Interrelationship of Self-Efficacy, Reflective Practice, and Supervision Quality on the Pre-Service Teachers' Teaching Performance

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ABSTRACT

Self-efficacy in teaching, reflective practice, and quality of supervision are generally considered to play significant roles in teacher preparation, yet limited research has been conducted to explore how these three variables interact with one another to determine their impacts on the teaching performance of pre-service teachers during internship. This study examined the relationships among these variables and determined their direct and indirect effects on the teaching performance of pre-service elementary teachers in selected cooperating schools in the Department of Education of Misamis Oriental. Structural Equation Modeling (SEM) descriptive-correlational research design was used to establish the relationships and the best-fit model of the variables. Data were collected from 126 pre-service teachers, with teaching performance evaluated by 96 cooperating teachers and further supported by 5 internship supervisors, using validated survey instruments measuring self-efficacy, reflective practice (reflection-for-action, reflection-in-action, and reflection-on-action), supervision quality, and teaching performance across six domains: lesson planning and preparation, content knowledge and pedagogy, classroom management and learning environment, instructional delivery, assessment, and professionalism. The levels of the variables were determined using descriptive statistics, and correlation analysis and SEM were employed to identify the relationships and predictive impacts of the variables. Results indicated a high level of teaching performance among the pre-service teachers. Structural equation modeling identified the best-fit model, revealing that supervision quality significantly influences self-efficacy, which in turn affects reflection-for-action and ultimately enhances teaching performance. Teaching performance also significantly predicted key areas such as lesson planning, content knowledge, and professionalism, with varying degrees. Overall, the findings indicate that these variables show indirect effects on teaching performance through interrelated pathways. The study highlights the importance of strengthening supervision and fostering reflective practice to improve teaching competence. Future research may utilize longitudinal or experimental designs, expand samples, and include additional variables to further explain teaching performance.

Keywords: self-efficacy in instruction, reflective practice, quality of supervision, instruction performance, pre-service teachers, content knowledge, lesson planning, professionalism.

INTRODUCTION

Teaching is one of the most significant professions, as teachers influence the community and the potential of many individuals, particularly learners, in terms of their academic growth, social development, and long-term success. In today's changing educational setting, pre-service teachers are expected to embody not only pedagogical competency but also confidence, develop reflective ability, and be able to respond and work well to quality supervision, establishing a learning environment crucial for effective teaching. An environment that could keep students engaged, promote an encouraging atmosphere for learning, and provide high-quality instruction with positive student outcomes across grade levels. These professional attributes are particularly relevant in the teaching internship, where the shift from theoretical classroom courses to actual classroom practice reveals the gaps in readiness and performance.

Out of these key success factors of teaching, self-efficacy, reflective practice, and quality of supervision have become powerful predictors of overall teaching performance by pre-service teachers. Self-efficacy teaching is the belief expressed by teachers in their perceived capability to contribute to the learning process and manage the classroom effectively (Bandura, 1997). Pre-service teachers with a high level of self-efficacy are more likely to show high levels of instructional decision-making, persistence in the case of difficulties, and more adaptive teaching behaviors (Hettinger et al., 2021). When teachers believe and have confidence that they can teach, manage the classroom effectively, overcoming challenges that lead to a stronger teaching performance. Accordingly, Orakcı et. al. (2023) stated that teachers' self-efficacy, or their confidence in their ability to successfully manage the responsibilities, demands, and problems associated with their professional activity, has a significant impact on the teaching profession. In short, teachers' self-efficacy reveals their confidence in overcoming the obstacles that may arise in the way of achieving the goals planned in the teaching process.

On the same note, reflective practice helps pre-service teachers reflect on their instructional choices, classroom experiences, and learners' responses to improve their teaching. Reflection enhances teachers' ongoing professional development, self-regulation, and metacognition (Estaji & Fatalaki, 2023; Machost & Stains, 2023). Through reflection-in-action, reflection-on-action, and reflection-for-action, pre-service teachers can make real-time instructional changes, assess teaching experiences after the lessons, and systematically plan future improvements of instruction. The more that they are engaged in reflection practices before, during, and after teaching, the more aware they become about their choices, the more they can directly enhance and act upon what they have observed in the classroom to improve instruction (Anselmann & Lunenberg, 2023; Wang et al., 2023).

Supervision quality, including the effectiveness of mentoring, guidance, feedback on observations, and support offered by cooperating teachers and supervisors to the pre-service teachers, is another aspect that is important in teacher development. Effective supervision involves effective feedback, beneficial mentoring, guided observations, and emotional support, which leads to the pre-service teachers progressing toward higher teaching competence and confidence (Griffin et al., 2023; Ambrosetti et al., 2020). In line with this, it has also been found that pre-service teachers can accomplish their tasks in lesson planning, instructional delivery, classroom management, assessment, and professionalism when supervision is organized and regular (Nesje & Lejonberg, 2022; Orland-Barak & Wang, 2021).

In accordance with Sustainable Development Goal 4 (*SD*G 4): Quality Education, empowering teacher preparation initiatives is necessary to make sure that future teachers are adequately trained in order to facilitate meaningful, equitable, and inclusive learning patterns. Reflective, well-supervised, confident pre-service teachers are better placed to create positive learning climates and enhance the results of teaching. This international agenda highlights the importance of adequately trained teachers who can comfortably handle classrooms and also meet the needs of different learners (UNDP, 2024; UNESCO, 2024). Maintaining an effective and well-managed classroom can directly contribute to this, as it minimizes inequalities in learning success caused by distractions, misbehavior, or uncontrolled teaching (United Nations, 2023). It should not be limited to the acquisition of knowledge of learners but also to their social and emotional well-being, which links to the classroom's climate and management. Lastly, taking into consideration classroom management through *SD*G 4 reveals a change of focus from the way of enforcing "control" towards creating a learning environment that promotes learners' active participation in learning, supporting learners' well-being, and enabling relevant and meaningful learning opportunities (López-Martín et al., 2023). The results will not only provide empirical evidence to the teacher education programs, but also meet the larger aim of education to promote quality teaching in line with *SD*G 4.

Considering these challenges, the study analyzed the predictive value of self-efficacy in teaching, reflective practices, and the quality of supervision about lesson planning and preparation, content knowledge and pedagogy, classroom management and learning environment, instructional delivery and communication skills, assessment, and professionalism.

Theoretical and Conceptual Framework

This study assumes that pre-service teachers' teaching performance develops through a sequential process in which supervision quality strengthens self-efficacy in teaching and reflection-for-action. It further assumes that

self-efficacy in teaching contributes to reflection-for-action, which then directly enhances teaching performance in terms of planning and preparation, content knowledge and pedagogy, classroom management, instructional delivery, communication skills, assessment, and professionalism.

Correspondingly, the theoretical foundations were based on the Social Cognitive Theory (Bandura, 1997) and Reflective Practice Theory (1983) of Schon, respectively, Lev Vygotsky's Sociocultural Theory (ZPD & scaffolding, 1978), and the Framework of Teaching (1996) by Danielson. All these theories are employed as they account for the effects of modeling, reinforcing practices, and the establishment of structured yet supportive settings for pre-service teachers to enable them to manage and engage learners successfully.

The research study is primarily grounded in Social Cognitive Theory, which describes the interplay of individual factors, behavior, and environmental factors to determine learning and performance (Bandura, 1986). In this context, self-efficacy is a major concept, described as the teacher's belief that he/she can perform teaching tasks successfully. Consequently, an increased self-efficacy is linked to better lesson planning, instructional delivery, classroom management, and assessment practices (Lee and Davis, 2023). They also build confidence through experience, observation, mentoring, modeling, and feedback, which are critical in an internship environment (Nduagbo, 2023; Nesje et al., 2022). Effective self-efficacy among teachers makes them more confident, persistent, and able to employ effective teaching strategies in the classroom (Tschannen-Moran and Hoy, 2022). Social Cognitive Theory is the primary basis of this study, in which the pre-service teacher's teaching performance is based on the interaction of internal beliefs and external support systems.

Furthermore, the Reflective Practice Theory describes how teachers enhance their teaching by continuously reflecting on their experiences. Schon (1983) suggests that teachers can reflect during and after the teaching and learning process. It is also perceived as a cyclical process made up of three dimensions, namely, reflection-in-action, reflection-on-action, and reflection-for-action. Through these processes, teachers are able to recognize their strengths and weaknesses to make improved decisions in instruction (Machost and Stains, 2023). Reflection-in-action takes place during instruction, and it enables teachers to make instant modifications based on classroom experiences (Russell, 2022). Reflection-on-action occurs after teaching, in which teachers evaluate their practices and find ways to improve them (Lison et al., 2023). Reflection-for-action is future-oriented teaching, which helps teachers design more efficient methods of instruction, relying on previous experiences (Lison et al., 2023). Research has revealed that reflective practice is beneficial to enhance both teaching skills and decision-making, and professional development (Myllykoski-Laine et al., 2024; Nduagbo and Casale, 2023). In this way, reflective practice offers a clear process in which pre-service teachers' teaching experiences can be transformed into better and more meaningful teaching performance.

