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Students' Perspectives on the Pedagogical Readiness of Pre-Service Geography Teachers During School Practicum

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Abstract: Pedagogical competence is a fundamental component of teacher professionalism and plays a crucial role in creating meaningful, student-centered learning experiences. Evaluating the pedagogical readiness of pre-service teachers through students' perspectives provides valuable insights into the effectiveness of teacher preparation programs and school practicum experiences. This study aimed to examine students' perspectives on the pedagogical readiness of pre-service geography teachers during the School Practicum Program (Pengenalan Lapangan Persekolahan [PLP]) at SMA Negeri 1 Palu, Indonesia. The study employed a quantitative descriptive research design involving 20 eleventh-grade students selected through purposive sampling. Data were collected using a structured questionnaire based on seven dimensions of pedagogical competence, including understanding student characteristics, mastery of teaching principles, curriculum implementation, learning facilitation, student development, communication skills, and assessment and evaluation. Supporting data were obtained through classroom observations and documentation. The collected data were analyzed using descriptive statistical techniques and percentage analysis. The findings revealed that students generally perceived the pedagogical readiness of the pre-service geography teachers positively, with all competency dimensions categorized as Good to Very Good. The highest evaluations were observed in the ability to foster students' learning potential and conduct assessment and evaluation, while learning facilitation and communication skills also received favorable ratings. Overall, the findings indicate that the School Practicum Program effectively supports the development of pedagogical competence and professional readiness among prospective geography teachers. The study highlights the importance of incorporating students' perspectives into practicum evaluation to strengthen reflective practice and enhance the quality of teacher education programs.
Keywords: pedagogical competence; pre-service teachers; school practicum; student perceptions; geography education; teacher professional development.

INTRODUCTION

Teacher quality remains one of the most influential factors affecting educational effectiveness and student learning outcomes. Numerous studies have demonstrated that teachers' pedagogical competence significantly contributes to students' academic achievement, learning engagement, motivation, and overall classroom experiences (Mujiyatun et al., 2021; Sulastri et al., 2026). In the context of twenty-first-century education, teachers are expected not only to master subject matter knowledge but also to possess the pedagogical skills necessary to facilitate student-centered, inclusive, reflective, and meaningful learning experiences (Beare & Slaughter, 2021; Mahyuna et al., 2024). Consequently, preparing future teachers with strong pedagogical competence has become a central concern in teacher education programs worldwide.

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Pedagogical competence refers to a teacher's ability to understand learners' characteristics, design and implement effective learning processes, facilitate student development, utilize appropriate instructional strategies, and conduct meaningful assessment and evaluation (Mujiyatun et al., 2021; Sulastri et al., 2026). These competencies are essential because they determine how teachers transform curriculum goals into learning experiences that support students' cognitive, social, and emotional development (Fakhrutdinova et al., 2020; Ranta et al., 2023). In geography education, pedagogical competence becomes particularly important because geography learning requires teachers to connect theoretical concepts with real-world environmental and social phenomena, encouraging students to think critically, spatially, and contextually (Chumsukon, 2021; Grobelski et al., 2023).

As educational systems increasingly emphasize active learning, inquiry-based instruction, and learner-centered pedagogies, teacher preparation programs are expected to provide prospective teachers with authentic opportunities to develop pedagogical competence in real classroom environments. One important component of teacher education is school practicum, which allows pre-service teachers to apply pedagogical theories, instructional strategies, classroom management skills, and assessment practices in actual teaching situations (Köksal & Genç, 2019; Pratiwi, 2020). Through direct interaction with students and school communities, pre-service teachers gain practical experiences that contribute to their professional identity formation and teaching readiness.

In Indonesia, the School Practicum Program (Pengenalan Lapangan Persekolahan or PLP) serves as a fundamental component of teacher education curricula. PLP provides opportunities for pre-service teachers to observe, participate in, and gradually assume responsibilities within authentic educational settings. Through PLP activities, students enrolled in teacher education programs are expected to develop pedagogical, professional, social, and personal competencies required for future teaching careers. The effectiveness of PLP therefore plays a crucial role in preparing competent and reflective educators capable of responding to contemporary educational challenges (Arbain & Ramadani, 2024; Rahmi et al., 2025).

