



Improving Classroom Management Skills Through Micro Teaching for Pre-Service Teachers of Vocational Schools

Dede Padilah¹; Ega Taqwali Berman^{2*}; Agus Solehudin³

^{1,2}Mechanical Engineering Education, Universitas Pendidikan Indonesia, Indonesia

³Chemical Engineering, Universitas Pendidikan Indonesia, Indonesia

^{2*}Corresponding Email: egatb@upi.edu, Phone Number: 0857 xxxx xxxx

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Abstract: Classroom management is vital for fostering productive learning environments. As a leading teacher-training institution, Universitas Pendidikan Indonesia (UPI) employs microteaching to equip students with pedagogical skills. This qualitative case study examines how microteaching enhances classroom management competencies among six Mechanical Engineering Education students, preparing them for the Program Penguatan Profesional Kependidikan (P3K). Data were collected through interviews on microteaching implementation, classroom management practices, and observations of teaching sessions. Supporting documentation and triangulation ensured validity. Analysis followed stages of reduction, presentation, and conclusion. Findings indicate that structured microteaching significantly improves classroom management abilities, evident in students' enhanced performance during school-based teaching. The program's procedural adherence enables participants to refine lesson delivery, behavioural management, and instructional adaptability. Practical experience through microteaching not only bridges theoretical knowledge with real-world application but also builds confidence and readiness for first aid challenges. Thus, microteaching is a critical preparatory tool, equipping future educators with the skills to navigate dynamic classroom settings and meet professional demands. These outcomes underscore the value of experiential training in teacher education, positioning UPI's approach as a model for cultivating adaptable, classroom-ready educators.

Abstrak: Mengelola kelas berperan penting dalam menciptakan suasana belajar yang efektif dan produktif. Sebagai lembaga pencetak calon guru, Universitas Pendidikan Indonesia (UPI) membekali mahasiswa melalui berbagai program, yaitu salah satunya *micro teaching*. Tujuan penelitian untuk memperoleh gambaran pelaksanaan *micro teaching* dalam meningkatkan keterampilan mengelola kelas untuk mempersiapkan mahasiswa mengikuti Program Penguatan Profesional Kependidikan (P3K). Metode penelitian ini menggunakan metode kualitatif dengan pendekatan studi kasus. Partisipan penelitian 6 mahasiswa Pendidikan Teknik Mesin UPI. Teknik pengumpulan data dengan wawancara kepada informan mengenai pelaksanaan *micro teaching* dan mengelola kelas ketika P3K. Observasi dilakukan kepada informan yang sedang mengajar di sekolah. Dokumentasi dilakukan dengan mengumpulkan dokumen yang mendukung penelitian. Keabsahan data dengan triangulasi yaitu triangulasi teknik. Analisis data meliputi reduksi data, penyajian data serta penarikan kesimpulan dan verifikasi. Hasil penelitian menunjukkan bahwa *micro teaching* yang dilaksanakan sesuai prosedur dapat meningkatkan keterampilan mahasiswa dalam mengelola kelas, yang terlihat dari peningkatan kemampuan mahasiswa saat mengajar di sekolah. *Micro teaching* berperan penting dalam mempersiapkan mahasiswa untuk menghadapi tantangan di dunia pendidikan. Selain itu, pengalaman praktik melalui *micro teaching* membantu mahasiswa lebih siap menghadapi tantangan nyata ketika mengajar kelas.

A. Introduction

Education is important in shaping quality human resources, including mastery of knowledge and practical skills and forming positive attitudes and characters (Sulaeman et al., 2024). In the formal education system, the learning process in the classroom is the central core of educational activities because it is where direct interaction between teachers and students occurs intensively. The success of education is highly dependent on how learning is carried out, in terms of planning, implementation, and evaluation carried out in a structured and directed manner (Wulandari & Maulidin, 2024). Teachers have a very complex role; they act not only as material deliverers but also as facilitators, motivators, and managers of the learning atmosphere (Mea, 2024). One of the important tasks of teachers is to create a conducive learning environment, namely a classroom atmosphere that is orderly, comfortable, and supports active student involvement. This conducive learning atmosphere significantly affects how much students can concentrate, understand the subject matter, and follow the learning flow well. In other words, the teacher's success in managing the class will determine the achievement of learning objectives. Without a well-controlled and organized classroom, the teaching and learning process becomes ineffective, as students are prone to distraction, boredom, and even loss of interest in learning.