Moreover, Sociocultural Theory highlights that learning is a social process achieved through social interaction, which makes supervision an important factor in the development of the pre-service teachers' teaching competence (Vygotsky, 1978). Supervision quality through mentoring, feedback, and collaborative engagement supports the development of self-efficacy and reflective skills in pre-service teachers. Supervisors can promote the growth of teaching skills, including lesson planning, classroom management, and assessment, through mentoring, feedback, and guided practice (Lejonberg et al., 2022). The progressive transfer of responsibility enables the pre-service teachers to acquire independence and confidence in teaching.

The Framework of Teaching (Danielson, 2013) also confirms this research by offering a systematic framework to assess the performance of teaching in major areas. The Framework for Teaching establishes effective teaching by covering four main areas, such as planning and preparation, classroom environment, instruction, and professional responsibilities, which are all inclusive to the entire work of teachers (Danielson Group, 2023). It is used as a standard of comparison for instructional quality, promoting an ongoing teachers' development through systematic reflection and evidence-based feedback (United Federation of Teachers, 2024).

Recent studies indicate that teachers who have a higher level of management self-efficacy tend to establish well-organized and supportive learning settings and positive classroom relationships (Lazarides, Watt, & Richardson, 2020; Ozdemir et al., 2025). This motivational aspect is related with the self-regulatory process described in the Reflective Practice Theory by Schon, according to which pre-service teachers consistently evaluate and improve their strategies, resulting in adaptive practices in instruction and management (Li, 2025; Chaseley,2025).

Reflective capacity, therefore, brings experiential learning into professional growth, which supports the relationship between internal belief systems and teaching behaviors that can be observed.

Besides these views, the Sociocultural Theory describes how good-quality supervision provides the social scaffolds and guided practice that pre-service teachers require to work effectively in their ZPD and to transform reflection and belief into effective classroom practice. Also, the Framework of Teaching, developed by Danielson, acts as a surveillance zone, turning theoretical constructs, such as self-efficacy, reflection, and behavioral strategy utilization, into measurable dimensions of educator performance, such as classroom environment, teaching behaviors, and professional behaviors.

Empirically, it has been established that pre-service teacher who had a greater belief in self-efficacy, engaged in reflective practice, and had higher ratings on standardized evaluation models under high-quality and structured supervision (Li, 2025; Lazarides et al., 2020; Chaseley, 2025). Consequently, the framework implies that the development of these dimensions, which go hand in hand in teacher preparation, not only increases the confidence and flexibility of pre-service teachers but also serves as a valuable addition to the overall performance of teachers.

Self-Efficacy in Teaching, according to Social Cognitive Theory, is sensitive to how teachers perceive classroom difficulties, maintain the effort, and persist in solving the problem. An increased level of self-efficacy in classroom management correlates with an increase in instructional engagement, adaptive behavior management, and overall teaching performance (Lazarides et. al., 2020). Additionally, self-efficacy and emotional stability aid teachers and instructors of the subject in a more effective classroom control and improved teacher-student interaction (Wettstein et. al., 2021). In the case of pre-service teachers, a high level of self-efficacy beliefs is essential since it supports their motivation, their decision-making process, and their capacity to implement the strategies they learn in real classroom situations.

In addition to this, *Reflective Practice* is described as a continuous process through which teachers critically analyze their instructional teaching methods, classroom management, and/or professional behaviors to enhance teaching effectiveness. It is based on the theory of Reflective Practice of Schon, which focuses on both the learning process of reflection-in-action and reflection-on-action and asks teachers to make informed changes throughout and after the teaching experiences. Reflective practice enabled pre-service teachers to relate theoretical learning to the teaching practices and, in the process, improve their metacognitive awareness and self-regulation as opined by Li (2025). Chaseley (2025) states that structured reflection also contributes to the acquisition of problem-solving skills and the growth of the profession, as it allows pre-service teachers to evaluate their instructional choices critically. Reflective practice, therefore, is a self-regulation process that enhances pedagogical decision-making and works to enhance the overall performance of the classroom.

The third independent variable, *Quality Supervision,* is a structured guidance, mentoring, and support that pre-service teacher receive in the practicum or field placement. It has been indicated that academic supervision can be quite effective in terms of teacher performance as it provides teachers with direction, feedback, and pedagogical support (Rahmadini, 2024; Syukri et. al., 2023). In a recent study, mentoring (professional, instructional, and personal) was a strong predictor of pre-service teachers' sense of efficacy (i.e., believing in teaching) and preparedness to their classroom duties (International Journal of Research and Scientific Innovation, 2023). Therefore, quality supervision serves as the necessary social scaffold, which assists in transforming the beliefs, reflections, and developing competence of pre-service teachers into effective and practical teaching practice.

Teaching Performance, the dependent variable in the study, is considered to be the observable expression of instructional competence, effectiveness, and professionalism of pre-service teachers in relation to their facilitation of learning. Teaching performance, as guided by the Framework for Teaching (Danielson, 2013), is the integration of pedagogical knowledge, reflective thought, and classroom management activities by teachers within the classroom in order to promote meaningful student learning. The performance of teaching in this study is operationalized through four components that are interconnected based on the schematic framework: instructional delivery, student engagement, assessment, and professionalism. These elements are teachable practices that can be observed and describe good classroom teaching. It indicates the extent to which pre-service

teachers combine knowledge, reflection, and management practices to encourage student engagement and achievement.

It is the aspect of the pre-service teacher that can be observed in terms of competence, effectiveness, and professionalism in the domain of facilitating learning. Instructional delivery is the degree to which teachers deliver lesson material clearly, organized, and flexible enough to help the students achieve learning goals. Effective instructional delivery consists of consistent lesson planning, intentional questioning, effective explanation, and attention to the learning needs of students so that learners can comprehend concepts more efficiently and reach the long-term learning results (Imran et al., 2023).

In addition, student engagement is defined as the extent of learner involvement in the teaching-learning process in terms of behavioral, emotional, and cognitive aspects. To encourage student feedback, teachers introduce organized classroom routines, interactive instructional strategies, and positive reinforcement to maintain learners' attention and interest in doing the learning tasks (Li, 2023). In conjunction with this, assessment is the process by which teachers observe evidence of learning among students and use this evidence to make instructional decisions. Formative and summative assessment strategies allow teachers to track the progress of learners, give feedback that is meaningful and sensitive, and modify instructional methods in order to more effectively meet the learning needs of the students (Wu et al., 2025; Goertzen et al., 2025).

Lastly, professionalism refers to ethical behavior, accountability, and dedication towards professional development exhibited by teachers. It entails professional standards, cooperation with fellow workers, reflective practice, and commitment to the constant improvement of teaching practices (Keshmiri et al., 2023; Muller et al., 2024). Combined, these four elements give an overall picture of teaching performance among pre-service teachers. These include the key instructional, relational, evaluative, and professional features of teaching practice, which, together, it shows how pre-service teachers apply their knowledge, reflective abilities, and classroom management skills into classroom performance.

Also, in the context of teacher education, teacher performance depends heavily on the professional preparation and teaching experiences on the practicum. The pre-service teachers should be competent in planning lessons, using the relevant pedagogical strategies, evaluating student learning, and being professionally responsible when dealing with students and cooperating teachers. An assessment of the teaching of pre-service teachers allows teacher education institutions to establish whether future educators are knowledgeable, skilled, and have professional dispositions that will enable them to engage in effective teaching practice (Dacer, 2024). The conceptualization of teaching performance in the current study is based on a number of interrelated parts, including, but not limited to: lesson planning and preparation, content knowledge and pedagogy, instructional delivery, assessment, and professionalism. Despite classroom management and learning environment being identified as part of existing teaching frameworks, the current study is primarily concerned with the instructional and professional aspects of teaching performance that directly mirror the developed competencies in the teaching practice.

Lesson Planning and Preparation can be defined as the process of organizing the instructional objectives, choosing accurate learning activities, preparing teaching materials, and designing assessment strategies that meet the curriculum standards and address students' learning needs. Good lesson planning gives a clear outline of how the instruction will be given and makes teaching activities aligned with the intended learning outcomes. Teachers with good planning ability can develop consistent lessons that lead students to significant learning of the content of subjects (Lison et al., 2023; Mohamed et al., 2022).

