

Teaching Skills for Students in a Practical Teaching Microteaching Course

Kusmiyati*, I Wayan Merta

Biology Education Study Program, Faculty of Teacher Training and Education, University of Mataram, Mataram, Indonesia
*e-mail: kusmiyati.fkip@unram.ac.id

Received: October 6, 2025. Accepted: December 3, 2025. Published: December 11, 2025

Abstract: The Microteaching course trains students to understand basic teaching skills and apply them in teaching practice with fellow students. The purpose of this study was to determine students' explanation skills during teaching practice in the microteaching course. The study was conducted with Biology Education students enrolled in the Microteaching course, class A, during the 2024/2025 academic year. Data were collected using observation sheets during student teaching practice through peer teaching. The instrument used was derived from indicators' explanation skills, with answer choices on a 1-5 Likert scale. The data were analyzed descriptively by calculating the scores obtained by each indicator on the observed explanation skills, then 5 categories were created: very poor, less good, quite good, good, and very good. The results of observations on all observed explanation skills indicators showed that, on average, students were able to apply explanation skills in teaching practice in micro teaching courses with a good category. However, there were still students with very poor and poor presentations, with an emphasis on important points, and feedback indicators. It can be concluded that, on average, students were able to apply explanation skills in teaching practice; however, they still need to continue practising so that, later, when facing school field practice or when becoming real teachers in schools, they become accustomed to using these skills.

Keywords: Microteaching; Practical Teaching; Teaching skills.

Introduction

The learning process is an interaction between teachers and students aimed at achieving established goals. The learning process is closely tied to the teacher's ability to master the learning material and effectively convey it to students. The learning process requires teachers to master basic teaching skills and apply them effectively. [1] states that basic teaching skills relate to how teachers teach learning material to students.

The Micro Teaching course is a compulsory course for 6th-semester Biology Education students at FKIP, Mataram University, in the 2024/2025 academic year, as part of an effort to produce professional prospective teachers and prepare them for School Field Practice (PLP). According to [2], micro-teaching is an absolute requirement for a student to gain experience standing in front of a class and practising their ability to act as an educational administrator, both at school and outside of school.

The Micro Teaching course trains students to understand basic teaching skills and apply them in teaching practice with fellow students as their students. Students who master basic teaching skills effectively can package learning in a way that is both well-structured and engaging, thereby fostering enthusiasm for learning and improving student learning outcomes. According to [3], through micro-teaching, students can develop their own abilities, instil self-confidence and an open nature to criticism from others, as well as prepare them for teaching practice and solve

difficulties in teaching. [4] Micro teaching has a positive effect on teaching readiness.

Basic teaching skills should be practised in front of the class, not just memorized in theory. In the Micro Teaching course, students are trained to apply basic teaching skills in the classroom within a very limited time frame, typically around 30 minutes. This practice is the initial period for prospective teacher students to become familiar with the professional duties of teachers in the classroom. Before undertaking teaching practice, students are also trained to determine effective learning tools, ensuring that the learning experience is interesting, student-centred, and effective and efficient. According to [5], micro-teaching simulations provide direct experience in teaching, allowing students to practice explaining techniques in front of their peers while also improving their explanation skills, building self-confidence, and developing the ability to manage the class.

The discussion of basic skills in this paper is limited to explanation skills, while still prioritizing student-centered learning. [6] states that explanation skills become highly systematic as a form of providing explanations through communication, discussion, and critical thinking. The purpose of this study was to determine students' explanation skills in conducting teaching practice within a microteaching course.

How to Cite:

K. Kusmiyati and I. W. Merta, "Teaching Skills for Students in a Practical Teaching Microteaching Course", *J. Pijar.MIPA*, vol. 20, no. 7, pp. 1354-1357, Dec. 2025. <https://doi.org/10.29303/jpm.v20i7.8291>

Research Methods

The study was conducted in April-May 2025, on Biology Education students taking the Microteaching course, in class A of the 2024/2025 academic year. Data were collected through observations using observation sheets during student teaching practice, including peer teaching. The instrument used was derived from the Explanation Skills Indicator [7], with Likert scale answer choices ranging from 1 (very poor) to 5 (very good). The data was analyzed descriptively, by calculating the scores obtained by each indicator on the observed explanation skills aspect, then looking for the average and making 5 categories, namely 1 = very poor, 2 = less good, 3 = quite good, 4 = good, and 5 = very good [8].

