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Evaluation of Pedagogical Competence of Microteaching Student Teachers: An Exploratory Study

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Abstract

This study aims to evaluate the pedagogical competence of microteaching practicum students at Yogyakarta State University in 2025. Microteaching is viewed as a strategic pedagogical laboratory that equips prospective educators with teaching skills before they directly enter schools. This research employs a quantitative approach with proportional sampling, involving 169 sixth-semester students from the Accounting Education, Economics Education, and Office Administration Education study programs. Data were collected through questionnaires, observations, and interviews, then analyzed using descriptive statistics and the discrepancy model. The findings indicate that, overall, students' pedagogical competence falls into the high category with an average score of 3.782 out of the 4.00 competency standard. Nevertheless, there is a gap of 0.218 points, with the largest discrepancy found in the aspect of learning outcome evaluation (0.237 points), indicating students' weaknesses in developing authentic assessment instruments and providing consistent feedback. Conversely, the aspect of student development shows the smallest gap (0.198 points), reflecting relatively stronger abilities in guiding students' academic and non-academic potential. In conclusion, microteaching plays an important role in enhancing students' pedagogical competence; however, special reinforcement strategies are still needed, particularly in the aspect of learning outcome evaluation. Intensive training in assessment instrument development, habituation with authentic assessments, and strengthening feedback skills are recommended so that students' pedagogical competence can fully meet the expected standards.

INTRODUCTION

Microteaching is a learning method designed to train prospective teachers or practicum students in developing their teaching skills effectively (Rifiyanti et al., 2023). As part of teacher professional education, microteaching has become an essential component in preparing professional future educators (Arslan, 2021). According to the Ministry of Education and Culture Regulation (Permendikbud) Number 38 of 2020 on Teacher Professional Education Standards, microteaching is regarded as part of the pedagogical competence that must be mastered by prospective teachers before entering real classroom practice. Through microteaching, students practice basic teaching skills on a limited scale in terms of the number of students, time, and subject coverage, allowing the learning process to be more controlled and focused (Iksan et al., 2014; O'Flaherty et al, 2025).

At the Faculty of Economics and Business (FEB), Yogyakarta State University (UNY), microteaching is a compulsory course for students in the Economics Education, Accounting Education, and Office Administration Education study programs. This course serves as a bridge between the learning theories studied in class and real practice in educational settings. As stated by Handayani et al. (2022), microteaching at FEB UNY is positioned as essential preparation for students before entering the workforce, particularly in equipping themselves to become professional teachers at various levels of education and institutions. Microteaching provides students with opportunities to sharpen their teaching skills, practice public speaking in front of a class, and enhance their self-reflection abilities on their pedagogical performance (Kimaro et al., 2021).

According to Cornford (1991), microteaching allows students to conduct teaching simulations in small groups, enabling them to receive direct feedback from supervisors and peers. Such feedback serves as reflective material that can improve and enhance teaching skills (Ledger & Fischetti, 2020). Thus, microteaching is not only a training ground for students but also an arena to evaluate the extent of their pedagogical competence development during the course (Zulfikar et al., 2020).

Kurniawan & Masjudin (2017) explained that the goal of microteaching is to prepare students with adequate pedagogical competence before they enter schools. Pedagogical competence includes the ability to plan lessons, manage classrooms, present material systematically, use relevant teaching methods and media, and provide constructive assessment and feedback (Hidayati et al., 2021; Setiawati &et al., 2023). However, in practice, there are often discrepancies between the competencies expected by the curriculum and the achievements of students during microteaching practice.

These discrepancies are influenced by several factors, such as students' limited experience, inadequate supporting facilities, insufficient intensity of supervision, and lack of constructive feedback. This situation creates a gap (discrepancy) between the expected competency standards and the actual reality in the field. As noted by Mustafa (2021), discrepancies are phenomena that must be systematically evaluated to identify areas needing improvement (Habiba et al., 2020).