Additionally, lesson planning and preparation are essential elements of the teaching performance as they offer order and consistency to classroom teaching. A well-planned lesson guarantees that there is an alignment between the learning objectives, teaching strategies, and assessment plans. Studies indicate that lesson planning improves instructional clarity and increases student engagement (Beckmann, 2023). In line with this, the Framework of Teaching notes that planning and preparation involve teachers knowing the subject matter and the nature of the learners to plan lessons that enable learners to engage and have meaningful learning experiences (Professional Development Courses for Teachers - Teacher Webinar, 2022).

Within teacher education, lesson planning skills are regarded as one of the core competencies of pre-service teachers. Lesson planning enables teacher candidates to understand how to structure instructional materials, what learning challenges can be encountered, and how to prepare relevant instructional materials that facilitate the learning process. In a study examining the pre-service teachers in the Philippines, it was observed that lesson planning competence is a significant factor in effective teaching practice due to its ability to help teachers plan their learning experiences and provide instruction more systematically (Sanchez, 2024). Research also suggests that teacher students with good planning abilities demonstrate strong instructional preparedness and classroom confidence (Leijen et al., 2024).

Additionally, the lesson planning competence of pre-service teachers can be strongly linked to reflective practice, which implies the systematic analysis of the teaching experience to enhance instructional decisions (Velasquez et al., 2023). Teacher interns can use reflective processes to consider the success and shortcomings of past lessons and adjust their teaching approaches (Fitria et al., 2024). The process improves lesson coherence and contributes to the ongoing professional growth as it allows a teacher to modify instruction and meet the needs of learners (Abualrob, 2025). Reflective practice also enables teachers to change their teaching methods according to the experiences in the classroom and this way, the overall lesson design and teaching efficacy is improved (Velasquez et al., 2023). Reflective planning helps teachers to reflect on previous teaching experiences and make informed decisions, and therefore improve future lesson effectiveness (Lavin and Goodman, 2023). Another important element in the development of planning competence is mentorship during practicum. Cooperating teacher guidance assists pre-service teachers in aligning lesson goals with curriculum guidelines and classroom practices to enhance the effectiveness of the instruction (Mafugu, 2022).

Content Knowledge and Pedagogy can be defined as the knowledge of the subject matter and the skills of teachers to use relevant instructional strategies that enable students to learn. These are all a collection of the skills of a teacher in his ability to turn the subject matter into a meaningful learning experience. This construct combines a profound knowledge of the concepts of discipline with the skills of implementing the right instructional strategies, with the facilitation of student learning and interest. The teachers with this integrated competence are in a better position to explain the concepts in a clear way, myth busting, and changing instruction to suit learning needs (Leijen et al., 2024).

Studies on teacher competence underscore the importance of combining subject knowledge and pedagogical knowledge to be effective at teaching. When teachers are well-informed in terms of their pedagogical content knowledge, they can more effectively design instructional activities that facilitate a conceptual understanding of students and enhance their skills in higher-order thinking (Fabelico and Afalla, 2023). Pedagogical content knowledge, which involves the combination of content knowledge and pedagogy, is closely linked to better teaching effectiveness (Darling-Hammond et al., 2023).

In the case of pre-service teachers, one of the key objectives of teacher education programs is the development of pedagogical competence. Pre-service teachers acquire skills through coursework and teaching practicum on how to apply the acquired theoretical knowledge into practical teaching strategies that meet the diverse learning needs of students. The skill to synthesize the knowledge of the subject with a good pedagogy gives the pre-service teachers the ability to help the students develop academically by designing good learning experiences (Mafugu, 2022). In addition, self-efficacy in teaching is also significant in supporting pedagogical competence. Pre-service teachers with a high degree of belief in their own teaching abilities are more likely use new teaching techniques and modify instruction to suit the needs of students (Scarparolo & Subban, 2021).

According to the study conducted by Bacus et al. (2024), a *Classroom Learning Environment* can be defined as conditions and interactions in the classroom that affect student engagement and participation. Mutual respect, clarity of behavior expectations, and positive relationships between students and teachers define a positive learning environment. Teacher education research has suggested that classroom environment is critically important in influencing the motivation, participation, and academic performance of the students.

Good and effective classroom environments are achieved when the teachers introduce ordered routines and a set of expectations that facilitate order and cooperation among the students. Students will be willing to engage in classroom discussions and collaborative learning activities when teachers are able to establish such environments

successfully. The research conducted on teaching performance demonstrates that the positive classroom climate can increase the engagement of students and positively affect the learning outcomes (Fitzsimons et al., 2024).

Also, according to Zapatero-Ayuso et al. (2026), classroom environment competencies are also developed by pre-service teachers, who undergo a supervised practicum experience, including observing experienced teachers and trying to employ classroom routines. It is in these experiences that pre-service teachers get to understand how to use classroom dynamics, how to help students engage productively, and how to establish learning environments that help students learn academically and socially. With the establishment of a supportive classroom environment, teachers can more effectively deliver instruction that facilitates meaningful learning.

Instructional Delivery is how teachers deliver the content of the lessons, facilitate learning processes, and ensure meaningful engagement in the teaching-learning process. The key elements of successful instructional delivery include clarity in explanations, proper pace of the lesson, meaningful questioning and application of various teaching methods that enable students to grasp lesson concepts. The aspect of instructional delivery is an important factor in teaching performance since it directly affects the way students approach the lesson and build knowledge. With teachers being clear in their teaching and having proper communication plans, chances of facilitating active involvement and enhanced learning amongst students are high. Studies have shown that teacher instructional competence plays a vital role in enhancing learning outcomes since students can more effectively follow the lesson plan and purpose (Evangelio & Escote, 2024).

Additionally, the teaching *Communication Skills* include clear verbal communication, nonverbal communication, active listening and provision of accurate instructions, which combine to improve understanding and engagement of the students during lessons. The use of nonverbal communication in the form of gestures, facial expression, and eye contact has been demonstrated to affect how students perceive teaching effectiveness and classroom interaction (Solomon Abekah Keelson et al., 2024). When teachers are clear in their instructions, organize ideas, and employ proper communication strategies, they most likely foster active engagement and understanding among students; communicative skills positively relate to student academic performance and involvement in classroom tasks (Raluto, 2025). Studies of pre-service teachers also support the idea that communication skills, such as effective articulation and participatory listening, develop based on specific instructional experience and are critical elements of teaching effectiveness during practicum (Hazar, 2025).

The second aspect that is vital in the process of instructional delivery is the ability of the teacher to adjust teaching to the demands of various learners. When teachers have flexible teaching strategies, responding to the questions of students is easier, and, the teacher can adjust the lesson speed and offer further explanations when they are necessary. This flexibility in instruction can enable learners with different abilities and learning styles to understand the lesson material better and engage in classroom activities in a meaningful way (Scarparolo and Subban, 2021).

Also, in the case of pre-service teachers, observation of classroom teaching, teaching demonstrations, and supervised teaching experiences are used to develop instructional delivery skills. With this, their instructional delivery competencies are reinforced by the repeated teaching experiences and the positive feedback provided by cooperating teachers. By observing classroom lessons, receiving mentorship, and engaging in reflective dialogues, teacher interns could be more conscious of their strengths and weaknesses in their instructional practices, which would eventually enable them to smooth their teaching techniques and enhance their instructional delivery over the years (Zach & Sindiani, 2025).

Similarly, the process of instruction is directly related to assessment practices since educators need to know whether their teaching methods can help students learn. Teachers can use formative assessment, questioning, and other evaluation types to track the understanding of students and modify their teaching to achieve better learning results (Reyes, 2023). The process of instructional delivery is also influenced by reflective practice. By reflecting on their teaching experience, pre-service teachers can determine how effective their teaching methods were and what they could help to improve. Reflective activities will enable them to examine the aspects of their lessons that were successful and those that should be improved to create better learning environments. Consequently, reflection allows teachers to improve their teaching practices and enhance their competence in teaching over time (Fitria et al., 2024).

Assessment practices involve the way in which teachers measure student learning and assess the effectiveness of teaching. Assessment is a crucial aspect of the teaching-learning process as it gives information regarding the progress of students and assists teachers in knowing whether instructional goals have been met. The literature on teacher competence emphasizes that good assessment practices help teachers to track learning outcomes and make appropriate changes to instruction (Dacer, 2024). Formative assessment is especially significant as it offers continuous feedback which aids students to enhance learning.