Recent developments in teacher education have increasingly emphasized the importance of evaluating pre-service teachers not only through supervisors' observations and institutional assessments but also through students' perspectives. Students represent direct recipients of instructional practices and are therefore uniquely positioned to evaluate teachers' pedagogical performance, communication skills, classroom management, and learning facilitation abilities (Barzilai et al., 2018; Hajian, 2019; Wakhata et al., 2022). Student perceptions provide valuable insights into how teaching practices are experienced in classrooms and can serve as an important source of feedback for improving teacher preparation programs.

Several studies have reported that students' perceptions of teachers' pedagogical competence are closely associated with classroom effectiveness, learning satisfaction, academic engagement, and motivation (Fernández-García et al., 2021; Hou, 2024). When students perceive teachers as competent, supportive, and responsive to their learning needs, they are more likely to participate actively and engage positively in learning activities. Consequently, understanding students' perceptions toward pre-service teachers' pedagogical competence may contribute to a more comprehensive evaluation of teacher readiness and professional development during practicum experiences.

Within geography education, pedagogical competence possesses additional significance because geography learning requires teachers to integrate diverse instructional approaches, contextual learning experiences, environmental literacy, spatial thinking, and contemporary societal issues into classroom practice. Effective geography teachers must be able to facilitate meaningful learning experiences that connect geographical knowledge with students' everyday realities while fostering critical thinking, environmental awareness, and problem-solving skills (Al-Barakat et al., 2026; Amoah-Nuamah et al., 2025). Therefore, evaluating the pedagogical readiness of pre-service geography teachers becomes particularly relevant in ensuring the quality of future geography education.

Preliminary observations conducted during the implementation of the PLP program at SMA Negeri 1 Palu indicated variations in students' engagement and responses toward learning activities facilitated by pre-service geography teachers. While some classrooms demonstrated high levels of student participation and positive interaction, others revealed challenges related to maintaining student attention, facilitating classroom discussion, and sustaining learning motivation. These observations

suggest that pedagogical competence remains a critical aspect influencing the effectiveness of practicum-based teaching experiences.

Although previous studies have investigated teacher competence and practicum experiences, research specifically examining pedagogical readiness through students' perspectives remains relatively limited, particularly within geography teacher education contexts in Indonesia. Existing studies primarily focus on self-assessment, supervisor evaluation, or institutional perspectives, while students' voices are often underrepresented in assessing pre-service teacher performance. Furthermore, limited attention has been given to how students evaluate different dimensions of pedagogical competence during school practicum experiences.

This study addresses these gaps by examining students' perspectives on the pedagogical readiness of pre-service geography teachers during school practicum at SMA Negeri 1 Palu. The study focuses on several dimensions of pedagogical competence, including understanding student characteristics, mastery of teaching principles, curriculum implementation, learning facilitation, student development, communication skills, and assessment practices. By exploring students' evaluations of these competencies, the study aims to provide a more comprehensive understanding of pre-service teacher readiness within authentic classroom contexts.

The findings are expected to contribute theoretically to the literature on teacher education, pedagogical competence, and reflective practice while providing practical insights for improving geography teacher preparation programs. Furthermore, the study supports the broader goal of enhancing teacher professional development by highlighting the importance of incorporating students' perspectives into the evaluation of pre-service teachers' pedagogical competence and readiness for professional practice.

METHOD

Research Design

This study employed a quantitative descriptive research design to examine students' perspectives on the pedagogical readiness of pre-service geography teachers during the School Practicum Program (Pengenalan Lapangan Persekolahan [PLP]). A descriptive approach was considered appropriate because the study sought to describe and interpret students' evaluations of various dimensions of pedagogical competence demonstrated by pre-service teachers during classroom instruction without manipulating any research variables.