Students' pedagogical competence can be observed from various indicators, such as lesson planning skills, mastery of subject matter, classroom management skills, diversity of teaching methods and media, and the quality of feedback given to students. Napolitano et al. (2024) emphasized that pedagogical competence in microteaching is often demonstrated through simulations, role plays, or face-to-face teaching practices.

Previous studies on the Discrepancy Evaluation Model have shown its relevance in evaluating gaps in pedagogical competence (Morales, 2022). For example, Turmuzi (2022) found that the average pedagogical competence gap among students was relatively small but still significant in certain aspects. These findings indicate the need for a more comprehensive evaluation, particularly at FEB UNY, so that students' weaknesses can be clearly identified and followed up through curriculum development or improved teaching strategies (Indriana, 2018).

By employing the Discrepancy Evaluation Model (Mustafa, 2021; Turmuzi, 2022), this study seeks to analyze the differences between the established pedagogical competence standards and the actual achievements of microteaching practicum students. This evaluation model emphasizes the alignment between objectives, standards, and achieved results, thereby providing a more objective overview of the quality of microteaching implementation (Cornford, 1991; Kurniawan & Masjudin, 2017).

The findings of this study are expected to benefit not only students as future teachers but also lecturers and program managers. For students, this research can serve as reflection material regarding their pedagogical competence. For lecturers, the results can provide insights into designing more effective microteaching strategies. For institutions, the research outcomes may be used as a basis for developing curricula tailored to actual needs. Thus, this research aligns with the Research Master Plan (Renstra) of Yogyakarta State University, particularly under the theme "Improving the Quality of Research-Based and STEAM-Based Learning."

METHODS

Type of Research

The type of research used in this study is evaluation research, which aims to assess the effectiveness, quality, or impact of a program in a specific context (Steinmetz, 1983). Evaluation research not only measures the achievement of program objectives but also identifies weaknesses and provides recommendations for further development. In this context, the study is directed at evaluating the effectiveness of the microteaching program as a learning medium for prospective teachers at the Faculty of Economics and Business, Yogyakarta State University (FEB UNY).

The research approach applied is quantitative. This approach was chosen because the study focuses on measuring variables objectively using standardized instruments, and the results can be analyzed using statistical methods. Through a quantitative approach, this research can describe students' pedagogical competence numerically and measurably, while also comparing their achievements with the established standards.

Research Model

This study employs the Discrepancy Evaluation Model developed by (M. M. Provus, 1969). The model aims to determine the extent to which the predetermined standards align with the actual outcomes of the microteaching program. Provus defines evaluation as a process consisting of:

1. Establishing program standards.
2. Measuring the actual performance of program implementation.
3. Identifying discrepancies between the standards and actual performance.
4. Using the information about discrepancies as a basis for improving performance or reviewing the program standards.

Using this model, the evaluation of microteaching not only illustrates outcomes but also provides a clear diagnosis of aspects that meet the standards and aspects that still require improvement. The model is considered relevant since microteaching has clearly defined pedagogical competence standards, making it possible to systematically compare expected and actual results.

Research Location and Time

The study was conducted at the Faculty of Economics and Business, Yogyakarta State University (FEB UNY) in 2025. The location was selected because FEB UNY consistently implements microteaching programs for students of the Economics Education, Accounting Education, and Office Administration Education study programs as an integral part of teacher preparation curricula.

Population and Sample

The study population comprised all active FEB UNY students participating in microteaching in the sixth semester who would later undertake the Teaching Practice Program (PK) in the seventh semester. The population included 75 Accounting Education students, 125 Economics Education students, and 93 Office Administration Education students.

Given the large population size, the study employed proportional sampling, ensuring that each study program was represented proportionally to the number of students enrolled in microteaching. This technique was chosen to ensure the results reflected the overall condition of students across the three programs.

The Slovin formula was applied to determine the sample size since the population size was known, and a representative sample was required with a certain error tolerance level. With a population of N = 293 students and an error tolerance of e = 0.05, the required sample size was determined. The sample was then distributed proportionally: 43 Accounting Education students, 72 Economics Education students, and 54 Office Administration Education students.