Classroom management is important for educators to build a conducive learning atmosphere and support optimal learning outcomes (Kesawan et al., 2025). Classroom management is important because of its role in organizing and conditioning students during learning activities. No matter how brilliant or good the teacher is at delivering learning materials, if the classroom conditions cannot be adequately organized, the teacher will also have difficulty providing meaningful learning experiences to students (Mustafida, 2021). Managing a diverse classroom is challenging for prospective educators, considering that each student brings a unique background, character, and learning style together in the same classroom. This creates significant challenges for prospective teachers who must be able to manage diverse classes effectively. The demand to create an inclusive learning environment that supports the growth of all students makes classroom management skills one of the crucial aspects of education. Therefore, educational institutions need to prepare students with good classroom management skills before prospective teachers join the field to teach.

Universitas Pendidikan Indonesia is an educational institution that prepares its graduates to become educators. One of the methods commonly used to prepare student teachers is *microteaching*. *Micro teaching* is a training method designed in such a way as to improve prospective teachers' teaching skills and develop teachers' professional experience, especially teaching skills, by simplifying or minimizing aspects of learning such as the number of students, time, focus of teaching materials and limiting the application of specific teaching skills, so that teachers can know the strengths and weaknesses of the teacher accurately (Damanik et al., 2021). Practice teaching practices in a laboratory situation, so through *micro-teaching*, prospective teachers or teachers can practice various teaching skills in controlled conditions to improve their competence (Nasution et al., 2023).

Previous research has researched *micro-teaching*. Kimaro et al (2021) showed that *micro-learning* helps prospective teachers acquire the skills needed to become professional teachers. Then Popat (2020) argues that *micro-teaching* contributes to improving competence; besides that, it also contributes to improving teachers' attitudes and perceptions of professional teacher teaching. Other researchers, namely Solichah et al (2024), show that *microteaching's* role in improving prospective educators' teaching skills is vital because this method provides opportunities for prospective educators to practice teaching on a small scale with immediate feedback. Through *microteaching*, prospective educators can hone communication skills, classroom management, and selection of appropriate strategies and materials. Research from Sihite et al (2024) suggests that *micro-teaching* effectively equips prospective educators with more mature and professional teaching skills. Lukitasari et al (2021) suggested that *micro-teaching* effectively improves prospective biology teachers' ability to design lesson plans and develop teaching skills. Although *microteaching* has been proven effective in improving teaching skills, research highlighting its role in certain aspects, such as the ability to manage a class, is still limited. This is an important concern, given that the increasingly dynamic and complex development of the world of education requires teachers to have more than just the ability to deliver learning materials. Today's teachers are expected to proactively manage the classroom, create a conducive learning environment, and adapt to the needs and characteristics of diverse learners.

Based on the results of interviews on September 13 and 18, 2024, with three Mechanical Engineering Education students who have completed the Educational Professional Experience Strengthening Program (P3K) in one of the schools in Bandung. The interviews obtained information related to the implementation of teaching activities. Students said that during teaching activities, students found obstacles during the learning process. Students often find obstacles related to students in class, such as much chatting, difficulty focusing their attention, difficulty remembering, students' voices not clear when speaking, and difficulty keeping the classroom atmosphere conducive. During the implementation of learning, students showed that managing the class is still their main challenge. This can be seen in several situations where students have difficulty managing the class to remain conducive. This condition hinders achieving maximum learning objectives (Khoiriyah et al., 2025).

Based on previous research results and the previously described problems, prospective student teachers still face difficulties managing the classroom (Khan et al., 2024). These problems indicate the high urgency of this research. The conditions in the field indicate what real students face in teaching practice, especially in efforts to create a conducive classroom atmosphere. Unpreparedness in this aspect can reduce the effectiveness of the learning process and the quality of the student's learning experience. Therefore, it is necessary to strengthen training strategies directed explicitly at developing classroom management skills so prospective student teachers have adequate readiness and competence in facing the dynamics of learning in the field. Effective classroom management creates a conducive learning environment (Mudarris, 2024). If students are not adequately

prepared with this skill, the quality of student teaching during P3K and in the future could be affected. Therefore, this study aims to learn more about how implementing *micro-teaching* learning during lectures can improve classroom management skills. This is done to prepare students for the educational professional strengthening program.

B. Method

The method used in this research is qualitative research method. This research was conducted to deeply understand the implementation of *microteaching* and students' classroom management skills during teaching. The case study approach was chosen because it allows researchers to explore phenomena holistically and contextually.

