study Program UNIPA Blitar Campus for the 2020/2021 Academic Year. The research approach used in this research is qualitative approach.

The object of the research is Students of the Mathematics Education Study Program Level 3, Blitar Campus, for the 2020/2021 academic year. In this study, the data collected from the answers of 1) the initial observation sheet, 2) the learning plan observation sheet, 3) the learning practice observations, and 4) the final observation sheet.

As this research is descriptive, the data analysis technique used is a qualitative descriptive technique with percentages. The formula used is:

$$P = \frac{F}{N} \; x\, 100\%$$

F = frequency

N = *Number Of Case*

P = Percentage

The data that has been percentage is then recapitulated and given modified criteria,(Arikunto, 2010) as follows:

Tabel 1. Criteria of Successful Research

Score in Percentage	Criteria
81,0% - 100,0%	Very good
61,0% - 80,9%	Good
41,0% - 60,9%	Enough
0,0% - 40,9%	Less

RESULT AND DISCUSSION

1. Research Result Discussion

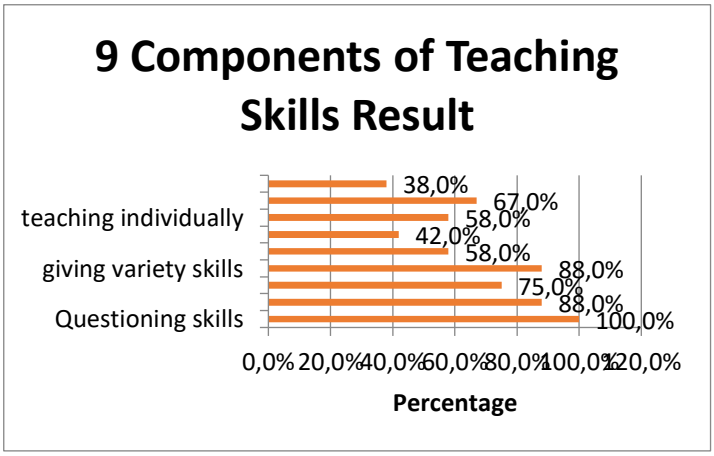
a. Preliminary Observation Results

The initial observation sheet aims to determine the students' prior knowledge of Microteaching teaching. The observations made were to determine student knowledge about the nine components of teaching skills, student opinions about microteaching courses, student preparation in microteaching learning, student opinions about good teachers (professional) in teaching, and student opinions about students who are good at learning.

1) Students' knowledge of the nine components of teaching skills

Knowledge of the 9 components of teaching skills must be known by prospective teachers. Because knowing the 9 components of teaching skills will be able to carry out learning better. This is in accordance with the statement that "Teachers who have basic teaching skills can bring the learning process well and attractively so that they can grow students' willingness to learn. Therefore, prospective teachers must have basic teaching skills. Basic teaching skills can be trained through Microteaching learning, (Frasetyana et al., 2015)

The percentage of prospective teachers' knowledge about the 9 components of teaching skills can be seen in the following diagram.



Picture 1. Students' knowledge percentage of the 9 components of teaching skills

Based on the diagram above, students' knowledge of the 9 components of teaching skills shows that for opening and closing lessons, it shows that students' questioning skills are very good and recognized by 100%, while for reinforcement skills are recognized by 88%, explaining skills are recognized by 75%, and for giving skills

variety are recognized by 88%. However, the others skills show that they are not as good as the other skills describe before. For using learning media are recognized by 58%, guiding small group discussions are recognized by 42%, teaching individually are recognized by 58% and teaching in groups are recognized by 67% and managing class are recognized by38%. The average of 9 component in teaching skills is 68%, this means that the students' knowledge about the criteria is quite good, although students are still less in managing class.

Of the 9 teaching skills components that are well known by students are opening and closing lessons, explaining skills, strengthening skills and asking questions. This terms are often seen in learning activities in general.

1) Student opinion towards microteaching courses

Microteaching is carried out before the Field Practice program is implemented. For this reason, it is necessary to have a common perception of Microteaching. Students think that Microteaching courses are to train and improve skills in terms of teaching and educating. Whereas, microteaching is about teaching and training about various skills including 1) speaking skills in front of students so prospective teachers are able to convey the material as well as possible, 2) how to open and close learning, 3) explaining the material to students with heterogeneous abilities. , 4) to ask questions, strengthen and vary learning activities, 5) to use learning media, and manage class 6) to teach individually or in groups, and 7) to measure how much teaching ability and how deep the material is mastered. Prospective teachers are also motivated to practice skills in teaching so that they are able to perform well in front of the class

2) To prepare prospective teachers for microteaching learning

In Microteaching learning, students need to prepare themselves so that the practice carried out in small classes is as if it were in a real class. The tools that must be prepared before performing during microteaching include 1) teaching tools (syllabus and lesson plans), 2) more in-depth material support and exercises, and 3) Student Work learning media or others.

Based on the results of filling in the initial sheet, before teaching, prospective teachers observe with the tutor teacher. They try to prepare teaching media well, but they have not fully prepared the use of learning media and they only use teaching media they've known. They still need to practice to perform with confidence.

3) Students' opinions about good (professional) teachers

Teachers who are able to educate, teach and train their students well and directed are professional teachers. To become a professional teacher, prospective teachers must be provided with an adequate education. Students think that a good teacher is a teacher that is like a tutor and can be a friend during discussions but act like a parent and there are also those who argue that a good teacher is a teacher who can perform the components of teaching skills well or a teacher who makes students become more active than usual.

4) Prospective teachers' opinions about students who are good at learning

Prospective teachers must have the ability to manage to learn. One of the important elements is understanding students. The diverse character of students requires teachers to be able to recognize and have close attention to their students, can they follow the lesson well?

Prospective teachers think that students who are good at learning are students who follow the learning well from the beginning to the end or those who listen and observe what the teacher explains. This means students still assume that students who are good at learning are students who behave well such as being obedient, listening to the explanations given, and not making noise.