The study focused on seven dimensions of pedagogical competence adapted from the Indonesian teacher competency framework, including understanding students' characteristics, mastery of teaching principles, curriculum implementation, learning facilitation, student development, communication skills, and assessment and evaluation practices.

Research Site and Participants

The study was conducted at SMA Negeri 1 Palu, Central Sulawesi, Indonesia, during the implementation of the PLP program in the 2025 academic year. The school was selected purposively because it regularly serves as a partner school for the Geography Education Study Program in implementing school practicum activities and provides authentic teaching experiences for pre-service geography teachers.

The population consisted of all eleventh-grade students enrolled in geography classes, comprising five classes (XI F, XI H, XI I, XI K, and XI M). A purposive sampling technique was employed to select participants based on their direct learning experiences with pre-service geography teachers during the practicum period.

The final sample included 20 students from Class XI I. The selected class met several criteria, including active participation in geography learning, direct interaction with pre-service teachers throughout the practicum period, and willingness to participate voluntarily in the study.

Research Instrument

The primary research instrument was a structured questionnaire developed based on indicators of pedagogical competence proposed in the Indonesian Teacher Competency Standards. The questionnaire consisted of seven competency dimensions represented by 28 statements measured using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

Table 1. Indicators of Pedagogical Competence

Pedagogical Competency Indicators	Number of Items
Understanding Student Characteristics	4
Mastery of Teaching Theories and Learning Principles	4
Curriculum Development	4
Learning Facilitation	4
Student Development	4
Communication Skills	4
Assessment and Evaluation	4
Total	**28**

Prior to data collection, the questionnaire was reviewed by experts in geography education and educational evaluation to ensure content validity, clarity of language, and relevance to the objectives of the study.

Data Collection Procedures

Data were collected using multiple techniques to obtain comprehensive information regarding students' perceptions of pre-service teachers' pedagogical competence. The questionnaire was administered directly to participating students after they had completed learning activities with the pre-service geography teachers. Students were asked to evaluate the pedagogical competence demonstrated during classroom instruction based on their actual learning experiences. Classroom observations were conducted during the practicum period to obtain supporting information regarding instructional implementation, classroom interaction, communication patterns, and learning management demonstrated by the pre-service teachers. Documentation techniques were employed to collect supporting data, including lesson plans, teaching schedules, classroom activity photographs, school documents, and practicum implementation records.

Data Validity

To ensure the credibility and quality of the research findings, several validation procedures were conducted. The questionnaire was evaluated through expert judgment involving lecturers in geography education and educational assessment. The validation focused on the relevance of each statement to the dimensions of pedagogical competence, clarity of wording, and suitability for senior high school students. The internal consistency of the questionnaire was examined prior to implementation using reliability analysis. The reliability coefficient indicated that the instrument possessed acceptable consistency for measuring students' perceptions of pedagogical competence.

Data Analysis

The collected data were analyzed using descriptive statistical techniques. Descriptive statistics were used to calculate:

- mean scores,
- percentage scores,
- and average scores for each pedagogical competency indicator.

These analyses provided an overview of students' perceptions regarding the pedagogical readiness of pre-service geography teachers. Students' responses were converted into percentage scores using the following formula:

$$\text{Percentage} = \frac{Skor}{Skor\ maksimum} \text{x } 100\ \%$$

The percentage scores were subsequently interpreted using the following criteria.

Table 2. Criteria for Interpreting Students' Perception Scores

Percentage Score	Category
81–100%	Very Good
61–80%	Good
41–60%	Fair
21–40%	Poor
0–20%	Very Poor

The findings were presented descriptively through tables and narrative interpretation to explain students' evaluations across each pedagogical competency dimension.