This study involved students with criteria including Mechanical Engineering Education students in the 2021 batch of FPTI UPI who have completed the *micro-teaching* course. Second, they have implemented the Educational Professional Strengthening Program (P3K). Third, I am willing to be an informant in the study. Based on these criteria, six informants in this study will provide various information regarding implementing *micro-teaching* learning and students' skills in managing classes when teaching in class.

This research was conducted in several places, the first at SMK Negeri 2 Bandung City. The research site was determined randomly based on the informant's decision regarding his willingness to choose a location for data collection or interviews. This research uses data collection techniques in the form of semi-structured interviews, observation and documentation. Triangulation is used to test the validity of data in this study. This research uses a data analysis framework from the perspective of Miles and Huberman (1994), which consists of three components: *data reduction*, *data presentation*, and *conclusion drawing/verifying*.

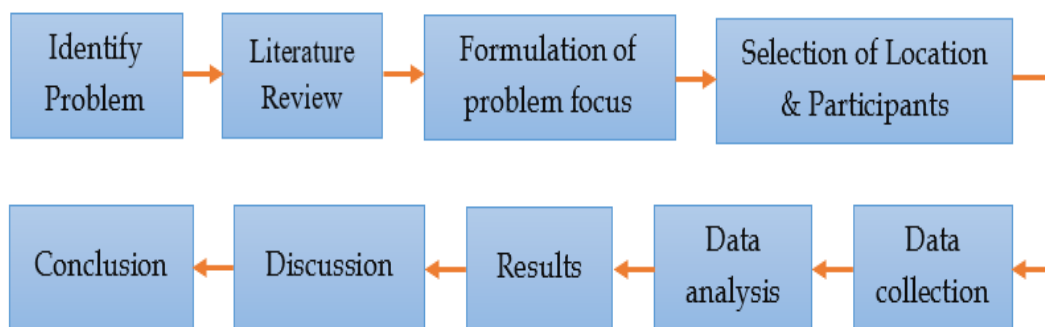


Figure 1. Research Flow

C. Result and Discussion

Result

1. *Micro Teaching* Implementation

Based on Table 1 of interview data with informants regarding implementing *micro-teaching* during lectures, it is known that the Mechanical Engineering Education Study

Program divides students into classes A and B. Based on the data, it is revealed that applicable procedures have been used to implement *micro-teaching* in class A. In contrast, the results of interviews with informants from class B show that the implementation of *micro-teaching* in the class has not followed the established procedures.

Table 1. Interview Data of *Micro Teaching* Implementation

No.	Stages of <i>Micro Teaching</i>	Class A	Class B
1.	Cognitive Stage		
	Lecturers deliver materials and concepts of <i>micro-teaching</i>	As per Procedure	Not according to procedure
2.	Implementation Stage		
	Making lesson plans	As per Procedure	Not according to procedure
	Using <i>micro-teaching</i> class	As per Procedure	Not according to procedure
	Student teaching practice	As per Procedure	Not according to procedure
	Lecturer present in person	As per Procedure	Not according to procedure
	There is a duration of practice time	As per Procedure	Not according to procedure
3.	Feedback Stage		
	Lecturers and students provide feedback.	As per Procedure	Not according to procedure

2. Classroom Management Skills

a. Physical Factors

Based on the results of the interview, it was found that one of the activities that is always carried out before learning begins is checking the condition of the classroom. This is done by asking students to remove the garbage around the students' seats to ensure no garbage is left in the classroom. This activity is a routine carried out by teachers as a first step to creating a clean and comfortable classroom atmosphere for students. Hence, when students teach in class, these activities are carried out. As expressed by the informant:

"... what is always prepared before learning is by checking the condition of the class by conditioning students to throw garbage if it is around the student's desk." (informant MG)

The findings in the interview are supported by data obtained through observation that students carry out activities before learning begins, namely checking the condition of the classroom before learning begins. This activity asks students to stand and observe the area around the table or classroom. If trash is found, students are asked to throw it into the trash can to maintain classroom cleanliness. As shown in Figure 2, the condition of the classroom is clean and tidy.