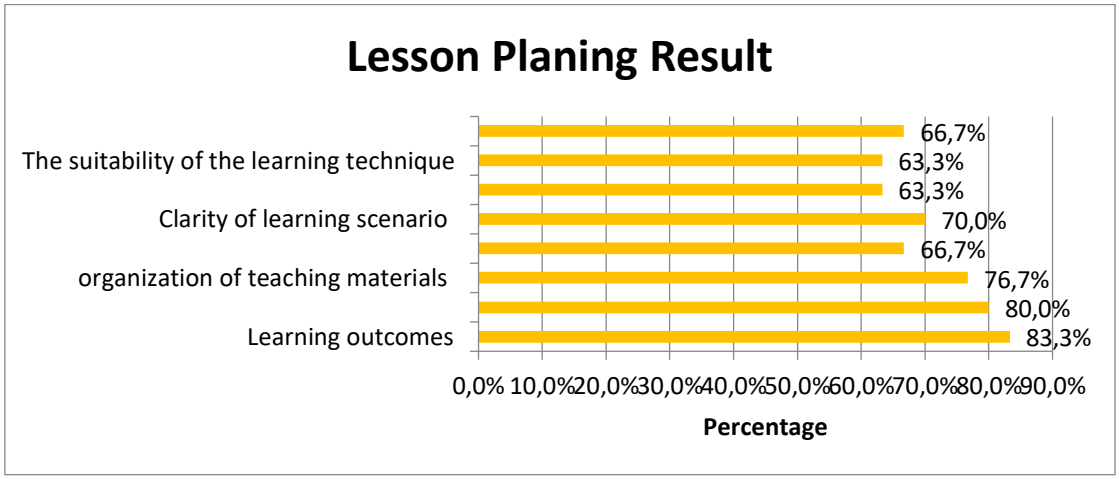
b. Prospective teachers Practice Assessment on the Implementation of Microteaching

The implementation of Microteaching activities is divided into 2 parts, namely before practice, lesson planning, teaching practice activities in class, and teaching skills.

1) Lesson Planning

Students are expected to understand very well how to make lesson plans before teaching because lesson planning has been given in the Developing learning tools course. Students are required to bring a lesson plan as an initial step in teaching as well as a reference where the learning is directed. Prior to practice, students are required to consult with the tutor who has been determined and collect the Lesson Plan (RPP) for an assessment. After the practice is complete, the tutor provides input or corrections related to the Lesson Plan (RPP), and the practice is carried out in order to perform better.

The following are the results of the lesson planning (RPP) assessment



Picture 2. Lesson Planning Score Percentage

The clarity in the formulation of multiple learning objectives and containing learning outcomes of 83.3% (Very good), Material selection (according to and characteristics of students) of 80.0% (Good), organization of teaching materials (coherence, material systematics, and time allocations accuracy) of 76.7% (Good), Selection of learning resources/media (according to the objectives, materials, and students characteristics) of 66.7% (Good), Clarity of learning scenario (activity steps: core, and closing) of 70.0% (Good), Details of the initial learning scenario (each step of strategy learning/ and time allocation at each stage) of 63.3% (Good), The suitability of the technique with the learning objectives of the assessment technique, for example, authentic assessment, and with observations of 63.3% (Good), Completeness of assessment instruments (questions, answer keys, scoring guidelines) of 66.7% (Good)

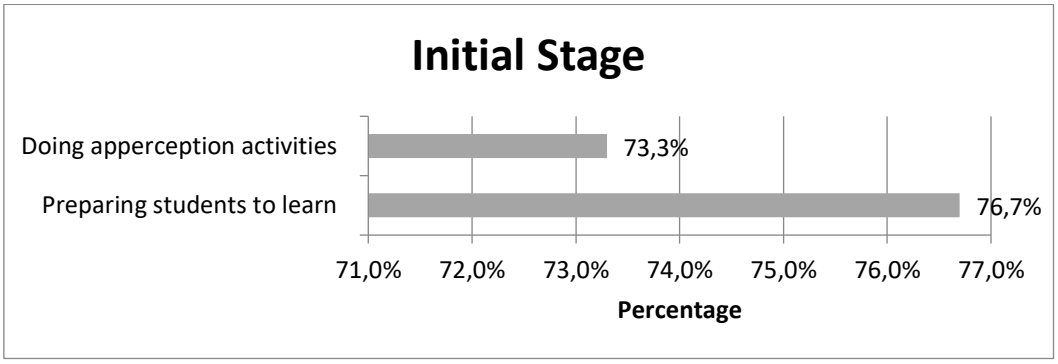
Based on the diagram above, it can be seen that the lesson planning carried out by prospective teachers is in a good category, with an average score percentage of 71.3%. This means that the Microteaching lesson plans carried out by students are good

c. Classroom Teaching Practice Activities

Prospective teachers have the opportunity to maximize 8 practice sessions and 20-30 minutes of time in each meeting. The first teaching practice is as an exercise to perform confidently in front of students and at the same time as an observation to

prepare for the next meeting. Practices carried out by prospective teachers must be creative and innovative, including the use of learning media.

Pre-learning is the initial stage in practical activities with 2 components of activities being observed, namely preparing students to learn and doing apperception activities. The results of the assessment in the initial activities are summarized in the diagram below.



Picture 3. Initial stage Percentage

In the diagram above, it can be seen that preparing students to learn gets a percentage of 76.7% and doing apperception activities is 73.3%. According to the category set, for the Pre-Learning stage, an average percentage of 75% is included in the Good category.