RESULTS AND DISCUSSION

RESULTS

This study examined students' perspectives on the pedagogical readiness of pre-service geography teachers during the School Practicum Program (PLP) at SMA Negeri 1 Palu. The analysis focused on seven dimensions of pedagogical competence, including understanding student characteristics, mastery of teaching principles, curriculum implementation, learning facilitation, student development, communication skills, and assessment and evaluation. Overall, the findings indicate that students perceived the pedagogical readiness of pre-service geography teachers positively. Across all competency dimensions, the average scores ranged from the Good to Very Good categories, suggesting that the pre-service teachers were able to implement instructional practices that met students' learning expectations during the practicum period.

The first competency examined was the ability of pre-service teachers to understand students' characteristics, learning needs, and individual differences.

Table 3. Students' Perceptions of Understanding Student Characteristics

Pre-Service Teacher	Mean Score	Category
Teacher 1	77	Good
Teacher 2	82	Very Good
Teacher 3	74	Good
Teacher 4	72	Good

The findings indicate that most students perceived the pre-service teachers as capable of recognizing students' learning characteristics and adjusting instructional approaches accordingly. Three pre-service teachers were categorized as Good, while one achieved the Very Good category. Students also evaluated the ability of pre-service teachers to apply appropriate instructional theories and learning principles during classroom instruction.

Table 4. Students' Perceptions of Mastery of Teaching Principles

Pre-Service Teacher	Mean Score	Category
Teacher 1	77	Good
Teacher 2	75	Good
Teacher 3	77	Good
Teacher 4	76	Good

All four pre-service teachers obtained scores within the Good category, indicating relatively consistent mastery of instructional planning and classroom learning strategies. Students assessed the extent to which pre-service teachers were able to implement curriculum objectives into classroom learning activities.

Table 5. Students' Perceptions of Curriculum Implementation

Pre-Service Teacher	Mean Score	Category
Teacher 1	80	Good
Teacher 2	75	Good
Teacher 3	78	Good
Teacher 4	70	Good

The results demonstrate that all participants were perceived as capable of organizing learning activities according to curriculum requirements and instructional objectives. Students' evaluations regarding instructional guidance and classroom facilitation showed generally positive perceptions.

Table 6. Students' Perceptions of Learning Facilitation

Pre-Service Teacher	Mean Score	Category
Teacher 1	77	Good
Teacher 2	79	Good
Teacher 3	86	Very Good
Teacher 4	76	Good

The findings suggest that students appreciated the assistance and guidance provided during classroom learning. One pre-service teacher received a Very Good evaluation, while the remaining participants were categorized as Good**.** The highest evaluation among all competency dimensions was found in the ability to encourage students' learning potential.

Table 7. Students' Perceptions of Student Development

Pre-Service Teacher	Mean Score	Category
Teacher 1	82	Very Good
Teacher 2	84	Very Good
Teacher 3	90	Very Good
Teacher 4	73	Good

Three pre-service teachers achieved the Very Good category, indicating that students perceived them as capable of motivating participation, encouraging learning confidence, and supporting students' academic development. Effective communication represents one of the essential pedagogical competencies during classroom interaction.

Table 8. Students' Perceptions of Communication Skills

Pre-Service Teacher	Mean Score	Category
Teacher 1	78	Good
Teacher 2	73	Good
Teacher 3	86	Very Good
Teacher 4	72	Good

Students generally considered the communication delivered by pre-service teachers to be understandable, interactive, and supportive of classroom learning. Students also evaluated the ability of pre-service teachers to assess learning outcomes and provide meaningful feedback.

Table 9. Students' Perceptions of Assessment and Evaluation

Pre-Service Teacher	Mean Score	Category
Teacher 1	79	Good
Teacher 2	88	Very Good
Teacher 3	87	Very Good
Teacher 4	76	Good

The findings indicate that students perceived assessment activities as fair, transparent, and aligned with classroom learning objectives. The overall analysis demonstrates positive student evaluations toward the pedagogical readiness of pre-service geography teachers.