Figure 2. Classroom Condition in a Clean State

After checking the classroom condition before the learning begins, it was found from the interview results that students generally do not change their seating position in the classroom and prefer to follow the pre-existing seating arrangement. Students feel no problem with the seating position and are more comfortable with the table arrangement that is already organized, so there is no desire to change it. Meanwhile, there is a difference in the laboratory room's seating arrangement; students can choose a seat according to their wishes without a certain distance between one student and another. According to other informants, there is a certain distance for the seating arrangement so that the class conditions are organized and minimize class conditions that are not conducive. According to the informant who stated:

"... for the seating arrangement, students are usually just lined up with a distance of half an arm's length and one tight back. So that the condition of the class remains neat." (Informant RA)

The findings from the interviews were supported by observations, which showed that during the learning process, students' seating positions remained in their original positions and did not change. In addition, Figure 3 shows that during learning in the workshop, students do not use tables and benches but sit on the floor. In practice, students can choose a seating position on the floor, provided they maintain a distance between students.



Figure 3. Student Seating Position during *Workshop* Learning

It was found that the classroom lighting relies heavily on natural light coming through the windows. The lights are only switched on during certain conditions. Meanwhile, ventilation in the classroom relies on the windows and doors located in the classroom. However, the windows are not opened by students but by students who feel hot in the classroom during the learning process. As stated by one informant who said:

"From morning until noon, the light from outside is usually bright, but in the afternoon, the classroom starts to get a bit dark. Sometimes when the situation is like that I turn it on. Air ventilation, usually students like to open the windows because it is hot" (Informant MG).

The results of the interviews that have been conducted are reinforced by the findings from observations, which show that the classroom conditions during the learning process are bright due to the natural lighting that enters through the windows. In addition, during the lesson, students tend to open the door from the beginning to the end to ensure good air circulation. However, due to the room's heat, students usually open the windows independently without instruction by students as teachers.

Regarding the storage of items, it was found that there were only chairs, tables, and blackboards in the classroom. Regarding the rules, in the classroom, there are verbal rules set by the teacher regarding the storage of goods, both during classroom learning and in the *workshop*, so that students only follow the existing rules. Despite these rules, students often do not comply with the provisions by storing items inappropriately and are left alone by students. However, two informants showed differences in the storage rules. Informants in *workshops* make rules to keep the classroom organized and the learning process uninterrupted. As stated by the informant who said that:

"Practical items have indeed been stipulated by the teacher to be kept in their original place. Most for bags so that class conditions are neat, I usually ask students to store bags at one point such as behind so students only carry pens, books and cellphones" (Informant RA).

The interview results above are reinforced by observations that many students keep items on the table during the learning process, such as bags, food, drinks, and prayer tools. In addition, many times during the learning process, some wear bags and hats. Students who do not obey the rules are usually left alone by students. During learning activities in *workshops* in other classes, student bags are stored in the storage area that has been provided, as shown in Figure 4.



Figure 4. Bag Storage

b. Non-Physical Factors

The results of interviews with informants found that in the learning process, classroom conditions were conducive at the beginning of learning. At the beginning of learning, students are more focused and can follow the learning well. However, as time went by, especially when delivering the material until the end of the lesson, the classroom conditions began to get out of control. As revealed by one informant, stating that:

"Conditions during the learning process there are differences at the beginning, middle and end of learning, at the beginning students are usually silent and follow it quietly, after the lighter question going to the material many students chat, play games during the explanation of the material." (Informant RB)

The findings of this interview were reinforced by the observations that showed a difference in classroom conditions between the beginning of learning and when students delivered the material. Students seemed focused at the beginning of learning, followed the learning conducive, and were active. However, when students delivered the material, many chatted, played *on cell phones*, and did not pay attention. Students who chatted mainly were found in the middle and back rows, while in the front row, students tended to be more focused and followed the course of learning well.

Information obtained from interviews found that students will usually be reminded and reprimanded when they violate the rules. However, if the violation persists despite the reprimand, students tend to let it go without taking further action. However, some informants state that the student immediately shows compliance after being given a reprimand. According to the informant:

"...usually once reprimanded immediately obey what I say." (Informant RA)

This aligns with the observation, which revealed that students tend to let students break the rules after being given reminders. However, in other classes, it was seen that students showed compliance when reprimanded by students.

Furthermore, another interview finding was that not all students actively participate in learning. Students who sit at the front tend to be more active in participating in learning, while students who sit in the middle and back usually rarely participate. In addition, students who sit in the middle and back often disrupt the learning process. This makes students annoyed because they ignore what they say. However, some informants say that in the learning process, all students are active in learning. One informant expressed his opinion by saying that:

"Active, because I usually make questions from the material. Usually everyone goes to the front to answer or verbally." (Informant RA)

The findings from the interviews are supported by observations, which show that students who sit in the front row tend to participate more actively in learning, such as asking questions, answering questions, or providing reinforcement. In contrast, students who sit in the back row often violate the rules, and even though they have been reprimanded or reminded, students often repeat the same offence or do not even listen to the reprimand. In addition, to get students to participate actively, one must ask chain questions that allow one question to be answered by several students.