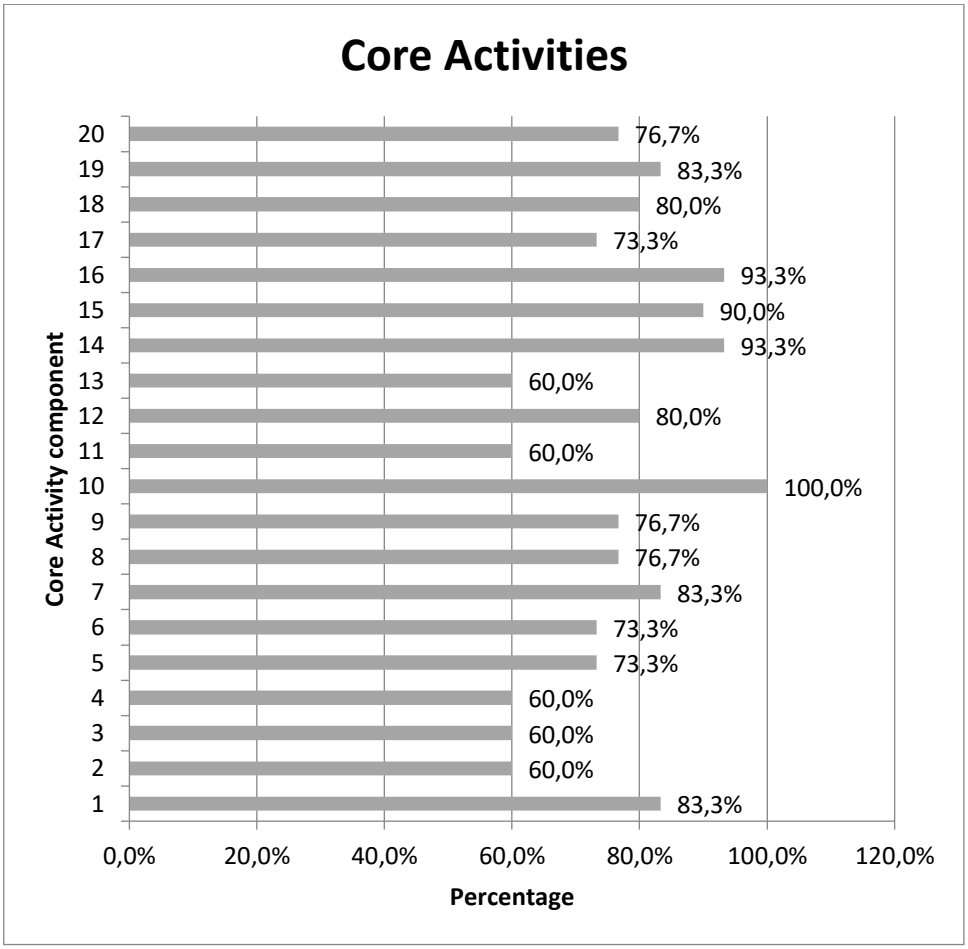
In the core activity, there are 20 components that are observed, that are 1. Demonstrate mastery of the subject matter; 2. Associating the material with other relevant knowledge; 3. Convey material clearly according to the learning hierarchy and characteristics of learners; 4.Associating matter with the realities of life; 5.Carry out learning in accordance with the competencies (objectives) to be achieved and the characteristics of students;6. Carry out learning in sequence; 7.Mastering the class; 8.Carry out contextual learning; 9.Carry out learning that allows the growth of positive habits; 10.Carry out learning in accordance with the planned time allocation; 11.Using media effectively and efficiently; 12.Generate compelling messages; 13.Involving learners in media utilization; 14.Fostering active participation of participants in learning; 15.Demonstrate an open attitude towards learners' responses; 16. Fostering the playfulness and enthusiasm of participants in learning; 17. Monitor learning progress throughout the process; 18. Conducting a final assessment in accordance with competence; 19. Use spoken and written language clearly, well, and correctly; 20. Deliver a message in the appropriate style. From observations resulted in 3 groups of categories,. namely quite good, good, and very good categories.

In the good enough category, there are 8 of the 20 components observed, or 40%. Its components include linking material with other relevant knowledge, delivering material clearly in accordance with the learning hierarchy and student characteristics, relating material to the reality of life, using media effectively and efficiently, and involving students in the use of media.

While in the good category there are 5 of the 20 components observed or 25%. The components are carrying out learning in accordance with the competencies (objectives) to be achieved and the characteristics of students, monitoring learning progress during the process, carrying out learning that allow the growth of positive habits, delivering messages in an appropriate style, conveying interesting messages, conducting final assessments according to with competence, carry out learning in a coherent manner and carry out contextual learning

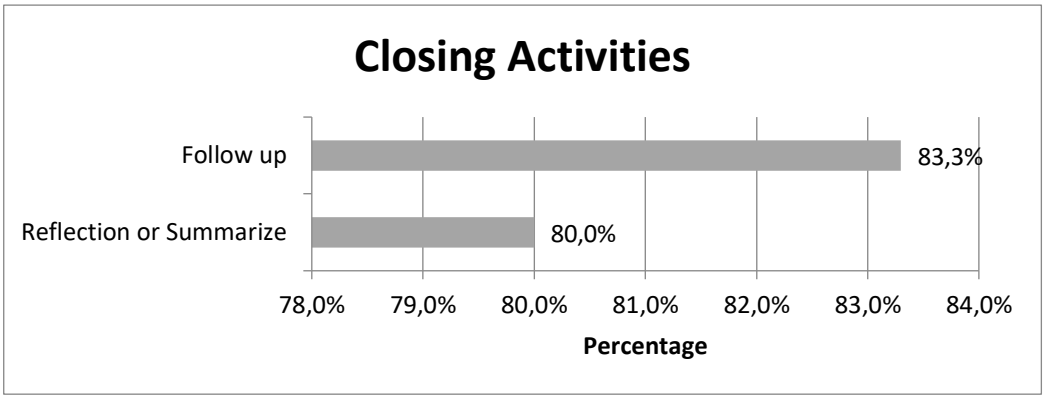
In the very good category, there are 7 of the 20 components observed, or 35%. The components are mastering the subject matter, mastering the class, using spoken and written language clearly, properly, and correctly, answering an open attitude to student responses, fostering active participation of students in learning, fostering the joy and enthusiasm of students in learning and implementing learning according to the planned time allocation. This means that the core activities obtained an average of 76.8% in the good category.

This can be seen more clearly in the diagram below.



Picture 4. Core Activity Percentage

In the closing stage, there are 2 components that are observed, namely reflecting or making summaries by involving students and delivering follow-up by giving directions, activities, or tasks as part of remedial/enrichment. The results of the assessment at the conclusion of the closing are summarized in the diagram below



Picture 5. Closing Stage Percentage

In the diagram above, it can be seen that doing reflection or making summaries by involving students gets a percentage of 80.0% and carrying out follow-up by giving instructions value of 83.3%. According to the category set, for closing, the average percentage is 81.7% which is in the very good category.