Table 10. Overall Students' Perceptions of Pedagogical Readiness

Pre-Service Teacher	Mean Score	Category
Teacher 1	79	Good
Teacher 2	79	Good
Teacher 3	83	Very Good
Teacher 4	74	Good

Overall, three pre-service teachers were evaluated within the Good category, while one achieved the Very Good category, indicating that the participants had demonstrated satisfactory pedagogical competence during the school practicum.

DISCUSSION

The findings of this study demonstrate that students generally perceived the pedagogical readiness of pre-service geography teachers positively across all dimensions of pedagogical competence. These findings reinforce the view that school practicum provides authentic opportunities for prospective teachers to translate pedagogical knowledge acquired in teacher education programs into effective classroom practice. The consistently positive evaluations across the seven competency dimensions indicate that the participants had developed the fundamental pedagogical capacities required for beginning teachers.

One important finding concerns the ability of pre-service teachers to understand students' characteristics and learning needs. Students perceived that most participants were capable of adapting instructional approaches to different classroom situations and individual learner characteristics. This competency represents a fundamental aspect of effective teaching because understanding learners enables teachers to design responsive instruction that supports meaningful learning experiences. Darling-Hammond et al. (2020) argue that responsive pedagogy begins with teachers' ability to recognize learners' diverse backgrounds, abilities, and learning preferences. The findings therefore suggest that the practicum experience successfully facilitated the development of learner-centered instructional practices among pre-service teachers.

The study also revealed consistently positive evaluations regarding mastery of teaching principles and curriculum implementation. Students perceived that the pre-service teachers were able to organize lessons systematically and align classroom activities with curriculum objectives. This finding reflects the importance of pedagogical content knowledge and curriculum literacy in teacher preparation. According to Von Esch & Kavanagh (2018), effective teacher preparation requires prospective teachers to integrate theoretical understanding with practical classroom implementation, allowing instructional decisions to be responsive to curriculum goals and students' learning needs. The results indicate that the PLP program contributes meaningfully to this integration process.

Learning facilitation and communication skills also emerged as important strengths of the participating pre-service teachers. Students reported that classroom explanations were generally clear, interactions were supportive, and opportunities for classroom participation were provided throughout the learning process. Effective classroom communication contributes to positive teacher–student relationships, increased student engagement, and improved learning outcomes. Previous research has consistently shown that teachers' communication competence influences students' academic motivation and classroom participation because effective dialogue creates psychologically safe learning environments where students feel encouraged to express ideas and ask questions (Abetang et al., 2020; Mabuan, 2017; Simbolon et al., 2024).

Among all competency dimensions, the highest student evaluations were observed in the ability of pre-service teachers to support student development. Students perceived that the participants actively encouraged participation, motivated learning, and created opportunities for students to develop their academic potential. This finding reflects the growing emphasis within contemporary teacher education on facilitative rather than transmissive teaching roles. Transformative educational perspectives

emphasize that teachers should function not only as knowledge transmitters but also as facilitators who empower learners to become active participants in constructing knowledge and solving authentic problems (Mezirow, 2023). Consequently, the positive evaluations obtained in this competency indicate encouraging progress toward student-centered pedagogy.

Another important finding concerns students' positive perceptions of assessment and evaluation practices. Students believed that learning assessments were conducted fairly and consistently with instructional objectives. Effective assessment represents an essential component of pedagogical competence because it enables teachers to monitor learning progress, provide constructive feedback, and adjust instructional strategies according to students' needs. Contemporary assessment literature increasingly highlights assessment as a learning process rather than merely a mechanism for measuring achievement (Kubiszyn & Borich, 2024). The findings therefore suggest that the pre-service teachers had begun to apply assessment practices that supported learning rather than simply evaluating outcomes.

More broadly, this study demonstrates the value of incorporating students' perspectives into evaluating pre-service teacher readiness. Traditionally, evaluations of teaching practicum rely heavily on university supervisors and mentor teachers. However, students interact directly with pre-service teachers throughout classroom instruction and therefore provide unique insights into the effectiveness of pedagogical practices. Student perceptions complement conventional evaluation systems by capturing classroom experiences that may not always be observable during formal supervisory visits. This perspective supports recent developments in teacher education advocating more comprehensive and multidimensional approaches to evaluating teaching competence.