Based on the results of the interviews, information was obtained that in the learning process, many students provided input so that the intonation of students' voices was clearer when explaining the material. In addition, students tend to stay in one spot when delivering explanations. However, other informants said they usually ask students about their voices before learning. In addition, when explaining the material, students usually do not stay at one point, so the back students can also focus on listening when providing material. As stated by one of the informants who stated:

"... before learning, I usually ask about the sound to the students whether it is clearly circulated or not" (Informant RB).

The observation results showed that during the learning process, many students complained about the intonation of the students' voices when speaking or explaining the material. In addition, students point their bodies to the table so that the teacher's voice can be heard more clearly. In addition to the problem of voice intonation, the position of the teacher when explaining is also a concern. Students who sit at the back, in addition to pointing their bodies to the table because the voice is not heard, also have difficulty seeing the position of students explaining the material. However, other informants pointed out that during the learning process, especially when explaining material, students often walk to the back and move around the front area of the classroom. In addition, students should ask students first about their voices.

Discussion

Microteaching is an approach to developing pursuit skills in teacher candidates and pre-service teachers widely used in teacher education programs worldwide (Luo & Li, 2024). *Micro teaching* is called "*micro*" because it involves teaching short lessons to a small group in

a simulated classroom setting to improve specific teaching skills (Deti et al., 2022). *Microteaching* training is cyclical and involves 3 stages of the implementation process: cognitive, teaching and feedback (Mhagama, 2024). Based on the research findings, implementing *micro-teaching* in classes A and B shows differences that impact the final results regarding classroom management skills. Class A runs three stages of micro-teaching implementation systematically by *micro-teaching* guidelines. Students get concept briefing first from lecturers, then conduct *micro-teaching* practices with *micro* class simulations, and receive direct feedback from lecturers and students. As a result, students showed increased classroom management skills when implementing P3K, both from physical and non-physical aspects.

In contrast, micro-teaching implementation in class B did not run optimally due to *micro-teaching* procedures, both from the cognitive, teaching, and feedback stages. As a result, it shows that students struggle to manage the class. This finding aligns with the research of O'Flaherty et al (2023) that the success of *micro-teaching* lies in integrating theory, practice, and evaluation. This is reinforced by Richard (2021) and Thangaraju & Medhi (2023). *Microteaching* effectively improves the teaching skills of prospective teacher students when carried out systematically and receives constructive feedback. Research by Rajni & Phogat (2024) showed that the application of *micro-teaching* significantly improves the teaching competence of prospective teachers; this process involves the application of theory in teaching practice accompanied by evaluation through observation and feedback. With feedback from lecturers and students, prospective teachers can determine which aspects have gone well and which ones need improvement. Besides that, students can improve their skills and understanding of teaching. This is reinforced by research by Badawi & Rahadi (2021) that feedback from others can increase a person's self-understanding, namely making a person aware of aspects of self and the consequences of behaviour never realized before. Research by Aptoula (2021) revealed that feedback in *micro-teaching* is essential for developing prospective teachers' competencies.

D. Conclusion

The implementation of *microteaching* provides meaningful teaching practice experiences for students, including cognitive aspects, learning implementation, and providing feedback. Through this process, students can improve their classroom management skills and form mental and professional readiness to participate in the Education Professional Strengthening Program (P3K). So, implementing *micro-teaching*, which is carried out by procedures, can improve students' classroom management skills. This is shown through the improvement of students' ability to manage the class when teaching at school.

The results of this study have implications that implementing *micro-teaching* with the correct procedures can improve students' skills in managing classes for prospective teacher students. Through the practical experience gained, students become better prepared to face

real situations in the classroom when participating in the Education Professional Strengthening Program (P3K).

Some recommendations that can be conveyed in this study. Lecturers should ensure that in the *micro-teaching* learning process, all stages are carried out according to the established guidelines. Universities must also provide adequate training and resources for lecturers to support the effective implementation of *microteaching* and ensure that learning facilities, such as classrooms and technology, support this process optimally. Future researchers are advised to examine the influence of *micro-teaching* on aspects of basic teaching skills.

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