Teachers can also determine the areas where the students need more support by examining their responses and performance in lessons. The teacher development research has shown that the strategies of formative assessment improve student engagement and lead to improved academic performance. Also, assessment literacy is built through teaching practicum when the pre-service teacher has the opportunity to design quizzes, assess student work, and interpret assessment results. Teacher interns gain these experiences to understand how to use assessment information to improve their instructional plans and better assist students in learning (Susilowati et al., 2026).

Moreover, assessment competence is the teacher's skill in designing, implementing, and interpreting assessment strategies to monitor and improve student learning. It includes the use of formative and summative assessments to make instructional decisions, give timely feedback, and help with the self-regulation of students. For pre-service teachers, this competence is necessary for assessing instructional effectiveness and determining learners' strengths and weaknesses (Sirianansopa, 2024; Al-Bahlani, 2023). This competence is further improved by the quality of supervision through mentoring and feedback of experienced teachers who advise pre-service educators on how to design suitable assessments and how to interpret the results to help them refine instruction (Monteleone et al., 2025). Therefore, the combination of assessment competence, reflective practice, and high-quality supervision would guarantee that pre-service educators have the ability to provide evidence-based, student-centered, and student-friendly instruction that can guarantee meaningful learning outcomes.

Professionalism can be described as the professional conduct, professional responsibility, and professional growth exhibited by teachers in their professional lives. Research on teacher development has highlighted that professionalism is essential in ensuring that the standards of teaching practice are maintained, as well as ensuring that there are positive relationships in learning institutions (Zhadyra Makhmetova et al., 2025). Also, Anam et al. (2023) defined professionalism as a set of ethical actions, responsibility, and commitment to lifelong professional development applied by teachers in practice and includes respectful relationships with students and colleagues, punctuality, and participation in reflective teaching (Anam et al., 2023).

Within the framework of the teaching standards, professionalism has been identified as one of the key aspects of quality teaching in terms of its symptomatic view of teacher commitment to high professional behavior and continuing professional growth, frameworks such as Framework of Teaching emphasize such aspects of professionalization as reflection on practice, professional community engagement, and competence progression (The Danielson Group, 2023).

In the case of pre-service teachers, professionalism is also developed, as practicum experiences expose them to the reality of the expectations and ethical standards of the profession through interactions with supervising teachers, school administrators and students, making them more aware of the roles and duties of professionals (Suyatno, 2023). Moreover, professionalism is enhanced in reflective practice because when teachers critically analyze their teaching experiences, they are more likely to improve their instructional practice, maintain professionalism, and express a desire to keep improving (Li, 2025). Therefore, Professionalism is the ethical and professional basis, therefore, that contributes to the overall teaching performance of pre-service teachers.

Figure 1 on the subsequent page illustrates the schematic presentation of the study.

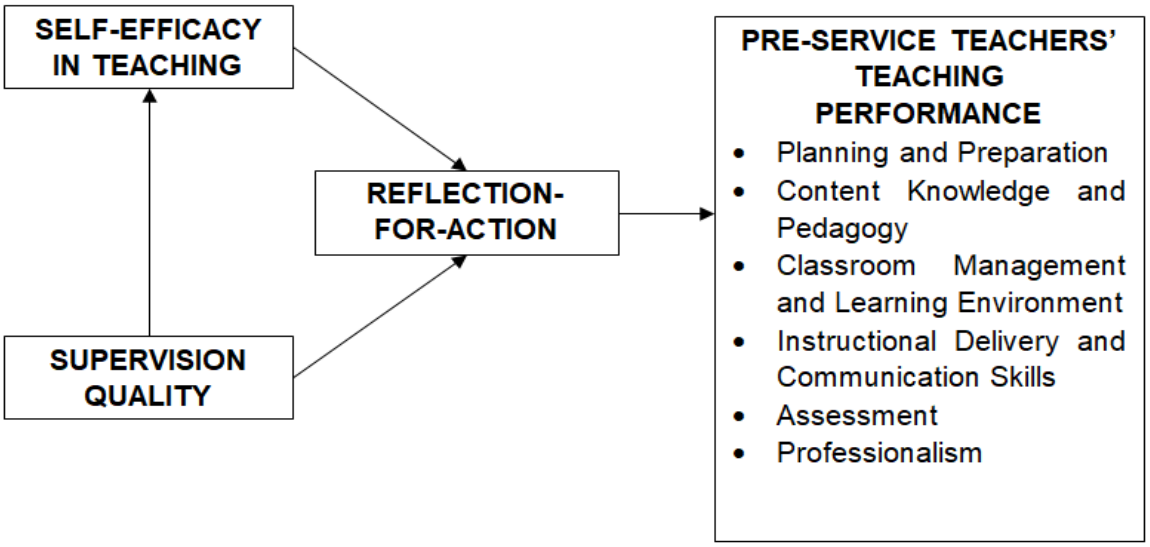

Figure 1. Schematic Presentation of the Study

Statement of the Problem

This study determined how self-efficacy, reflective practice, and supervision quality influenced the teaching performance of pre-service teachers from a local college in Misamis Oriental during the Academic Year 2025–2026. It also determined the levels of these variables and examined their relationships with teaching performance.

Specifically, the study sought to answer the following questions:

1. What are the participants' self-report of their level of self-efficacy in teaching?

2. What is the participants' extent of reflective practice in terms of:

2.1. Reflection-in-action;
2.2. Reflection-on-action; and
2.3. Reflection-for-action?

3. What is the participants' assessment of supervision quality?

4. What is the participants' level of teaching performance considering:

   4.1. Lesson Planning and Preparation;
   4.2. Content Knowledge and Pedagogy;
   4.3. Classroom Management and Learning Environment;
   4.4. Instructional delivery;
   4.5. Assessment; and
   4.6. Professionalism?

5. What model best fits the pre-service teachers' teaching performance?

Hypothesis

The hypothesis was tested at the 0.05 level of significance:

Ho_1: None of the model best fits pre-service teachers' teaching performance.

Significance of the Study

The findings of this study are expected to provide valuable insights into the following:

Pre-Service Teachers. The findings will help pre-service teachers better understand how self-efficacy, reflective practice, and supervision quality influence their teaching performance. This understanding will guide them in improving their confidence, classroom skills, and readiness for the teaching profession.

Mentor Teachers and Teacher Educators. The results will help mentor teachers and teacher educators design more effective training programs and practicum supervision. They will be able to provide specific interventions that strengthen the teaching skills and classroom management of pre-service teachers.

Teacher Education Institutions. The study will provide evidence that can be used to improve curriculum design and practicum experiences. It will help ensure that pre-service teachers develop both theoretical knowledge and practical teaching skills.

School Administrators and Policy Makers. The findings will provide useful information for developing standards, assessment systems, and professional development programs. They will help support policies and school-based programs that improve teacher preparation and supervision.

Future Researchers. The study will serve as a reference for future studies related to self-efficacy, reflective practice, supervision quality, and teaching performance. It will also encourage further research using other variables, methods, and educational settings.

Scope and Delimitation of the Study

The research study was conducted across different grade levels in the selected cooperating elementary schools under the Department of Education (DepEd), where pre-service teachers were assigned for their internship. The participants were both the cooperating teachers with the classes of various grades, and the pre-service teachers who were the second semester of practicing teaching during the Bachelor of Elementary Education (BEEd) program. The research was conducted in one semester (1) or four to five months.

The research investigated three independent variables, which include: self-efficacy in teaching, reflective practice, and quality of supervision. The dependent variable was teaching performance, which is measured by the means of lesson planning and preparation, content knowledge and pedagogy, classroom management and the learning environment, instructional delivery and communication skills, assessment, and professionalism. It was specific to pre-service teachers who were assigned to selected cooperating schools in a local higher education institution and who were assigned to intermediate grade levels.

The research design was restricted to pre-service teachers in their internship period and excluded in-service teachers, pre-service teachers who were placed in lower grades, and/or pre-service teachers who were deployed to schools other than the identified cooperating institutions.

There were a number of limitations associated with the study that are out of the control of the researcher. These encompassed differences among learners with respect to abilities, interests, and behavior; the general school climate and institutional practices; differences in the mentoring practices used by supervising teachers; and potential distractions in the teaching-learning process, including absenteeism, school activities, or unforeseen incidents that influence the schedules of classes. Nevertheless, the study aimed to offer a clear picture of the role of self-efficacy in teaching, reflective practice, and the quality of supervision in influencing teaching performance of the pre-service teachers working in the actual classroom context.

Definition of Terms

In this study, several key terms are defined both theoretically and operationally to provide clarity and consistency in understanding the variables examined.