Data Collection Techniques

To obtain accurate and comprehensive data, several data collection methods were employed:

1. Questionnaires

   Used to measure students' perceptions of their microteaching experiences, particularly regarding their pedagogical competence. The questionnaires contained items reflecting aspects of pedagogical competence.
2. Observations

   Conducted using an assessment instrument based on pedagogical competence indicators. Observations took place after the completion of the microteaching program to evaluate achievement levels and improvements in pedagogical competence.
3. Interviews

   Conducted with microteaching lecturers and selected students to obtain in-depth information regarding program effectiveness, implementation challenges, and suggestions for improvement.

Through this combination, the data obtained were more complete, in-depth, and had higher validity.

Research Instruments

The instrument used in this study was a pedagogical competence assessment sheet designed to evaluate four main aspects:

1. Understanding students – the teacher's ability to identify characteristics, needs, potential, and learning styles of students individually or in groups.
2. Planning and implementing learning – the ability to plan lessons aligned with objectives, content, methods, and relevant media, and to conduct effective, creative, and engaging instruction.
3. Evaluating learning outcomes – skills in assessing student learning processes and outcomes using valid, fair, and objective techniques.
4. Student development to actualize potential – the ability to facilitate and guide students in developing their academic and non-academic potential optimally.

The instrument in this study employed a 1–5 rating scale with criteria defined as 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = always. This scale was used to obtain measurable and analyzable data regarding students' microteaching performance (Fraenkel, 2012). To enhance reliability, five raters independently evaluated the students, as the use of multiple raters is considered effective in reducing individual scoring bias (Creswell & Creswell, 2018). Final scores were calculated by averaging all ratings, following recommendations in educational evaluation that emphasize maintaining consistency across rater.

G. Data Analysis Techniques

The collected data were analyzed using both descriptive and inferential statistical techniques. In the descriptive analysis stage, the Ideal Mean (Mi) and the Ideal Standard Deviation (SDi) were calculated to determine the overall distribution and categorize the levels of students' pedagogical competence. These statistical measures provided a clearer overview of the central tendency and variability of the assessment results, serving as the foundation for interpreting patterns and identifying areas that required further examination.

Based on Mi and SDi, the data were categorized into five criteria:

Table 1. Interval Formula Categories

Classification Category	Interval Formula
Very Low	$X_{min} \leq Mi - 1.5\ SDi$
Low	$Mi - 1.5\ SDi \leq x < Mi - 0.5\ SDi$
Moderate	$Mi - 0.5\ SDi \leq x < Mi + 0.5\ SDi$
High	$Mi + 0.5\ SDi \leq x < Mi + 1.5\ SDi$
Very High	$Mi + 1.5\ SDi \leq X_{max}$

This categorization was used to describe the level of students' pedagogical competence across aspects.

Correlation Analysis

Conducted to identify factors influencing discrepancies, such as teaching experience, motivation, or attitudes toward teaching. Correlation analysis helps reveal variables that contribute to differences between standards and actual outcomes.

RESULTS AND DISCUSSION

A. Result

The data analysis provided a comprehensive overview of the pedagogical competence of FEB UNY microteaching students across four main aspects: understanding students, lesson planning and implementation, evaluation of learning outcomes, and student development. The measurement was conducted using a 5-point Likert scale, with 43 items distributed across the four aspects.

Descriptive statistics showed an overall mean score of 3.782, placing the students' pedagogical competence in the high category. When disaggregated, the scores were relatively close across all aspects: understanding students (3.796), lesson planning and implementation (3.764), evaluation of learning outcomes (3.763), and student development (3.805). This pattern demonstrates that the

students' competencies were consistently high, with slight variations in strength and weakness among different areas.

