

Analysis Of Basic Teaching Skills Of A Prospective Math Teacher

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Abstract. The prospective teacher's skills in teaching will determine what his teaching skills will be like when he becomes a teacher. This study aims to identify the basic teaching skills shown by a prospective teacher when carrying out teaching practice in the Micro Teaching course. This study uses a qualitative approach. The research subject was 1 prospective mathematics teacher who was carrying out teaching practice in Microteaching courses in the second semester of the 2021/2022 academic year. Data was collected through teaching practice video studies, interviews, and documentation. Data were analyzed using the Miles and Huberman interactive model. The identification of basic teaching skills is guided by a theory about basic teaching skills. Checking the validity of the data is done by technical triangulation. The results showed that the subject 1) did not demonstrate questioning skills 2) demonstrated strengthening skills 3) demonstrated skills in variations in the form of variations in learning methods 4) demonstrated skills in explaining material, (5) demonstrated skills in opening and closing, 6) subjects did not practice small group discussions . 7) demonstrate classroom management skills, 8) demonstrate skills in organizing small group work.

Key words: basic teaching skills; prospective math teacher.

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INTRODUCTION

The education of prospective mathematics teachers has a very important role in preparing qualified prospective teachers. Prospective teachers who already have the knowledge, attitudes, and skills as teachers are expected to become qualified teachers. The teacher education curriculum aims to shape prospective teachers to become qualified teacher candidates. Having basic teaching skills is an absolute must for education students to be able to realize the definition of teacher competence contained in the Law on Teachers and Lecturers of the Republic of Indonesia (Amelia & Sthephani, 2022).

Sukirman explained that basic teaching skills (teaching skills) are special abilities (most specific instructional behaviors) that must be owned to carry out teaching tasks effectively, efficiently and professionally (Ismail, 2015). Basic teaching skills are teaching competencies in elaborating concepts related to learning materials with several fundamental skills (Dewi & Sumarjan, 2021). For prospective teachers, basic teaching skills are developed through several theoretical courses and several practical courses.

One of the practical courses that aim to develop basic teaching skills for prospective teachers is Micro Teaching. Microteaching teaching skills have a direct positive effect on teaching skills (Setiawan & Mulyati, 2018). The Micro Teaching course is expected to equip

educators with some basic skills for teaching and learning (Turmuzy & Kurniawan, 2021). Microteaching learning activities take place in the classroom with lectures, practice and simulation methods (Eldarni, 2017).

According to Sukirman, micro teaching is an approach or way to practice teaching performances that are carried out in a "micro" or simplified way (Welven Aida, 2019). The microteaching program alone is not enough to develop the teaching abilities of prospective teachers (Tuasikal et al., 2021) so that it is continued with internships in schools, namely Field Experience Practices. Microteaching courses are included in the pre-service teacher education program. According to Novitasari, pre-service education is the phase of preparing educational personnel to acquire the knowledge, skills, and attitudes needed before being assigned or serving (Turmuzy & Wahidaturrahmi, 2021).

There are several theories regarding basic teaching skills. The basic skills sequentially include eight, namely: (1) question skills, (2) reinforcement skills, (3) small group discussions skills, (4) explaining skills, (5) opening and close skills, (6) variation skills, (7) class management skills, and (8) skills of organizing small group work and individual work (Sugihartini et al., 2020). Basic teaching skills include opening and closing lessons, explaining, asking questions, providing reinforcement, using media, conducting variations, guiding

discussions, and managing classes (Dewi & Sumarjan, 2021). There are seven basic teaching skills, namely opening and closing learning skills, reinforcement skills, questioning skills, variation skills, class management skills, small discussion guiding skills, and lesson explaining skills (Ratnawati et al., 2021). Teaching skills include opening lesson skills, explaining skills (carrying out core activities), questioning skills, strengthening skills, variations skills, closing lessons skills, and lesson plan (Ambarawati, 2016)

There are similarities in the theories of these basic teaching skills. Based on this theory, the basic teaching abilities in this study refer to the theory presented by Sugihartini et al. These include (1) question skills, (2) reinforcement skills, (3) variation skills, (4) explaining skills, (5) opening and closing. skills, (6) small group discussions skills, (7) class management skills, and (8) skills of organizing small group work and individual work.

This study aims to identify the basic teaching skills shown by prospective teachers when teaching. This research is expected to provide

references related to the teaching skills of prospective teachers so that they can be considered in the preparation of teacher education programs.

METHODS

This study uses a qualitative approach with a descriptive type. The data is presented in the form of words that describe the basic teaching skills possessed by prospective teachers. Data collection was carried out in September 2022. The research subject is 1 prospective mathematics teacher who is carrying out microteaching. The data were collected through a study of teaching practice videos, documentation including lesson plans, and interviews to confirm and clarify the results of the assessment of teaching practice videos. The assessment is based on the basic teaching skills by Sugihartini et al, namely (1) question skills, (2) reinforcement skills, (3) variation skills, (4) explaining skills, (5) opening and closing. skills, (6) small group discussion skills, (7) class management skills, and (8) skills of organizing small group work and individual work with the following explanation:

Table 1. Keterampilan Dasar Mengajar (Sugihartini et al., 2020)