Based on the data above, it can be seen that the teaching practice carried out by prospective teacher-students is in a good category, with an average score percentage of 78.3%, meaning that the implementation of Microteaching is in a good category.

In the implementation of Microteaching, there are several notes for students that are still doubts, especially on the components: 1) Linking the material with other relevant knowledge, 2) Delivering material clearly in accordance with the learning hierarchy and student characteristics, 3) Relating the material with the reality of life, 4) Using media effectively and efficiently 5) Involving students in utilizing media. They need to use a lot of learning resources that are appropriate, it can be proven by the discrepancy of the material with the objectives and basic competencies that have been previously designed.

As the time is limited, students also use only textbooks as a learning resource, even though there are many other learning resources.

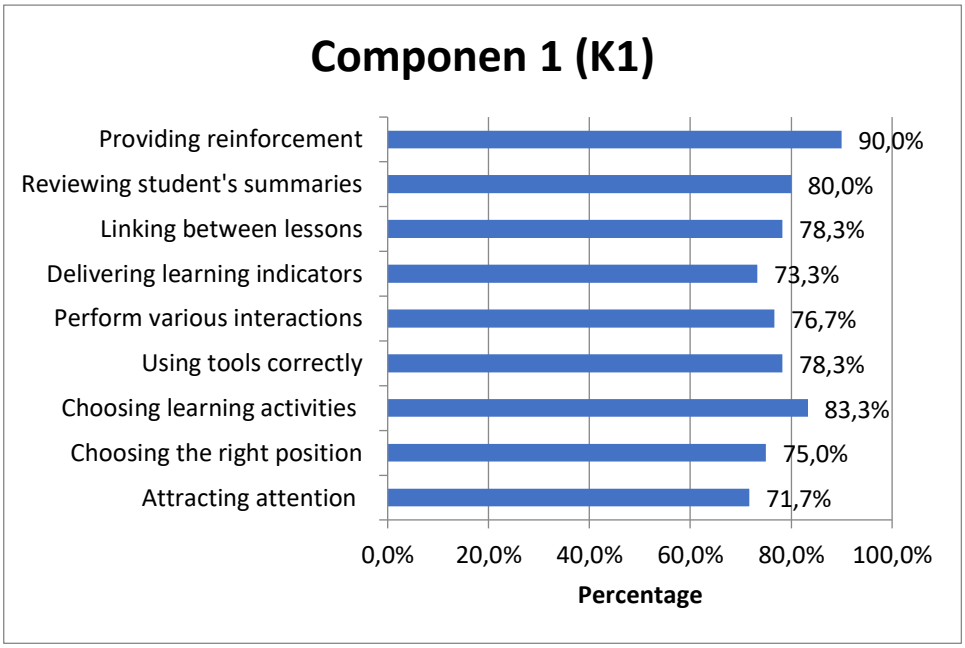
In terms of using appropriate media, students are quite good at determining the media in each lesson, it can be seen that many students practice using powerpoint media, some also combine whiteboard media with powerpoint, and some use other media. From that, it is quite good at identifying and using the right media.

d. Teaching skills

a) Opening and Closing Lesson Skills (K1)

The skills of opening and closing stages consist of 9 components as follows: (a) Attracting attention due to the motivation and curiosity of students, (b) Choosing the right position, (c) Choosing learning activities according to the topic, (d) Using tools correctly, (e) perform various interactions, (f). Delivering learning indicators, (g) Linking between lessons, (h) Reviewing student-made summaries and (i) Providing reinforcement (giving homework, assignments, future plans).

The student assessment data in Opening and Closing Stage can be seen in the diagram below.

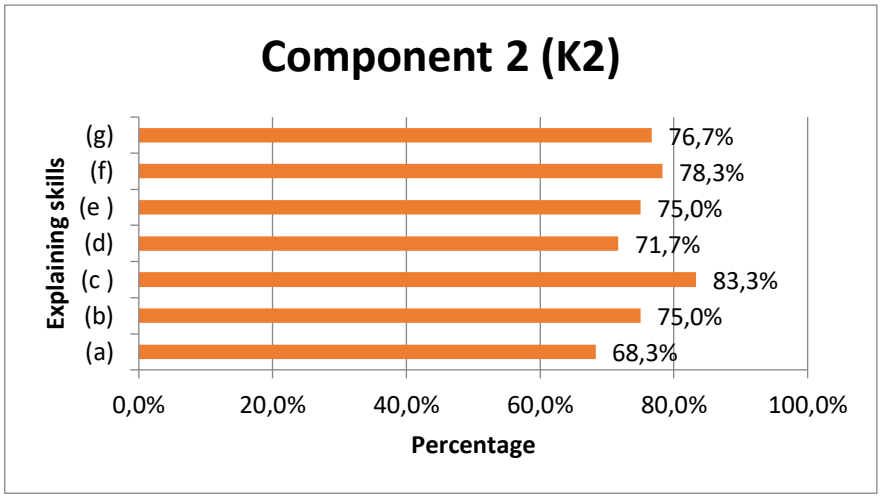


Picture 5. The Ability to open and close lesson percentage

Based on the diagram above, it can be seen that attracting attention component raises the motivation and curiosity of students are recognized by 71.7%, choosing the right position are recognized by 75.0%, choosing learning activities according to the topic are recognized by 83.3%, using tools correctly are recognized by 78.3%, conducting various interactions are recognized by 76.7%, delivering learning indicators are recognized by 73.3%, linking between lessons 78.3%, reviewing summaries made by students by 80.0%, and providing reinforcement or delivering affirmation (giving homework, Assignments, future plans) are recognized by 90.0%. Based on the results above, it can be seen that in the 3rd and 9th components, namely choosing learning activities according to the topic, with an average score of 83.3% and delivering affirmation (giving homework, assignments, upcoming plans with an average score) by 90.0% in average. According to the criteria set, the ability to open the learning by prospective teacher-students is in a good category, with an average score percentage of K1 is 78.5%.

b) Explaining skill (K2)

The skill consists of 7 components, namely: (a) Shows the serving structure, (b) Using effective sentences, (c) Providing relevant examples, (d) Using aids , (e) Using variations of intonation, (f) Asking questions to explore the understanding of students, and (g) Providing feedback. The results of the assessment data can be seen clearly in the diagram below.