The highest score was achieved in student development (3.805). This indicates that students demonstrated strong abilities in guiding learners' academic and non-academic potential, motivating them, and creating a positive classroom atmosphere. Such performance reflects an encouraging capacity to foster creativity, self-expression, and active participation. In contrast, the lowest score was observed in evaluation of learning outcomes (3.763). Although still categorized as high, this suggests that students experienced challenges in developing valid assessment instruments, carrying out authentic assessments, and providing consistent and constructive feedback. The findings emphasize the importance of strengthening assessment-related skills as a critical component of pedagogical competence.

The frequency distribution analysis further reinforced these findings. Most respondents (151 students or 89.3%) scored within the 157–179 interval, confirming that the majority of practicum students were clustered at the high competence level. Another 13 students (7.69%) were positioned slightly below the average in the 134–156 interval, while only 5 students (3.55%) scored in the higher 180–202 interval, representing the upper echelon of achievement. Notably, no students fell into the lowest intervals (43–65, 66–88, 89–110, or 111–133), nor the extreme highest interval (203–225).

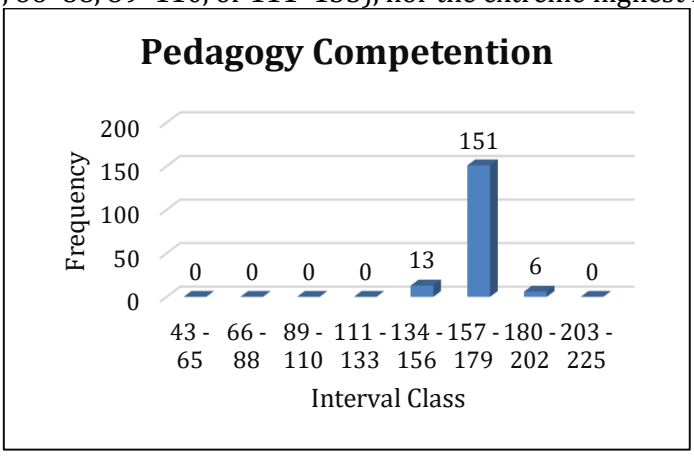

Figure 1. Histogram Pedagogy Competention

This distribution curve, illustrated through the histogram, shows a strong concentration of students at the high level with limited dispersion across the extremes. The interpretation is that most microteaching students demonstrated adequate readiness as prospective teachers, while a minority showed either slightly weaker or outstanding performance. The presence of students at both lower and upper extremes signals individual variations that need to be addressed through targeted mentoring. Students at lower levels require additional guidance to achieve the expected competencies, while those at higher levels could serve as role models for their peers.

B. Discussion

The findings of this study confirm that microteaching has a significant contribution to enhancing the pedagogical competence of preservice teachers. This is reflected in the average score of 3.782 out of the 4.00 competency standard, indicating that students have been able to master most pedagogical skill indicators effectively through guided teaching practice. This result reinforces Allen et al. (1972) view that microteaching serves as a laboratory experience that enables students to repeatedly practice teaching skills in a safe, controlled, and structured environment that allows for instantaneous reflection on their performance. This context is highly relevant to the needs of 21st-century education students, who require opportunities for pedagogical experimentation before entering real classroom settings.

Furthermore, the effectiveness of microteaching in bridging pedagogical theory and authentic instructional practice aligns with Vígh (2024) work, which explains that microteaching integrates theory, practice, and reflection simultaneously. The study highlights that microteaching not only strengthens basic instructional skills but also helps students build confidence, develop instructional communication abilities, and improve accuracy in making pedagogical decisions. This is evident in the

present study, where students demonstrated strong performance in the domain of learner development, one of the essential aspects of professional teaching competence.

However, the results also reveal a competency gap of 0.218, with the largest discrepancy found in the area of learning outcome evaluation (gap = 0.237). This discrepancy indicates that students have not yet fully mastered the ability to design authentic assessment instruments, construct assessment rubrics, provide constructive feedback, and compile learning outcome reports comprehensively. These findings are consistent with Turmuzi (2022), who noted that learning evaluation frequently becomes a weakness among microteaching students because assessment requires a deep conceptual understanding of competency-based assessment, achievement indicators, and the development of valid evaluation tools.