No	Basic Teaching Skills	Explanation
1	question skills	The teacher's ability to ask questions in the learning process to improve students' critical thinking skills and problem solving skills, includes the competence to ask questions, investigate questions, formulate high-level questions, and divergent questions.
2	reinforcement skills	all forms of response as part of the teacher's behavior modification towards students which aims to provide feedback on student actions or responses, including 1) giving verbal reciprocation and 2) non-verbal reinforcement
3	variation skills	Teacher actions to overcome student boredom, so that students always show perseverance, enthusiasm, and active participation, including variations in the form of teaching styles, use of media, variations in interaction patterns and variations in activities
4	explaining skills	Ability to present information orally in a systematic manner, regarding an object, fact, situation, and data in accordance with the time and the applicable laws and regulations; Good explaining skills include arranging sentences that are fluent, choosing the right words in relating the explanation to the student's context, clear initial statements, no irrelevant statements, and coherent sentence relationships.
5	opening and closing skills	Opening skills, namely teacher activities in preparing students to take part in learning, include opening skills including attracting students' attention, providing references and making connections. Closing learning skills are the teacher's ability to close lessons to end the main learning activities. The closing skills component of learning includes reviewing, evaluating, providing follow-up.
6	small group discussions skills	An organized process involving a group of students in optimal cooperative face-to-face interaction with the aim of obtaining various information or experiences in making decisions or

		solving a problem, including focusing attention, analyzing student views, correcting student descriptions, clarifying problems or order of opinions, distributing opportunities to participate, and close the discussion.
7	class management skills	Teacher skills in creating and maintaining an optimal learning atmosphere and efforts to restore it when problems and disturbances occur in the learning process, skills in creating and maintaining optimal learning conditions, skills in controlling optimal learning conditions (behavior modification). , group management/processes, finding and addressing behaviors that cause problems).
8	skills of organizing small group work and individual work	The teacher's actions in learning with three to eight people (in small groups), and one person for personality, include personal approach skills, skills to guide and train learning, organizational skills, and skills to plan and carry out learning activities.

Data were analyzed using the Miles and Huberman interactive model (Miles et al., 2014). Testing the validity of the data is carried out through technical triangulation.

RESULTS AND DISCUSSION

The results of the study refer to basic teaching skills including (1) question skills, (2) reinforcement skills, (3) variation skills, (4) explaining skills, (5) opening and close skills, (6) small group discussions skills, (7) class management skills, and (8) skills of organizing small group work and individual work.

In the first indicator, namely question skills, the subject asks several questions to students during teaching practice. The questions include "How are you, children?", X (name of a student), yesterday you were not present?", "Who is the class president in this class?", "Are you ready to study, children? ", "Understood, huh?". On the question "Are you ready to learn, children?" followed by an appeal to encourage students. rectangular. However, these questions do not meet the qualifications of questions intended for questioning skills. According to Nasution (Sugihartini et al., 2020) the expected asking skills are related to things that can develop critical thinking skills and problem solving skills .In the second indicator, namely reinforcement skills, the subject responds to student presentations by saying "Yes, that's right, give applause."

In the third indicator, namely skill variation, the subject uses a variety of learning methods. The method used by the subject is discussion, assignment, lecture, and presentation.

In the fourth indicator, namely the skill to explain the material, the subject mentions the

characteristics of the building structure, the type of building space, the nature of the spatial structure.

In the fifth indicator, namely showing opening and closing skills, the subject opens the lesson by greeting, asking for news, asking for readiness to take part in learning, giving an appeal so that students are excited, information about the material to be studied, apperception by asking students about the prerequisite material, namely the formula for the area of a square. length and square, and informs the teaching materials to be used.

The sixth indicator adalah small group discussion skills. This indicator cannot be measured because the subject does not practice the course of group discussions.

In the seventh indicator, the subject shows the skills of managing the class. Subject responds to the difficulties faced by students when using teaching materials provided by the teacher. The subject seemed able to divide attention to the students. During the learning process, the subject seemed to have no difficulty in focusing group attention. The subject is also able to give clear orders both when giving assignments and when students work in groups.

In the eighth indicator, namely showing skills in organizing small group work and individual work. Subjects carry out these things by forming groups, providing clear instructions for learning activities, providing rewards for students, providing information on why to use certain teaching materials. The individual work is not carried out specifically.

These results can be presented in the table as follows:

Table 2. Summary of Data Analysis Results

No	Basic Teaching Skills	Fulfilled or Not
1	question skills	-
2	reinforcement skills	√
3	variation skills	√
4	explaining skills	√
5	opening and closing skills	√
6	small group discussions skills	Not practiced
7	class management skills	√
8	skills of organizing small group work and individual work	√ Individual work is not practiced.

Based on the information from the lesson plan, it is known that the basic competence to be achieved in this practice is to distinguish and determine the surface area and volume of flat side shapes (cubes, blocks, prisms, and pyramids) with indicators namely making nets of cubes and blocks through concrete objects; find the derivative of the formula for the surface area of a cuboid and a cube, and calculate the surface area of a cuboid and cuboid.

These results indicate that it is necessary to carry out teaching practices that allow for an assessment of as many as eight basic teaching skills. In addition, especially in questioning skills, it is necessary to develop skills for the subject as a teacher candidate. Therefore, lecturers need to continue to train students to improve their teaching skills. Guidance, motivation, and monitoring are needed from lecturers so that students are ready to become teachers, continue to practice teaching practice so that they are ready to face Student Work Practices (Setiawan & Mulyati, 2018).

CONCLUSION

Based on the results of data analysis, it can be seen that the subject 1) The results showed that subject 1) belum menunjukkan keterampilan bertanya 2) demonstrate reinforcement skills 3) show variation skills in the form of variations in learning methods 4) demonstrate the skills to explain the material, (5) showing the skills of opening and closing, 6) the subject does not practice small group discussion. 7) demonstrate classroom management skills, 8) demonstrate skills in organizing small group work.

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