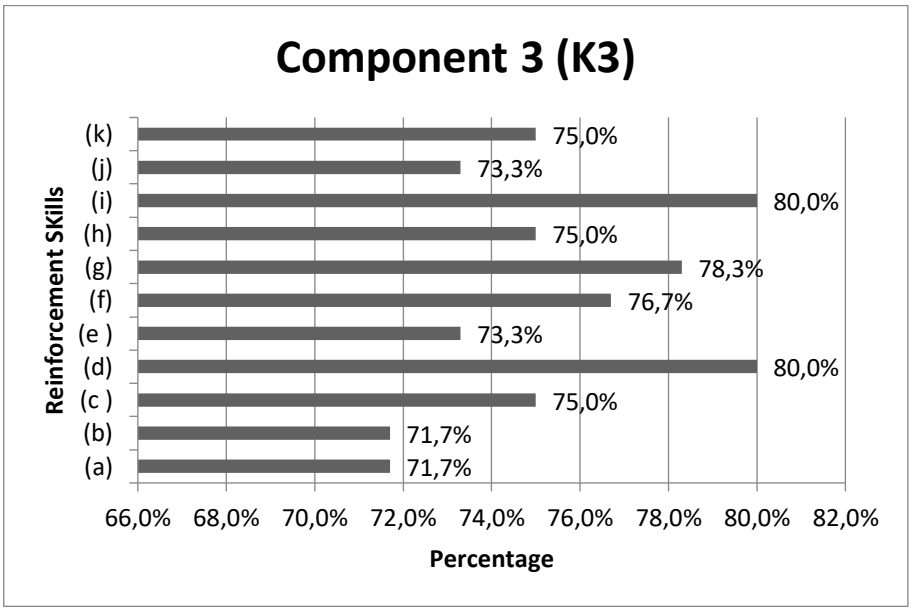


Picture 6. Explaining skill percentage

Based on the diagram above, it can be seen that: (a) Shows the serving structure which are recognized by 68.3%, (b) Using effective sentences are recognized by by 75.0%, (c) Providing relevant examples are recognized by by 83.3%, (d) tools assistance by 71.7%, (e) Using 75.0% intonation variations, (f) Asking questions to explore students' understanding of 78.3%, and (g) Providing feedback by 76.7%. In particular, the 3rd component, which is providing relevant examples, with an average score of 83.3% is in the very good category. Overall, it can be seen that the explanation skills performed by the prospective teachers with the acquisition of an average score percentage of 75.5%. are in a good category.

c) Reinforcement skills (K3)

Reinforcement Skills consist of 11 components as follows: (a) Provide verbal reinforcement, (b) Provide reinforcement in the form of mimicry, (c) provide reinforcement for body movements, (d) Provide reinforcement by approachment (e) Provide reinforcement in the form of objects or symbols, (f) Gives strength to a group of students, (g) Gives strength to particular individual, (h) Gives immediate reinforcement, (i) show joy and enthusiasm, (j) Gives meaningful reinforcement, and (k) avoid a negative response. The details can be seen in the diagram below.



Picture 7. Reinforcement skill Percentage

The diagram shows that: (a) Provide verbal reinforcement by 71,7%, (b) Provide reinforcement in the form of mimicry by 71,7%, (c) provide reinforcement for body movements by 75,0%, (d) Provide reinforcement by approaching by 80,0%, (e) Provide reinforcement in the form of objects or symbols by 73,3%, (f) Gives strength to a group of students by 76,7%, (g) Gives strength to particular individual by 78,3%, (h) Gives immediate reinforcement by 75,0%, (i) show joy and enthusiasm by 80,0%, (j) Gives meaningful reinforcement by 73,3%, and (k) avoid a negative response by 75%.

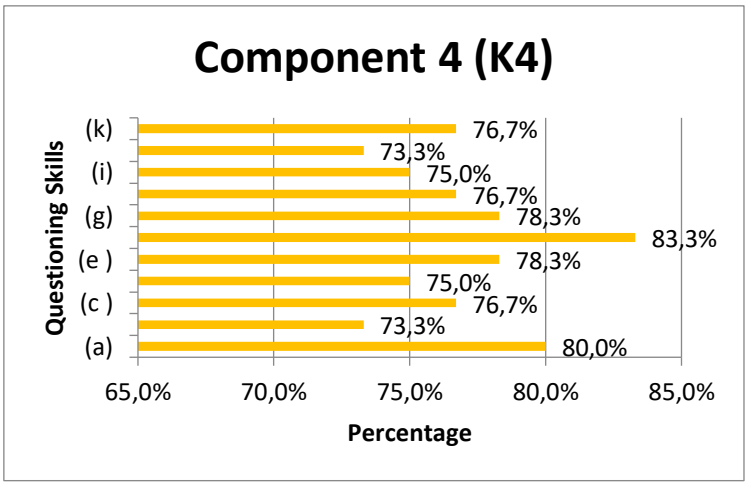
Based on the data above, it can be seen that the Skills in Giving Reinforcement carried out by prospective teacher students with an average score percentage of 75.5% are in a good category.

d) Questioning skills (K4)

Asking questions well shows good teaching. The results showed that in general, teachers did not succeed in using effective questioning techniques. Questioning skills are important if it is connected with the opinion that says "thinking itself is asking".

Questioning skills, for a student, is a very important skill to master. Why? Because through these skills, students can create a more meaningful learning atmosphere. You can feel learning will be very boring, as for hours the teacher explains the subject matter without being interspersed with questions, either just prompting questions, or questions to invite students to participate. Therefore, in every learning process, any learning model used is an activity that is always an inseparable part. Experts believe that good questions have a positive impact on students such as 1) increasing students' full participation in the learning process. 2) improve students' thinking skills, because thinking itself is essentially asking. 3) arouse students' curiosity, and lead students to determine answers. 4) Focusing students on the problem being discussed.