Results and Discussion

Observations of students' explanation skills revealed that the majority (48%) fell into the good category, with no students classified as very poor or poor (Table 1). The average student score also showed a good category, indicating that the average student was able to apply explanation skills in their teaching practice. Prospective teacher students in the good category already possessed the ability to master the material and delivery methods. The methods and media selected were appropriate for the characteristics of the material and the students, resulting in effective and efficient learning. However, students still needed to improve to the very good category. The skill of explaining is a teaching activity that cannot be avoided by teachers or prospective teachers; even though the learning is centered on students, the teacher's skills in giving explanations must be continuously trained. As [9] argues, teachers as instructors need to understand the knowledge that will be their responsibility as deeply as possible and master teaching methods and techniques effectively. [10] adds, in the learning process, there needs to be a learning model that can influence student understanding.

Table 1 also shows that students still need to continue practising, considering that 28% of students are still in the fairly good category. Students in this category have created lesson plans and explanations of the material quite well, delivered the material in clear sentences, but sometimes stutter. They still often use words like "uh" or "mmm" and remain fixated on the lesson plan or summary of the material. The method selection is still not suitable for the material's characteristics, and the selection of learning strategies also still requires further practice. The provision of examples is appropriate to the material presented, but the provision of pressure and feedback is still lacking, still requiring continued practice and improvement. Providing explanations is a crucial aspect of a teacher's interactions with students in the classroom, although all components of basic teaching skills are interrelated to facilitate the learning process. As [11] argues, well-planned information delivery presented in a suitable sequence is a key characteristic of explanation activities.

Table 1. Number and Percentage of Students in Explanation Skills,

Category	Frequency	Percentage (%)
Fairly good	7	28
Good	12	48
Very good	6	24
Total	25	100

When viewed from each indicator, the clarity indicator shows that most students are in the good category, with no students in the very poor or poor categories (Table 2). This indicates that most students have provided explanations using clear sentences, in accordance with the clarity indicator components, speaking fluently and avoiding convoluted language. Most students do not use excessive and doubtful words, such as "maybe," "if I'm not mistaken," and so on. However, they still occasionally refer to the lesson plan that was prepared. Therefore, this group also still needs a lot of practice to improve their abilities to a very good category. The sentences used are well-written, and the examples provided are also relevant to the material and everyday life. According to [12], the mastery of explanation skills demonstrated by teachers enables students to gain a solid understanding of the problem being explained, while also increasing student engagement in learning activities. [13] added that good explanation skills are demonstrated by clear statements, good sentence structure with appropriate words according to student characteristics, and coherent relationships between sentences.

Table 2 also indicates that 28% of students fall into the fairly good category. Students in this category often still use the word "uh-uh" when explaining, lack confidence by frequently referring to the lesson plan or summary of the material prepared, and become convoluted when explaining how to complete student worksheets. Students in this category still need to continue practising to master explanation skills very well. [14] states that microteaching is a training method designed to prepare students to master teaching competencies, enabling them to carry out their duties and responsibilities as professional teachers. [15] It notes that microteaching offers training in teaching that aligns with fundamental aspects of teaching skills.

In the example use indicator, students ranked as fairly good, good, and very good were almost equally distributed; only 36% of students in the fairly good category were one level higher than those ranked as good and very good (Table 2). Students have used examples in providing explanations, but many still choose examples that are less relevant to everyday life and student abilities. Therefore, students in the fairly good and good categories still need to continue practising and improving their ranking to achieve a very good one, so that learning becomes meaningful. As stated by [16], the definition with examples is a systematic form of explanation.

In the presentation indicator, there are still students in the very poor and poor categories, 4% each (Table 2). Students in this category have not fully mastered the

delivery of the material has not been fully mastered, the presentation structure is less systematic, does not provide an overview of important things, and the presentation is not in accordance with the order of the material, which should be from easy to difficult, so that when explaining, it is still less understandable. The chosen method is less suitable for the material, as it relies heavily on games; however, the implementation is less effective, focusing primarily on core activities such as ice-breaking games. To become a professional teacher, it is not enough to simply master the material; one must also possess skills related to learning. [17] Inappropriate delivery of information can lead to poor student learning outcomes.

The percentage of students in the presentation indicator is highest in the good category (40%). Students in this category have presented according to the presentation components, but the order of the material is not from easy to difficult. Likewise, for the fairly good category, the presentation is still not systematic, and the order of delivery is not from easy to difficult. Therefore, students in categories other than 'very good' must continue to practice to move up to the 'very good' category. Students should be able to use standard presentation steps and stages to achieve learning objectives optimally. Additionally, components related to the learning process are prepared as thoroughly as possible, ensuring that learning can occur according to the established plan. [18] states that when a teacher explains, it means the teacher provides information in such a way that students truly understand and comprehend what the teacher is conveying. [16] adds that explanation skills involve presenting information in a valid and detailed manner, systematically demonstrating cause and effect.