Quality of Supervision. This term can be defined as the level of guidance, support, and feedback from cooperating instructors and supervising teachers during the internship. It also encompasses the ability of supervisors or mentors to provide instructional guidance, feedback following observations on time, modeling how to teach well, and emotional or professional assistance.

Reflective Practice. This refers to the systematic approach whereby pre-service teachers reflect on their teaching experiences to improve instructional decisions. It is also concerned with teachers examining their performance, identifying areas where they need to improve, and using the experience to enhance their lessons in the future. In the context of this study, it comprises the following:

Reflection in action. This refers to the real-time changes in the pre-service teachers during the teaching process. It focuses on how teachers adjust their explanations, pacing, classroom activities, and strategies to meet the needs of learners, responding to unexpected classroom situations. This provides spontaneous instructional choices, adjusts instructional delivery in real-time, adjusts activities to maintain interest, and clarifies misunderstandings during the process of teaching.

Reflection on action. This refers to the process where pre-service teachers evaluate their teaching after teaching, seeking strengths, challenges, and areas for improvement. It involves written reflections, post-lesson discussions, and evaluations that show what worked, problems that have arisen, and what is required to be improved. This is evidenced by reflective journals, discussing with the mentors to enhance the following lessons. It implies their ability to evaluate themselves critically and lifelong learning.

Reflection for action. This term is explained as the ability of pre-service teachers to use lessons or proactive teachers' reflection; the insights of past and current events inform the planning and preparation of future teaching activities. This involves improved lesson plans, predicting potential classroom challenges, and implementing the learned methods towards a more efficient teaching performance. It emphasizes a progressive attitude and professional growth.

Self-Efficacy in Teaching. It refers to pre-service teachers' confidence in their ability to accomplish necessary teaching duties, including classroom management, instructional delivery in different learning contexts, learner support, lesson planning, and accommodating learner differences. It involves the way they believe they are able to manage instructional and behavioral demands. The concept is based on the definition of self-efficacy by Bandura (1997) as a person holding the belief that he or she is capable of performing actions necessary to handle situations.

Teaching Performance. This term refers to the capability of pre-service teachers to control the classroom, implement the lesson efficiently, and create a favorable environment in the classroom. Operationally, this means the participants' performance is assessed regarding classroom management, instruction delivery, student interaction, assessment, and professionalism as per their official practicum evaluation forms.

Lesson Planning and Preparation. This refers to the organization, accuracy, and coordination of the lesson plans in terms of curriculum standards and learning competencies. Here, it encompasses the clarity of objectives, appropriateness of strategies, logical sequencing of activities, and readiness of instructional materials. Mentor's evaluation of lesson plans and teaching demonstrations of observed teaching are scored.

Content Knowledge and Pedagogy. This refers to how well the pre-service teachers understand the subject matter and apply appropriate teaching methods. This work proves it with proper definitions, proper application of ideas, and proper choice of strategies according to the needs of the learners. It is quantified by the ratings of classroom observation that take the evaluation of subject mastery and pedagogical choices.

Classroom Management and Learning Environment. This refers to the readiness of pre-service teachers to keep the order, develop routines, respond to misbehavior, and provide a safe and positive learning environment. Among others, it discusses how interns arrange the classroom, transition management, facilitate learner engagement, and establish a favorable learning environment. It is rated on the basis of classroom observation standards according to the practicum performance tool.

Instructional Delivery and Communication Skills. This means the level of effectiveness with which pre-service teachers deliver lesson content and communicate with learners. In this case, it comprises clarity of explanations, employing questioning techniques, pacing, voice modulation, and facilitating understanding. It is evaluated by the observation rating and communicative descriptors in the practicum assessment form.

Assessment. This refers to the application of the appropriate instruments and approaches to track the progress of the learners and direct teaching. It comprises the designing and utilizing quizzes, performance tasks, rubrics, feedback systems, and data-based upgrading of instructions. Assessments are evaluated on the basis of documented assessment practices and using ratings by mentors.

Professionalism. This refers to the application of professional and ethical standards of the pre-service teachers in their internship. It involves time management, plan preparation, collaboration with school staff, feedback responsiveness, and involvement in professional development. professionalism is measured in terms of the involvement of the teacher in professional development, the compliance with the Code of Ethics of Professional Teachers, the reflective practice, and the documentation of the contribution of the teacher to the activities of the collegial improvement (UNESCO, 2024).

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter reviews related literature on pre-service teachers' teaching performance and its key predictors: self-efficacy, reflective practice, and quality of supervision. It establishes the study's conceptual and empirical foundation by defining these variables, identifying their indicators, and examining their relationships within the proposed structural model. The chapter is organized into three parts: teaching performance as the outcome variable, the predictor variables and related studies, and a synthesis highlighting research gaps and justifying the hypothesized model.

Pre-Service Teacher's Teaching Performance

Teaching performance can be defined as the capability of pre-service teachers to plan, deliver, and administer instruction efficiently in their practicum. It involves lesson planning, instructional delivery, classroom management, assessment practices and professional behavior. These elements demonstrate the extent to which pre-service teachers can use theoretical knowledge in real classroom contexts.

This perspective aligns with teaching models such as the Philippine Professional Standards of Teachers (PPST) and the Framework for Teaching by Danielson (1983), which identify the effective teaching practice based on planning, instruction, classroom setting, and professional responsibility. These areas are directly related to the indicators of teaching performance measurement in this study.

In line with this, empirical research findings indicate that there are both internal and external factors that affect teaching performance. Accordingly, Guevarra (2024) discovered that pre-service teachers who were successful in lesson planning and instruction delivery had higher chances of succeeding in their practicum, proving that they were effective predictors of overall teacher performance. On the other hand, self-efficacy is a powerful predictive variable of teaching performance. The findings of the study by Garcia-Lazaro et al. (2022) indicated that teachers who have a high level of teaching self-efficacy displayed higher confidence in their ability to teach the lesson and manage classroom activities, resulting in improved teaching results. Equally, Khusniyah et al. (2023) demonstrated that belief in the ability to teach well affects decision-making in the process of instruction, and this has a direct positive effect on classroom performance. Ribeiroinha and Correia (2025) also found that teaching internship experiences enhance self-efficacy, improve teaching competence, and suggested that confidence is directly related to performance.

Additionally, Teaching performance is also enhanced by reflective practice. Peguera-Carre et al. (2023) reported that pre-service teachers who had a structured reflection on their practice enhanced the delivery of instruction and especially in the areas of communication and clarity of explanation. Octoria (2025) further say that reflective teachers will be more likely to recognize the learning challenges in their students and make changes in their teaching practices that lead to better classroom management and student engagement.

The quality of supervision also has a significant contextual role. Kean et al. (2024) have shown that pre-service teachers provided with clear guidance and regular feedback from mentors have demonstrated better lesson implementation and professional behavior. Plopino and Carbonell (2025) also stressed that well-organized supervision involving observation and feedback sessions can improve teaching skills in the areas of planning, instruction, and assessment.

Instructional competency and available resources also affect teaching performance. Rivera et al. (2025) discovered that teachers who had good content knowledge and instructional delivery were more effective in teaching. Nevertheless, Sinsay-Villanueva et al. (2025) observed that teaching quality is still influenced by gaps in the teacher preparation programs, and better training systems are necessary. Adjei (2023) also demonstrated that performance-based assessments reinforce teaching ability and confidence, which is why they can be used to evaluate teaching performance. All in all, the performance of teaching depends on the combined impact of self-efficacy, reflective practice, and the quality of supervision. These variables interact to facilitate the acquisition of effective teaching practices by the pre-service teachers.

Moreover, the design of the standards of teaching performance reflects the overall changes in expectations of the education process and societal needs. The new models are centered around the 21st-century skills, technology use, and culturally responsive teaching practices. The Philippine Department of Education teacher education program presents the necessity to instill competencies in pre-service teachers, including the aspect of learning losses and the acquisition of skills and abilities to face the challenges of the future (DepEd, 2025). This policy agenda refers to the fact that the performance expectation in teaching is not fixed, and that the teacher preparation programs should always evolve.

The succeeding paragraphs discuss the components of teaching performance as used in this study.

Lesson Planning and Preparation. The lesson planning is one of the main aspects of teaching performance. It involves the setting of clear learning objectives, organizing instructional activities, and aligning assessment to the expected outcomes. In their research, Lestari and Lestari (2021) concluded that pre-service teachers who created detailed lesson plans regularly showed readiness and confidence in the process of teaching, which implies that planning competence is a direct contributor to teaching performance. Rubio and Saenz (2023) also demonstrated that effective planning competencies enhance the correspondence between the intended goals and the reality presented in the classroom, which leads to better outcomes in the classroom.