Student Questioning skills consist of 11 components as follows: (a) Expressing questions clearly and verbally, (b) Expressing questions in other ways, (c) Focusing students' attention, (d) Changing turns, (e) Spreading questions to students (individuals), (f) Spread to all students, (g) Respond to students, (h) Give time to think, (i) Train students to ask questions, (j) Ask questions in stages, (k)) Encourage interaction between students. The assessment data can be seen in the diagram below



Picture 8. Questioning skills Percentage

Based on the diagram above, it can be seen that: (a) Expressing questions clearly and briefly verbally is 80.0% (b) Expressing questions in other ways is 73.3%, (c) Focusing students' attention is 76.7%, (d) Transferring turns by 75.0%,

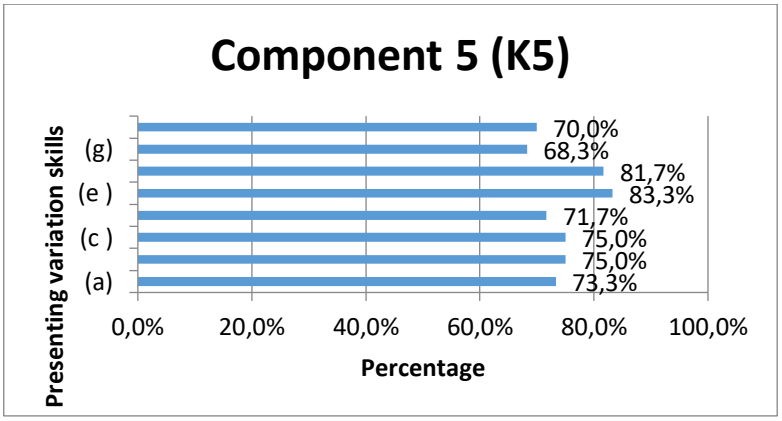
(e) Distributing questions to students (individuals) by 78.3%, (f) Distributing questions to all students by 83.3%, (g) Responding to students by 78 ,3%, (h) Provide thinking time of 76.7%, (i) Train students to ask 75.0%, (j) Ask questions in stages by 73.3% (k) Encourage interaction between participants students by 76.7%. The 6th component, which is distributing questions to all students, with an average score of 83.3%, is in the very good category. Overall, the activities carried out by prospective teacher students were obtained with an average score percentage of 77.0% is in a good category.

e) Presenting Variation skills (K5)

The skill of presenting variations in teaching is a process of change in learning that aims to eliminate dullness and boredom and change the mood of students in the learning process to accept teaching materials provided by the teacher and focus students' attention so that students can always be active and focused in the learning process. This variation skill can also be used for the use of other teaching skills, such as using questioning skills, giving reinforcement, explaining, and so on.

The skill of presenting variations consists of 8 components as follows: (a) variations in teaching style, (b) using variations of intonation, (c) making changes in movement/mimicking, (d) giving quiet time in speaking, (e) gazing at all students, (f) emphasize important points of teaching, (g) use a variety of teaching tools, (h) use a variety of interaction patterns in learning.

Based on the assessment obtained: (a) variation in teaching style by 73.3%, (b) uses intonation variation by 75.0%, (c) making movement or expression changes by 75.0%, (d) giving quiet time in speaking by 71.7%, (e) Gazing at all students by 83.3%, (f) emphasizing important teaching points by 81.7%, (g) using a variety of aids by 68.3 %, (h) using variations in interaction patterns in learning by 70.0%



Picture 9. Presenting Variation Skills Percentage

Based on the data above, it can be seen that the training skills carried out by prospective teacher students are in a good category, with an average score percentage of 74.8%. The stands out component is the 5th component, which is gazing a glance at all students, with an average score of 83.3% being in the very good category.

In the skill of presenting variations, the student practice is able to create a lot of innovative learning, for example by not always learning through tables and chairs but can sit on the floor while practicing, besides that students are also able to overcome obstacles when the class is not conducive, so students try to take over completely to create a conducive learning atmosphere.

The concept of a class taught by small groups that are used as an example in this program makes the students seem to be calm and focused in managing the class.

This can be seen when students practice doing the second one because they have already passed the first practice so that the discomfort can be handled optimally. Each student's methods and strategies are different, they need to prepare the right strategy and reserve other strategies in order to adapt to the classroom situation during practicing.

The pattern of interaction between teachers and students in teaching and learning activities has a very diverse pattern. Starting from activities that are dominated by teachers to independent activities carried out by students. This depends on the skills of the teacher in managing teaching and learning activities. The use of variations in teacher-student and student-student interaction patterns so that learning activities do not cause dullness and boredom. Then, the class atmosphere is lively.

e. The final observation Result

In the final observation sheet, there are 5 questions with an open answer model. It aims to determine student understanding after practicing Microteaching teaching.

1) Students master the material being taught

The opinions given by students are as follows: 1) students are less able to absorb the material being taught well, because the delivery of the material is too fast, 2) Not all students can really understand the material being taught, because some students are sometimes confused with the material presented. 3) Not all students can solve the questions given because students are still confused about using the right formula to work on the questions, 4) Not all students understand the material given. They want to actively ask, but there are also those who don't ask.

If there are students who do not understand the material given by the prospective teacher, then what is the solution? Based on the questions above, students are asked to state their opinions, including 1) the cause of students not being able to learn well is the delivery of material that is too fast. Moreover, the grasping ability of students is different. There are some students who have slower grasping ability than others so when students are unable to take part in learning (left behind) sometimes it makes students become lazier to follow the lesson. The solution to overcome this problem is that the teacher should communicate more with students individually on material that is still not reached. In addition, the teacher can also create a study group that contains students who are responsive and left behind. By doing this, it is hoped that students who are left behind can discuss material that is not yet comprehended by discussing it with their peers. 2) The reason is that the material explained is considered by students to be difficult so students cannot follow the lesson well. For this, the alternative solutions is to change students' mindsets so that they are not afraid of the material being taught. 3) The cause of students not learning well is because students have already thought that the material being taught is relatively difficult so students cannot learn well. The alternative that can be done is to understand and motivate students that the material being taught is not difficult so that they are also able to master the material, 4) students lack learning and willingness to learn, and other contributing factors that is the use of cell phones for learning activities, social media use such as Instagram, Tik Tok, and Facebook. Solution: the teacher must provide motivation and enthusiasm that students are capable, and teachers observe whether the use of cell phones is appropriate during the lesson or even if necessary, cell phones are collected. This way, if students have difficulty, they can ask directly to the teacher then students become more active. 5) students are less interested in learning, as well as curiosity about mathematics. Students find mathematics difficult. The alternative solution is to always do exercises and give appreciation so that they are excited.