Despite these encouraging findings, several pedagogical aspects remain open for improvement. The relatively lower scores obtained in learning facilitation and communication by some participants suggest that future teacher education programs should strengthen opportunities for repeated teaching practice, reflective feedback, classroom interaction training, and mentoring during practicum experiences. Strengthening reflective practice is particularly important because systematic reflection enables prospective teachers to identify instructional strengths, recognize classroom challenges, and continuously improve pedagogical performance throughout their professional careers.

Overall, this study confirms that the School Practicum Program plays a significant role in developing the pedagogical readiness of pre-service geography teachers. Students' positive evaluations indicate that the participants had successfully demonstrated core pedagogical competencies required for effective classroom instruction. The findings also emphasize that incorporating students' perspectives provides valuable evidence for improving teacher preparation programs and supports the broader goal of developing reflective, competent, and learner-centered educators capable of responding to contemporary educational challenges.

CONCLUSION AND SUGGESTION

The findings of this study indicate that students generally perceived the pedagogical readiness of pre-service geography teachers during the School Practicum Program (PLP) positively. Across the seven dimensions of pedagogical competence including understanding student characteristics, mastery of teaching principles, curriculum implementation, learning facilitation, student development, communication skills, and assessment and evaluation he participating pre-service teachers achieved ratings within the Good to Very Good categories. These findings suggest that the practicum experience effectively supported the development of essential pedagogical competencies required for prospective geography teachers to conduct meaningful and student-centered classroom instruction.

Among the assessed competencies, the ability to foster students' learning potential received the highest evaluations, indicating that the pre-service teachers were successful in encouraging student participation, motivation, and active engagement during geography learning. Students also positively evaluated classroom communication, instructional organization, and assessment practices, demonstrating that the participants were able to translate pedagogical knowledge acquired during university coursework into authentic classroom practice. These findings reinforce the important role of school practicum as a bridge between theoretical teacher education and professional teaching practice.

The study further highlights the value of incorporating students' perspectives into the evaluation of pre-service teacher competence. Students, as the direct recipients of instructional practices, provide meaningful feedback regarding classroom interaction, learning facilitation, and pedagogical effectiveness that may complement evaluations conducted by university supervisors and mentor teachers. Integrating student feedback into practicum assessment can therefore contribute to more comprehensive, reflective, and evidence-based teacher education.

The findings also imply that teacher education institutions should continue strengthening practicum programs through structured mentoring, reflective teaching practices, and opportunities for repeated classroom experience. Greater emphasis on learner-centered pedagogy, classroom communication, differentiated instruction, and formative assessment will further enhance the pedagogical readiness of future geography teachers. Such improvements are essential for preparing teachers who are capable of responding to the demands of twenty-first-century education and creating inclusive, engaging, and meaningful learning environments.

This study was limited by its relatively small sample size and its focus on a single school context, which may limit the generalizability of the findings. Future research is recommended to involve larger and more diverse participant populations across different educational settings and teacher education institutions. In addition, subsequent studies may employ mixed-method or longitudinal designs to examine the development of pedagogical competence throughout the practicum process and explore relationships between students' perceptions, reflective teaching practices, instructional quality, and teacher professional development. Such investigations would provide deeper insights into how school practicum contributes to the preparation of competent, reflective, and professionally ready educators.

DECLARATION OF GENERATIVE AI SOURCES

During the preparation of this manuscript, the author(s) used several generative artificial intelligence (AI) tools, including Claude AI (Anthropic), Google Gemini, and Grammarly AI, to assist with language refinement, grammar correction, paraphrasing, and improving the overall clarity and organization of the manuscript. All AI-assisted outputs were carefully reviewed, verified, and substantially revised by the author(s) to ensure the accuracy, originality, and academic integrity of the work. The author(s) assume full responsibility for the content, interpretations, and conclusions presented in this manuscript.

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