Table 2 shows that for the important emphasis indicator, most students are in the good category (46%), but

there are still students in the very poor and poor categories (4% each). This indicates that students still need to continue practising, emphasizing important points in their explanations to improve to the very good category. Students in the good category have emphasized important things when giving explanations, including explaining the completion of student worksheets, such as using intonation and facial expressions, but there is still less practice in repeating and making diagrams or explanations with pictures. [19] stated that explanation skills have a positive effect on student learning outcomes; if explanations are not done well, they will have an impact on student understanding. [20] added that explanation skills can support student understanding of material and assignments.

According to the feedback indicator (Table 2), a significant number of students are still ranked as very poor (4%), while the majority fall into the good category (52%). Students in the very poor category, when teaching, often fail to implement effective feedback components, such as not asking enough questions and not providing students with opportunities to ask questions. Students in the good category have implemented feedback components well, have provided opportunities to ask questions and raise questions, but still need to continue practising, because when asking questions, it is still not appropriate to their abilities and daily life. Explanation skills are essential for guiding students to be actively involved, enabling them to independently discuss, solve problems, and ask questions of teachers during the learning process [21-22]. Other research added that feedback helps students identify their strengths and areas that need improvement in explanation skills [23-25]. This feedback is crucial for the professional development of prospective teachers, as it offers an opportunity to enhance teaching practices in the future.

Table 2. Number (Σ) and Percentage (%) of Students for Each Indicator

Category	Indicator									
	Clarity		Use of Examples		Presentation		Emphasis of Important Points		Feedback	
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%
Very Poor	0	0	0	0	1	4	1	4	1	4
Poor	0	0	0	0	1	4	1	4	0	0
Fairly Good	7	28	9	36	7	28	9	36	4	16
Good	10	40	8	32	10	40	10	40	13	52
Very Good	8	32	8	32	6	24	4	16	7	28
Total	25	100	25	100	25	100	25	100	25	100

Conclusion

On average, students in the Biology Education Study Program, class A, semester 6, 2024/2025 academic year, were able to apply explanation skills in teaching practice in microteaching courses, with a good rating. However, there were still students with very poor and poor ratings on the indicators of presentation, emphasis, and feedback. In conclusion, the average student can apply explanation skills in teaching practice, but they still need to practice so that when they face field practice in schools or become actual teachers, they become accustomed to using these skills.

Author's Contribution

Kusmiyati: conceptualized and designed the study, conducted data collection and analysis, and drafted the manuscript. I. W. Merta: validated the results and revised the manuscript.

Acknowledgement

The authors would like to express their sincere gratitude to the Biology Education Study Program for academic support and facilitation during this study. Appreciation is also extended to the University of Mataram for providing institutional support and research facilities that contributed significantly to the completion of this work.