2) Students are interested in the use of media

With the pandemic situation, there are not many choices of learning media that can be used. So the opinions are as follows: 1) the media used is not interesting, because it only uses the blackboard and worksheets while students are lazy to take notes, 2) students are interested because the media used is easy to understand.

3) The learning objectives set achieved

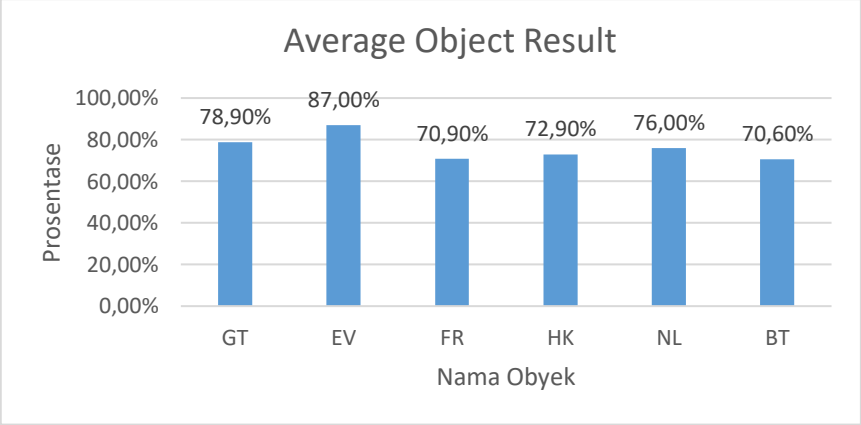
To find out whether the conducted learning can achieve the objective set? Not an easy situation. The opinions given by students are as follows: 1) students can follow and answer well and get scores above the standard (KKM), 2) learning objectives can be achieved because students can master the material presented, and students are also able to use the right formula and to analyse the exercise. 4) The learning objectives have not been maximized because only some are happy with mathematics which can be seen from only some students paying attention to the teacher.

2. Discussion of Research Result

a. Analysis of Microteaching Learning Implementation

Of the 9 basic teaching skills components, this study focused on 5 components, namely: 1) Opening and closing lessons (K1), 2) Explaining skills (K2), 3) Reinforcement skills (K3), 4) Questioning skills (K4), 5) Variation skills (K5) which are collected and reduced to make it easier for researchers to find data that has been obtained when needed. Considering that this research is descriptive, the data analysis technique used is a qualitative descriptive technique with percentages. In the diagram below is a complete presentation of the data that has been processed.

b. Data Presentation for each object



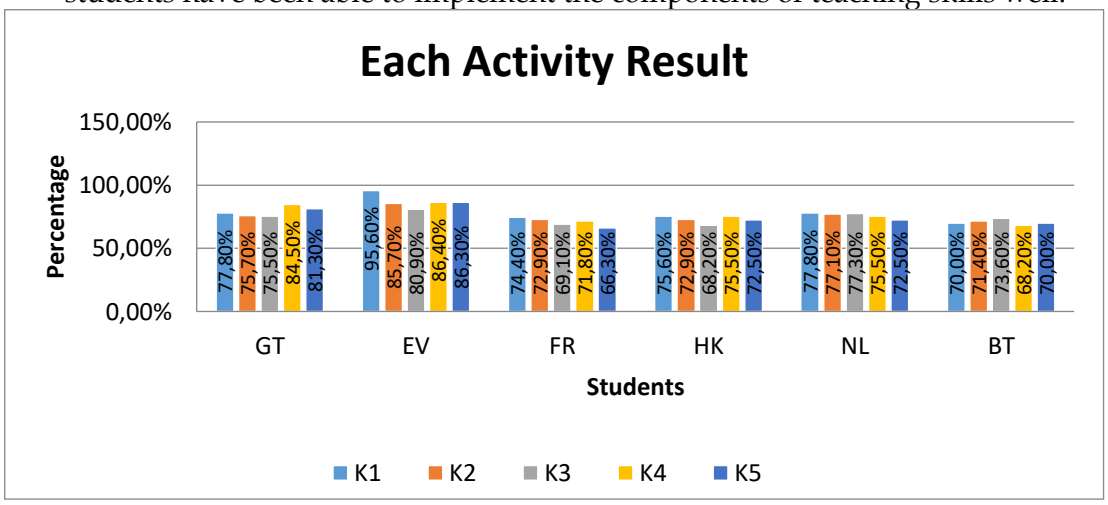
Picture 9. Data Presentation for each object

In the diagram above, it can be seen that the average score for each research object is GT of 78.90% (Good), EV of 87.00% (Very good), FR of 70.90% (Good), HK of 72.90% (Good), NL of 76.00% (Good) and BT of 70.60% (good) so that the overall average of activities is 76.1% in a good category. This can be seen from the 6 research objects, there are 5 objects that are in the good category and 1 person who is in the very good category, namely EV. From this data, it can be concluded that all research objects have been able to carry out microteaching activities well. This activity is very important because it can see the ability of students in teaching small classes. This experience will then become a provision for carrying out practical teaching activities (Field Practice/PPL) in partner schools. In line with the statement which states that teaching simulation is a student teaching and learning activity in groups in a room (microteaching) to develop student's talents and abilities and skills in carrying out learning activities before going directly to the real world at school, (Ardi, 2014). Based on these results, it can be said that

students are ready to be deployed in the real world (partner schools) to carry out PPL.