Self-efficacy also affects lesson planning by enhancing confidence to plan lessons and foreseeing classroom challenges. Reflective practice also enhances planning as pre-service teachers can review past lessons and enhance future teaching. Ponce (2024) stressed that they should be coherent in planning and assessment to make teaching more effective, which is best achieved by using structured planning tools. Nevertheless, little local research has been conducted on the systematic development of planning skills, which means that a gap is filled by this study.

Content Knowledge and Pedagogy. Pedagogy and content knowledge constitute a critical aspect of teaching performance since they directly determine the accuracy of instruction and the clarity of concepts, and the capacity to construct meaningful learning experiences. Content knowledge enforces accuracy, whereas pedagogy concentrates on teaching content to learners. In addition to this, teachers who possess high content knowledge are able to describe understanding and to resolve misconceptions of students, making them more confident in their teaching (Conceicao et al., 2022). Pedagogical knowledge assists teachers in selecting the right strategies that facilitate the learning process and participation.

The combination of content and pedagogy, known as pedagogical content knowledge, is closely associated with teaching effectiveness, which is highlighted by Linda Darling-Hammond (2021). This integration enhances the instructional delivery and responsiveness of pre-service teachers during practicum in those who develop it (Manigbas III et al., 2024).

As mentioned by Rubio and Saenz (2023), pre-service teachers who possess strong content knowledge also exhibit confidence in their ability to explain the subject matter and make instructional changes based on the

students' questions. This result is consistent with the theoretical view that teaching quality can be based not on knowledge of what to teach, but on how teachers construct and bring this knowledge to students.

Self-efficacy facilitates the competent application of instructional strategies, and reflective practice is used to sharpen teaching methods. Both areas are reinforced with the quality of supervision, which offers guidance and feedback (Fitzsimons, 2025). Nevertheless, it is necessary to consider the application of these skills on the local classroom level (Espiritu, 2021).

Learning Environment and Classroom Management. Classroom management and learning environment are key components of the teaching performance since they directly affect the extent to which the students will be able to learn. Recent reviews show that positive classroom management approaches — including clear routines, active monitoring, and positive behavior strategies — are linked to higher student participation, fewer disruptions, and improved school connectedness, all of which increase learning opportunities. (Wilkins et al., 2022). Today, classroom management is not limited to behavior control but also refers to organizing routines, expectations, and interactions, enhancing the creation of a positive learning atmosphere (NSW Department of Education, 2020). Such a holistic approach is consistent with the instructional quality frameworks that focus on the classroom structure, support, and climate as fundamental aspects of effective educational performance (Ye, 2024). Notably, classroom management does not run on its own but is influenced by the quality of instructional supervision that teachers are getting, their perception of self-efficacy in their teaching duties, and their involvement in reflective professional practice. These processes are all interconnected, and they also affect the overall way classrooms are run, as well as how teachers develop and change in their lifetime.

The learning environment and classroom management play a vital role in defining student engagement, flow of instruction, and overall teaching performance. Manigbas III et al. (2024) also found that Pre-service teachers who had greater classroom management competency defined more specific behavioral expectations, reduced disruptions, and provided more structured learning environments in practicums.

Available literature notes that classroom management is not merely about controlling the behavior but also about creating an environment in which learning will thrive. According to recent studies, the pre-service teachers also tend to have problems with controlling behavior in the classroom and creating effective discipline patterns, because the competence of classroom management is built over time, and the teaching experience and working practice are crucial. According to a study by Junker et al. (2021), pre-service and beginning teachers generally show less competence in classroom management than experienced teachers, and these skills are still developed during professional preparation and teaching experience. The challenges highlight the need for systematic preparation to incorporate both theoretical knowledge and practical teaching experiences in the learning environment management. Moreover, Street et al. (2025) found that first-year Pre-service teachers usually struggle to uphold instructional assistance and establish consistent expectations, especially in diverse classrooms or high-enrollment classrooms.

In summary, the literature indicates that successful classroom management leads to continuity in the instructional process, less learner disengagement, and greater classroom participation. Despite the good evidence of the classroom management development using the simulated and practical environment of international studies, further Philippine-focused studies are required in order to determine how culture, classroom size, and local school conditions mediate the management practices among pre-service teachers.

Instructional Delivery And Communication Skills. Teaching performance includes instructional delivery as a key element since it has a direct effect on the understanding, engagement, and achievement of students. It includes the clarity, organization, pacing, and flexibility of teaching factors that characterize the lesson planning, presentation, and adaptation of the lessons by pre-service teachers to improve the learning results. The delivery of the instructions must be effective so that the lesson can be purposeful, structured, and in response to the various needs of the learners. On the same note, Benton and Li (2021) have determined clarity as the foundation of effective instruction, and they claim that by clearly communicating learning objectives and expectations, students gain a clearer idea of what the lesson is all about and are motivated throughout it more. The recent studies have also emphasized the significance of pacing and instructional organization. Fryer and Leenknecht (2023) suggested that the teacher's teaching clarity, feedback, and self-efficacy correlate with teacher confidence

and student achievement. On the other hand, Van der Lans et al. (2021) stated that adaptive pacing (speeding or slowing down the lesson according to the student's readiness) enhances learning outcomes, and Sutherland et al. (2022) discussed that flexible pacing facilitates individualized learning despite institutional constraints or requirements.

The skills of instruction delivery and communication are the key to teaching efficiency because they directly determine the way academic material is delivered to learners and the way learners interact with the instruction. Instructional delivery denotes the pedagogical methods teachers use, such as clarity of explanation, logical sequence of the teaching material, questioning strategies, active engagement techniques, and communication skills, which are related to language clarity, responsiveness, and interpersonal interaction inside the classroom. Studies have long demonstrated in the Philippines and in other global areas that the level of competence of teachers in the delivery of instruction is a decisive factor in the understanding and engagement of students, more so in language-intensive disciplines where communication skills are key to learning (Ompoc, 2023). These results put the instructional delivery and communication skills as the pillars of successful classroom instruction. In line with this, instructional supervision can be of great significance in the process of developing and enhancing the delivery of instructions and communication skills.

Communication skills and instructional delivery skills are critical aspects of the performance of the teaching process that define the clarity, organization and flexibility of classroom instructions. According to Al Kharousi, Yulia, bt Mohd Rozi, and bt Abd Malek (2025), pre-service teachers who had stronger communication competencies were better in clarity in their delivery of lesson material, effective questioning techniques, and interaction with learners. These competencies are especially important in helping students grasp the material in language-intensive and interactive classes, and it is important to stress that communication competence is one of the primary indicators of the quality of instruction. Similar findings were made by Ramirez (2020), who observed that mentors view pre-service teachers who present confidently, explain clearly, and interact with their teachers and their learners as instructional-ready and responsive to their learners.

The studies of communication also reveal that the delivery of instructions involves not only the clarity of the spoken words, but also the pacing, responsiveness, and strategy of interaction. As reported by Alcazaren (2024), integrated assessment practices, including checking for understanding as an instructional practice, may be a very effective way to enhance instructional delivery and cognitive engagement of students. This concurs with the evidence that delivery of instruction is best achieved when teachers adjust the pacing and modes of communication in accordance with the divergent needs of learners.

Overall, instructional delivery and communication are multidimensional competencies that influence the way learners perceive and process instruction. Although the existing literature has shown positive links between communication skills and instructional effectiveness, localized learning on the development of these competencies in the practicum experiences of Filipino pre-service teachers, particularly in a culturally diverse classroom, remains limited.

Assessment Practices. Assessment practices play a central role in knowing the learning of students, making instructional decisions, and increase the relevance and effectiveness of instruction. Evaluation in the teaching-learning process is a systemic process of identifying the levels as to which the instructional objectives have been achieved and in making future decisions about the pedagogical process. Learning assessment involves formative and summative activities, where formative assessment aims at tracking student learning in real-time, offering continuous feedback, and influencing real-time instructional changes whereas summative assessment evaluates learning outcomes at the conclusion of an instructional unit. The solid evidence confirms that the practices of assessment that are focused on the continuous learning, feedback on time, and monitoring allow students to engage and improve their performance in any educational setting to a large extent (Sortwell et al., 2024). Specific and timely feedback is associated with formative assessment in particular with better student performance, higher levels of self-regulation and higher levels of conceptual knowledge. With this, the effectiveness of assessment practices in enhancing learning outcomes highly depends on the quality of feedback that is implemented in the assessment practices. Specific, action-oriented, and learning-process oriented feedback instead of judgmental feedback has been empirically demonstrated to have a positive effect on student motivation, encouraging self-regulation, and engagement with academic activities (Brandmo & Gamlem, 2025). The quality of feedback helps

the learners to understand their strengths, weaknesses and adopt strategies that will be used to learn in future, thus serving as a critical transition between assessment and instructional adaptation. In comparison to comparison-based mechanisms, formative feedback mechanisms, which focus on learning progress and not comparing students with each other, lead to fairer learning opportunities and higher student agency.