When analyzed through the lens of the Discrepancy Evaluation Model (M. Provus, 1969; M. M. Provus, 1969) the gap in the evaluation domain suggests that although the competency standards for the microteaching program have been clearly established, the training strategies related to assessment have not yet been fully optimized. Provus' model emphasizes that any identified discrepancy should be followed by program improvement measures. Therefore, the identified gap serves as a critical foundation for program managers to strengthen the assessment component. To address this issue, the microteaching program should provide more intensive training on authentic assessment, learning outcome analysis, rubric construction techniques, and feedback literacy so that students can conduct assessments comprehensively and align them with the standards of competency-based education.

The study also shows that informal teaching experience has a positive influence on microteaching performance. Students with prior experience as tutors or learning assistants demonstrated stronger pedagogical competence compared to those without similar experiences. This finding supports Sardiman (2011) argument that prior learning experiences enhance cognitive and affective readiness for teaching activities. Additionally, recent international research indicates that informal teaching experience improves instructional judgement, classroom management abilities, and pedagogical responsiveness (Darling-Hammond, 2016; Yin & Huang, 2021)

Microteaching facilities such as well-equipped laboratories, video recording tools, digital devices, and interactive media were also found to be crucial supporting factors. Adequate facilities enable students to conduct self-evaluation through video-based reflection, an approach proven effective in improving the instructional quality of preservice teachers (Pedaste et al., 2015; Dochy, 2003; Turhan, 2020).In this study, students who actively used microteaching video recordings showed notable improvements in their instructional delivery and classroom management skills.

Overall, microteaching continues to play a central role as a platform for developing students' pedagogical competence. However, its success is not solely determined by teaching practice; it is also shaped by mentoring strategies, learning facilities, students' informal experiences, and the depth of reflection embedded in the learning process. The competency gap in learning outcome evaluation signals the need for targeted strengthening in this area. Efforts such as intensive training in developing assessment instruments, habituation with authentic assessments, case-based assessment workshops, and strengthening of feedback skills are essential for ensuring that students' pedagogical competence fully meets established standards.

With appropriate interventions, the microteaching program can evolve beyond a simple teaching simulation and become a professional learning ecosystem that prepares future educators to navigate the complexities of 21st-century teaching with greater effectiveness, comprehensiveness, and reflective capacity.

CONCLUSIONS AND SUGGESTIONS

A. Conclusion

The evaluation of microteaching practicum students at FEB UNY revealed that overall students' pedagogical competence is in the high category, with an average score of 3.782 out of the 4.00 standard. This confirms the essential role of microteaching as an effective learning platform for improving future teachers' pedagogical skills.

Nevertheless, a gap of 0.218 points remains, with the largest discrepancy found in learning evaluation (0.237 points), indicating students' challenges in designing authentic assessments and providing consistent feedback. Conversely, student development showed the smallest gap (0.198

points), reflecting stronger performance in guiding learners to actualize their potential. These findings highlight the need for additional training strategies to ensure all aspects of pedagogical competence reach the optimal standard.

B. Suggestion

To optimize the effectiveness of microteaching at FEB UNY, several targeted recommendations are proposed. Students should engage in more teaching practice to strengthen their skills in authentic assessment, lesson planning, and feedback delivery. Lecturers are encouraged to provide intensive guidance through rubric design training, competency-based assessment workshops, and feedback simulations. At the program level, the microteaching curriculum should be redesigned to emphasize assessment competence, integration of learning technologies, and reflective pedagogy. Finally, the institution needs to enhance facilities such as microteaching laboratories and ICT tools, while also expanding collaborations with partner schools to provide students with more authentic teaching experiences. Through these efforts, microteaching can more effectively equip students with pedagogical competencies that meet professional teaching standards.

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