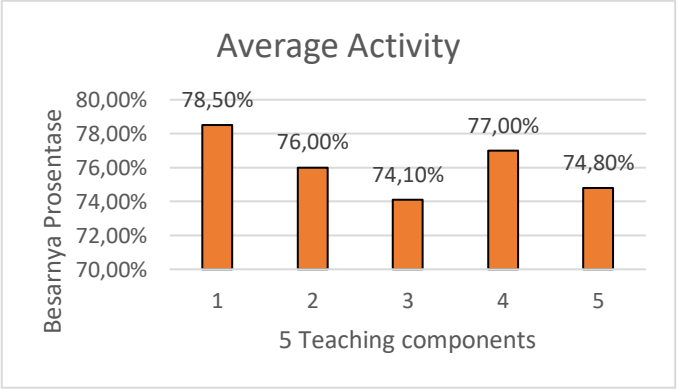
c. Data Presentation on each activity

There are 6 objects studied in this research. In the diagram below, it can be seen that each activity carried out by each object is well delivered, none of which is in the less category. Some things that need to be observed are the FR object, the K5 component only got 66.3%, the HK object in the K3 component got 68.2%, and the BT in K4 got 68.2%, those are the percentage at the lower limit for a good category. Although there are EV students who get a high score of 95.6%. It can be said that students have been able to implement the components of teaching skills well.



Picture 10. Each Activity Data Percentage

d. Data Presentation of Each 5 Components of Basic Teaching Skills



Pciture 11. 5 Basic Component skills Data Percentage

In the diagram above, it can be seen that the average score for each component namely opening and closing lessons skill (K1) by 78.50%, 2) explaining skill (K2) by 76.00, 3) providing reinforcement skill (K3) of 74,10%, 4) questioning skill (K4) of 77.00, and 5) giving variation skill (K5) of 74.80% so that the overall average of the activities is in a good category by 76,1%.

Overall, the activities of students in the Mathematics Education Study Program at UNIPA Blitar Campus regarding the Implementation of Microteaching Learning in the teaching skills practice for prospective teachers in the 5 main components of Basic Teaching skills have a total average of 76.1%, which is included in a good category. However, the mastery of 5 basic teaching skills still needs to be improved so that it is in a very good category. If so, it can be interpreted that students are ready to carry out PPL activities at partner schools.

CONCLUSION

Mastery of student characteristics by students of the Mathematics Education Study Program, Blitar Campus, is categorized as good. This shows that the pedagogic competence of students of the Mathematics Education Study Program UNIPA Campus Blitar regarding the mastery of students' characteristics in learning activities at school is categorized as good. The ability of teachers to manage learning, at least includes understanding student character, mastery of educational theories and learning principles, curriculum/syllabus development, educational and dialogical learning implementation, communication with students, and assessment and evaluation.

Mastery of learning theory and educational learning principles means that a teacher or teacher candidate must be able to determine various approaches, strategies, methods, and learning techniques that educate creatively in accordance with teacher competency standards. Teachers must also be able to adapt learning methods according to the characteristics of students and motivate them to learn.

This microteaching makes students ready to take part in the Field Practice Program and makes students more proficient in teaching. Based on the research results, the benefits of this Microteaching course are included in the good category. This is also supported by the results of observations which state that "the benefits obtained after taking Microteaching courses are that students can learn to become a teacher or teacher candidate before the student goes directly to school".

ACKNOWLEDGMENTS

This research are especially addressed to Directorate of Research, Technology and Community Service, Directorate General of Higher Education, Research and Technology, Ministry of Education, Culture, Research and Technology, Rector of PGRI Adi Buana University,Operational Director of PGRI Adi Buana University Blitar, Head of the Mathematics Education Study Program of Adi Buana University Blitar

REFERENCES

Agus R, A. H. (2015). Strategi Pengelolaan Kelas dalam Proses Pembelajaran. *Jurnal Pendidikan Pedagogik*.

Ardi, M. (2014). Pelaksanaan Pembelajaran Micro Teaching bagi Mahasiswa Program Studi PPKn STKIP-PGRI Pontianak. *Jurnal Edukasi*.

Arifin, A., & Gultom, U. A. (2016). Lesson Study: Peningkatan Kompetensi Pedagogik Mahasiswa Praktik Pengalaman Lapangan (PPL) di SMP Kota Tarakan. *Journal of Educational Science and Technology (EST)*, *2*(3), 185–203. https://doi.org/10.26858/EST.V2I3.3217

Arikunto, S. (2010). *Prosedur Penelitian Suatu Pendekatan Praktek*. Rineka Cipta.

Frasetyana, A. D., Sujadi, I., & Kusmayadi, T. A. (2015). *Analisis Keterampilan Dasar Mengajar Mahasiswa Pendidikan Matematika dalam Pembelajaran Mikro*. Jurnal Elektronik Pembelajaran Matematika. https://jurnal.uns.ac.id/jpm/article/view/10674

Gazali, R. Y. (2016). Pembelajaran Matematika yang Bermakna. *Jurnal Pendidikan Matematika*, *2*(3).

Pamela, I. S., Chan, F., Yantoro, Fauzia, V., Susanti, E. P., Frimals, A., & Rahmat, O. (2019). Keterampilan Guru dalam Mengelola Kelas. *Edustream: Jurnal Pendidikan Dasar*.

Peter, & Sudjana. (2009). *Dasar-dasar Proses Belajar Mengajar*. Sinar Baru Algesindo.

Rhamayanti, Y. (2018). Pentingnya Keterampilan Dasar Mengajar bagi Mahasiswa Praktek Pengalaman Lapangan (PPL) Prodi Pendidikan Matematika. *EKSAKTA Jurnal Penelitian Dan Pembelajaran MIPA*.

Robiah, S. (2015). Analysis of Prospective Teacher in Trouble Mastering Basic Skills

Teaching. *Biogenesis*, *11*(2), 99–104. https://doi.org/10.31258/BIOGENESIS.11.2.99-104

Salsabila, A., & Pupitasari. (2020). Faktor-Faktor yang Mempengaruhi Prestasi Belajar Siswa Sekolah Dasar. *Jurnal Pendidikan Dan Dakwah*, *2*, 278–288. https://ejournal.stitpn.ac.id/index.php/pandawa

Syafi'i, M. (2014). *Implikasi Pembelajaran Mikro dalam Pengembangan Keterampilan Mengajar di Madrasah*. Religi: Jurnal Studi Islam. https://www.journal.unipdu.ac.id/index.php/religi/article/view/422

Tim. (2019). *Pedoman Mikroteaching UNIPA Kampus Blitar*. UNIPA Kampus Blitar.

Usman, M. U. (2010). *Menjadi Guru Profesional*. Remaja Rosdakarya.