Accordingly, Alcazaren (2024) concluded that Pre-service teachers who had higher assessment literacy levels had a higher ability to design formative assessments, interpret student feedback, and give actionable feedback. Such practices increase the level of learner autonomy and encourage deliberate reflection on the learning outcomes. Wei et al., (2026) emphasized that intelligent and explainable assessment systems enhanced the capacity of Pre-service teachers to analyze data and modify the instructional strategies to support learning progress.

Philippine research also reflects on the contribution of assessment practices towards enhancing positive teaching outcomes. According to Dacer (2024), more competent pre-service teachers in key assessment practices were better at aligning assessment tasks to learning objectives, and this is how a more definitive instructional focus and tracking student performance became achievable. Those results validate the idea that assessment literacy is not only a task in measuring but a tool of instruction that improves the decision-making of teachers and the interaction of students.

Collectively, these studies confirm that holistic evaluation practices, especially formative strategies, interpretation of data, and practical feedback, have a substantial influence on teacher performance. Nevertheless, empirical research on the application of these practices by Philippine pre-service teachers in practice based on classroom experiences and the manner in which assessment training programs influence their overall teaching competencies remains limited.

Professionalism. Professionalism in teaching can be defined as the attitudes, behaviors, competencies, and ethical standards that define the practice of teachers as professionals. Modern studies place professionalism not only as a system of adherence to external requirements but as a complex construct of professional identity, autonomy, and collaborative interaction, as well as lifelong learning (Ingaran et al., 2025). Professionalism, as the concept, includes professional identity, professional ethical behavior, professional responsibility, lifelong learning, and professional activities within professional communities, which together lead to the successful teaching process and the continuous enhancement of student development (Nadia et al., 2025).

In contrast to experienced teachers, interns are at a developmental stage, which means that they combine theoretical knowledge with practice in the classroom. This is because their professionalism is demonstrated by their ethical behaviors, responsibility, participation in professional learning, and responsiveness to supervision by which builds the ability to provide quality instructions and assist students to learn. As an example, Tian (2025) notes that at the internship level, the basis of future teaching ability and instructional efficacy lie in professional behaviors and reflective habits, which should be developed early on in teaching to achieve growth over time. Professionalism is the measure of how individual teachers absorb professional norms as well as the systemic demands of teachers to maintain a practice that fosters student success, collaborative teamwork, and continuous professional development. High-quality education relies on teacher professionalism because it embodies individual qualities and group commitments that define educational outcomes and learning experiences.

Collectively, these studies suggest that professionalism is not confined to technical skills, but also to ethical participation, collaboration and reflective involvement in learning communities. Although this can be corroborated by international literature, studies specifically on professional development paths of Pre-service teachers in local Philippine contexts are scarce, indicating that contextual research is to be conducted in greater depth.

In general, the literature reviewed offers a consistent and appropriately supported background to the understanding of teaching performance by pre-service teachers as a multi-dimensional construct that is influenced by personal and contextual factors. In the literature, teaching performance is always found to be highly correlated with lesson planning, content knowledge, and pedagogy, classroom management, instructional delivery, assessment practices, and professionalism, which are enhanced by effective instructional supervision,

high self-efficacy beliefs, and reflective practice. The literature also shows that these variables do not work independently, but rather interact dynamically to affect the process of translating theory into effective classroom practice by pre-service teachers.

These gaps need to be addressed to inform the teacher education programs and enhance the training of future educators. Thus, this summary of related literature creates a solid theoretical and empirical foundation of the current study and highlights its importance in developing evidence-based practices in pre-service teaching education.

Pre-Service Teachers' Self-Efficacy in Teaching

Self-efficacy in teaching can be defined as the beliefs held by the teachers regarding their ability to plan and carry out instructional activities necessary to attain sought educational end results. It is based on the Social Cognitive Theory (1986) by Bandura, according to which the beliefs that individuals have in regard to their abilities affect their motivation, behavior, and performance. Self-efficacy is significant in teacher education because it influences the way pre-service teachers respond to instruction issues, classroom management, and effective instruction practices.

The significance of self-efficacy in professional teaching practice has been proven in several studies. Highly self-efficacious teachers are more likely to show greater confidence in lesson planning, the use of new instructional strategies, and addressing challenges encountered in the classroom effectively (Garcia-Lazaro et al., 2022). Also, Khusniyah et al. (2023) have found a similar result, stating that the positive beliefs of teaching competence allow pre-service teachers to introduce more efficient classroom behaviors and better instructional decision-making. These results show that self-efficacy is a significant predictor of teacher professional motivation and instructional engagement.

Empirical evidence further indicates that self-efficacy is built in the course of teaching practicum through experiential learning opportunities. Ribeirinha and Correia (2025) established that structured teaching experiences and mentorship programs can have a significant effect on the self-efficacy of pre-service teachers as they enable them to use theoretical knowledge in actual classroom settings. Pre-service teachers can gain confidence in their teaching skills and build stronger professional identities through repeated teaching experience and positive feedback provided by mentors.

Nonetheless, certain researchers suggest that the correlation between self-efficacy and teaching performance is not necessarily direct. Indeed, as Hettinger et al. (2024) described, self-efficacy can affect the attitude and engagement of teachers, but its direct effect on the visible teaching outcomes may depend on the contextual and institutional factors. Similarly, Chen (2024) identified that the self-efficacy factor has a higher contribution to professional growth and teacher resilience compared to teacher immediate performance. These findings imply that self-efficacy can be a motivational resource to aid professional development, but not a predictor of teaching effectiveness.

In general, the literature suggests that self-efficacy is an important factor that affects professional attitudes, motivation, and confidence of teachers. In line with the Social Cognitive Theory, the beliefs that teachers hold concerning their instructional skills shape the way they approach their teaching tasks and professional challenges. However, there is no consistent empirical evidence on its direct impact on teaching performance. This underscores the importance of additional studies that explore the interaction of self-efficacy with other professional variables, including reflective practice and the quality of supervision, with teaching performance.

Pre-service Teachers' Reflective Practice

Reflective practice can be defined as the process by which an educator critically evaluates his or her experiences as a teacher in order to make future teaching decisions. The theory is based upon the Reflective Practice Theory by Schon (1983) that highlights the three types of reflection, namely: reflection-in-action, reflection-on-action, and reflection-for-action. Reflective processes help teachers to assess their teaching methods, see where they can make improvements, and craft more effective methods of teaching.

Reflective practice is one of the pillars of professional teaching development, which involves systematic inquiry practices that help educators to examine, review, and enhance their teaching practices. According to the current definitions, reflective practice can be defined as intentional reflection that is inherent in the organized sequences of self-observation and self-assessment aimed at encouraging continuous learning and professional development (Newell, 2025). A thorough review of the literature by Suphasri (2021) found reflective practice as an inquiry process in a cycle, with teachers thoughtfully gathering evidence on their teaching practice to analyze, interpret, and evaluate their experiences with the aim of enhancing future teaching. This process makes the reflective practice stand out from the spontaneous reflection, and thus, reflective practice is aimed at becoming a method of professional development.

Reflective practice can help increase teacher identity and lead to better teaching through a number of processes. Systematic reflection assists teachers in being more aware of themselves and, therefore, in a better position to analyze their instructional practices as well as their effects on student learning outcomes. Lifelong learning and development are founded on this enhanced awareness. As promoted by Machost & Stains (2023), reflective practice has allowed pre-service teachers to notice inconsistencies between the intended outcomes of instruction and the execution of assessment, which results in more responsive evaluation practice.

Reflection-in-action takes place through the teaching process, where a teacher modifies their strategies based on the situation that takes place in the classroom. This type of reflection allows teachers to make instant instructional choices depending on the reaction of students and classroom interactions. According to Farrell (2022), reflection-in-action provides teachers with an opportunity to modify their teaching practices on the spot, improving responsiveness and teaching efficiency in the classroom. These adaptive practices of teaching are especially significant to pre-service teachers who have not yet established their professional competency.

On the other hand, reflection-on-action occurs after the teaching experience. At this phase, educators adjust their teaching choices, assess the effectiveness of strategies they use, and find ways to improve them. Research indicates that post-teaching reflection helps pre-service teachers to critically examine their teaching practices and have more insight into pedagogy (Saleem, 2024; Mandal and Chattopadhyay, 2024). In the Philippines, the teaching practicum reflective experiences have been found to reinforce teacher awareness and improve instructional competence in practice teachers (Comia et al., 2024).