References

- [1] A. Arqam, "Kompetensi profesional guru: Keterampilan dasar mengajar," in *Jurnal Pegguruang: Conf. Ser.*, vol. 1, no. 2, pp. 1–8, 2019.
- [2] J. M. M. Asmani, *Pengenalan dan Pelaksanaan Lengkap Micro Teaching & Team Teaching*. Yogyakarta, Indonesia: Diva Press, 2010.
- [3] A. Sabri, *Strategi Belajar Mengajar dan Micro Teaching*. Jakarta, Indonesia: Quantum Teaching, 2005.
- [4] H. Mulyani, I. Purnamasari, and F. Rahmawati, "Analisis kesiapan mengajar program pengalaman lapangan mahasiswa pendidikan akuntansi melalui pembelajaran mikro," *J. Pendidik. Akunt. Keuangan*, vol. 7, no. 2, pp. 147–156, 2019, doi: 10.17509/jpak.v7i2.18086.
- [5] D. Wahyuni and E. Kurniawan, "Pengaruh simulasi micro teaching terhadap kepercayaan diri dan keterampilan mengelola kelas calon guru," *J. Pendidik. Terbuka dan Jarak Jauh*, vol. 6, no. 1, pp. 23–34, 2023.
- [6] A. Arrahim and A. P. Pratama, "Penerapan model pembelajaran Think Talk Write untuk meningkatkan kemampuan komunikasi matematis siswa sekolah dasar," *Pedagogik*, vol. 12, no. 1, pp. 20–27, 2024, doi: 10.33558/pedagogik.v12i1.8302.
- [7] Hasibuan and Moedjono, *Proses Belajar Mengajar*. Bandung, Indonesia: Remaja Rosdakarya, 2010.
- [8] S. Arikunto, *Prosedur Penelitian*. Jakarta, Indonesia: Rineka Cipta, 2014.
- [9] O. Hamalik, *Proses Belajar Mengajar*. Jakarta, Indonesia: Bumi Aksara, 2011.
- [10] A. Aningsih and S. P. Wolosah, "Model pembelajaran guided discovery learning untuk meningkatkan pemahaman konsep IPA siswa sekolah dasar," *Pedagogik*, vol. 8, no. 2, pp. 36–43, 2020, doi: 10.33558/pedagogik.v8i2.3179.
- [11] Rusman, *Model-Model Pembelajaran: Mengembangkan Profesionalisme Guru*. Jakarta, Indonesia: Rajawali Pers, 2011.
- [12] E. Mulyasa, *Menjadi Guru Profesional: Menciptakan Pembelajaran Kreatif dan Menyenangkan*. Bandung, Indonesia: Remaja Rosdakarya, 2015.
- [13] N. Sugihartini *et al.*, "Improving teaching ability with eight teaching skills," *Adv. Soc. Sci. Educ. Humanit. Res.*, vol. 394, pp. 306–310, 2020, doi: 10.2991/assehr.k.200115.050.
- [14] N. Hidayah, "Analisis kesiapan mahasiswa prodi pendidikan guru madrasah ibtidaiyah sebagai calon pendidik profesional," *Terampil*, vol. 5, no. 1, pp. 117–137, 2018, doi: 10.24042/terampil.v5i1.2936.
- [15] H. Irawati, "Analisis keterampilan dasar mengajar mahasiswa calon guru biologi di Pendidikan Biologi FKIP UAD," *Inkuiri*, vol. 9, no. 1, pp. 33–39, 2020, doi: 10.20961/inkuiri.v9i1.41378.
- [16] Y. Yulhaini, B. Bustanur, and Z. Zuhaini, "Analisis keterampilan menjelaskan (explaining skill) guru pada mata pelajaran PAI kelas X," *JOM FTK UNIKS*, vol. 4, no. 1, pp. 639–642, 2023.
- [17] K. Renggana, "Investigasi pengaruh disiplin kerja guru dan motivasi belajar siswa terhadap prestasi belajar," *Edum J.*, vol. 3, no. 1, pp. 19–28, 2020, doi: 10.31943/edumjournal.v3i1.61.
- [18] V. Rezanian, E. Z. Nuroh, and L. I. Mariyati, "Kemampuan cognitive apprenticeship sebagai bagian dari keterampilan dasar mengajar guru sekolah dasar," *Pedagogia*, vol. 9, no. 1, pp. 43–52, 2020, doi: 10.21070/pedagogia.v9i1.258.
- [19] U. Moonti and A. Bahsoan, "Pengaruh keterampilan menjelaskan guru terhadap hasil belajar siswa," *Jambura Econ. Educ. J.*, vol. 3, no. 1, pp. 1–7, 2021, doi: 10.37479/jeej.v3i1.8312.
- [20] I. Andriati and Z. Sesmiarni, "Analisis keterampilan mahasiswa Fakultas Tarbiyah dan Ilmu Keguruan IAIN Bukittinggi dalam menjelaskan materi pelajaran," *J. Visi Ilmu Pendidik.*, vol. 16, no. 1, pp. 52–65, 2024, doi: 10.26418/jvip.v16i1.75988.
- [21] U. Rosida *et al.*, "Pengaruh lama pengalaman mengajar terhadap keterampilan menjelaskan guru," *J. Integr. Harmoni Inov. Ilmu Sos.*, vol. 3, no. 6, pp. 636–640, 2023, doi: 10.17977/um063v3i6p636-640.
- [22] I. W. Merta, "Analysis of students' basic teaching skills on teaching practice of micro-teaching courses," *J. Pijar Mipa*, vol. 19, no. 2, pp. 235–239, 2024, doi: 10.29303/jpm.v19i2.6579.
- [23] B. Hartono *et al.*, "Peran umpan balik dan refleksi dalam pengembangan keterampilan mengajar calon guru," *J. Manaj. Pendidik.*, vol. 8, no. 2, pp. 90–101, 2023.
- [24] E. S. Puji, A. A. Sukarso, and I. W. Merta, "Application of contextual teaching and learning model to improve disposition and creative thinking skills of high school students," *J. Pijar Mipa*, vol. 19, no. 3, pp. 401–409, 2024, doi: 10.29303/jpm.v19i3.6551.
- [25] S. K. Amartyah and R. Rusmini, "Development of student worksheets with contextual teaching and learning (CTL) approach to train critical thinking skills responsibility of students on thermochemistry concepts," *J. Pijar Mipa*, vol. 17, no. 3, pp. 276–284, 2022, doi: 10.29303/jpm.v17i3.3452.