The third dimension, reflection-for-action, is about preparing future teaching plans on the basis of the knowledge received through previous experiences. This is a proactive type of reflection that helps teachers to foresee challenges in classrooms and create more effective teaching strategies. Burhan-Horasanli and Hart (2024) pointed out that reflection-for-action assists teachers in refining lesson planning as well as enhancing the organization of instruction. On the same note, Sam et al. (2025) discovered that reflective lesson planning contributes to instructional preparedness and classroom facilitation in pre-service teachers.

Although the importance of reflective practice in teacher education has been recognized, certain studies observe that not all reflection necessarily results in better teaching performance. Velasquez et al. (2023) stated that reflective activities should be facilitated with the help of mentoring and professional guidance to be more effective. Unless reflective insights are closely coupled with a structured support system, there is always a likelihood that the insights will not be translated to some kind of improvement in classroom practice. As such, professional supervision and feedback mechanisms should go hand in hand with reflective practice.

To conclude, reflective practice was found to be a significant part of the professional growth of the pre-service teachers as it facilitates critical thinking, self-reflection, and improvement of instruction. In line with the theory of reflection presented by Schon, reflection helps a teacher to learn through experience and improve his or her teaching strategies, determined by the existence of facilitating learning situations and mentorship, which means that supervision plays a vital role in the process of professional development.

Pre-service Teachers' Assessment on Supervision Quality

Supervision quality is the effectiveness of mentoring, feedback and professional guidance by cooperating teachers and internship supervisors in the teaching practicum. Supervision in teacher education is an important

part of facilitating the professional growth of pre-service teachers to assist them in the transition between theoretical learning and classroom practice.

The significance of supervision is justified in the discussion of the Sociocultural Theory of Vygotsky (1978), who emphasized the idea of learning based on social interaction and directed within the frame of Zone of Proximal Development (ZPD). This theory states that in case the novice learners are assisted by individuals who are more knowledgeable, they are in a position to accomplish tasks that they have not been able to do on their own. When it comes to teacher education, cooperating teachers and supervisors are mentors who offer scaffold which allows pre-service teachers to build instructional competence.

Empirical research points to the significant use of supervision in enhancing teaching practices. Lejonberg et al. (2022) established that structured mentoring and positive feedback play a significant role in professional learning of pre-service teachers. On the same note, Wang et al. (2025) established that instructional confidence, reflective thinking, and classroom management skills improve in student teachers when they have effective supervisory practices. These results indicate that supervision can be considered the necessary support system that can help a person to develop professionally.

The pre-service teachers and their cooperating teachers' mentoring relationship is the most important aspect of the practicum experience because the formal guidance and supervisory feedback only assist pre-service teachers to bridge theory with practical classroom realities. In the Philippines, pre-service teacher competencies in lesson planning, classroom management, and instructional delivery were found to be enhanced by structured coaching and mentoring when performed during practicum, and mentoring conferences enhanced confidence and reflective thinking about the teaching practices (Estipona, 2025).

Empirical studies also reveal that pre-service teachers perceive classroom feedback offered by mentors and supervisors as more than evaluative feedback; it can be described as a dialogic type of feedback that promotes professional development and inspires teachers to reflect more regularly on their teaching practices (Tubal et al., 2025). The presence of reflective practice has been also associated with the planning, designing, implementing, and evaluating the instruction of pre-service teachers, which supports the idea that reflection is one of the main mechanisms by which pre-service teachers form opinions about teaching and practicum experiences (Cadiz, 2021). Such mentoring relationships and reflective dialogues thus lead to changes in instructional practices and classroom management practices among future teachers.

Nonetheless, the effectiveness of supervision in teacher education relies significantly on the quality of mentoring relationships and the consistency and developmental quality of feedback because inconsistent or low levels of supervisory involvement have been found to reduce the effectiveness of practicum experiences (Asregid, 2025). The literature on mentoring in practicum settings indicates that guided mentoring discussions based on observation have the potential to promote the professional growth of student teachers by enabling them to observe and think critically about classroom interactions, but the differences in mentoring styles used by different teachers and the quality of the feedback might limit more in-depth reflection (Goldshaft, 2024). Empirical data also suggests that when supervisors engage in dialogic and targeted feedback, it is not only that teaching skills and reflection are improved but that reflective practice and professional development are also encouraged; but inconsistent, delayed, or primarily procedural feedback practices limit the development of autonomous teaching competencies (Asregid, 2025).

Local research in the Philippine context also indicates that guidance and mediation offered by cooperating and supervisory teachers has an impact on how pre-service teachers cognitively construct the meaning of practicum challenges, with feedback of significance and scaffolded assistance impacting teacher learning and development (Manicio and Baetiong, 2023). Socioculturally, such facilitated interaction is consistent with Vygotsky who argues that learning occurs through social interaction and scaffolding and therefore, the quality of supervision is critical in molding the instructional performance of pre-service teachers. However, the gaps in empirical research on the actual interaction of supervision quality with individual professional variables, including self-efficacy and reflective practice, to define the role of instructional outcomes, indicates a significant research gap in future investigations.

Overall, the analyzed literature confirms that the concept of teaching performance in pre-service teachers is a multidimensional construct that depends on internal and external factors. Always, self-efficacy has been distinguished as the important motivational variable that determines the instructional confidence and persistence, whereas reflective practice has been recognized as a self-regulatory process that promotes instructional decision-making and professional development. Moreover, the quality of supervision is another important contextual support that can help pre-service teachers be able to apply theoretical knowledge and reflective insights into real classroom practice.

Although there is strong empirical evidence that supports each of these variables separately, there is a significant gap in the current body of research focusing on their interactive effect within a single data-analytical model, especially with the application of sophisticated statistical methods like Structural Equation Modeling (SEM). The new research notes the growing popularity of SEM in the field of education research to model complicated relationships between variables; still, they indicate the lack of integration of numerous teacher-related factors into a single predictive equation (Sun and Liu, 2023). In addition, the body of research in the Philippine context, particularly in the context of exploring how these factors interplay to affect teaching performance during practicum experiences, is limited (Jiang et al., 2025).

Considering these gaps, the current study is essential to give an analysis of teaching performance that is model-based and comprehensive among pre-service teachers. Through SEM, the research will determine the most appropriate model to explain the relationship between self-efficacy, reflective practice, and supervision quality. By doing this, it provides evidence-based information that can be used to improve teacher education programs, improve practicum supervision practices, and assist in developing more effective instructional competencies among future educators.

RESEARCH METHODS

This chapter delves into the research design, research participants and sampling procedure, instrumentation, validity, and reliability of the research instruments, scoring procedure, data collection procedure, and ethical considerations, and statistical treatment of the data that will be gathered, which were adequately described, underscoring the appropriateness of each component.

Research Design

The study employed a quantitative, descriptive-correlational research design and Structural Equation Modeling (SEM) as the main analytical method to be used to investigate the associations between the variables and test the hypothesized theoretical model. SEM was selected because it enables simultaneous examination of various direct and indirect connections between variables, which is especially necessary when examining complex path models.

As Creswell and Creswell (2023) observed, a correlational design enables a researcher to quantify the level of relationship between variables for statistical means without controlling or manipulating any circumstances. Quantitative research, by definition, presents an objective description of trends, patterns, and relationships based on the gathering and evaluation of numerical data. This study design, together with SEM, was very appropriate to the purpose of the study, which was to establish whether self-efficacy, reflective practice, and quality of supervision were significant predictors of the performance of pre-service teachers in teaching, in addition to the structural relationships among the variables.

Research Participants and Sampling Procedure

The participants in the study included three different groups, which were: (1) pre-service teachers, (2) internship supervisors, and (3) cooperating teachers in the partner public elementary schools. The study was conducted in a public higher education institution in Misamis Oriental, where the Bachelor of Elementary Education (BEEd) program is offered and has partnership agreements with the local public elementary schools within the Department of Education (DepEd), facilitating field studies and internships. This cooperation allowed pre-

service teachers to engage in authentic classroom experiences in which they can test theoretical and pedagogical learning, acquire teaching competencies, and learn through reflection and experience.

Additionally, this study was conducted in seven partnering elementary schools in the municipality, which are all known training sites for field exposure and internship. These schools provide meaningful learning experiences where pre-service teachers are allowed to practice the various aspects of lesson planning and preparation, instructional delivery, classroom management, assessment, and professional conduct, under the guidance and monitoring of cooperating teachers, school administrators, and internship supervisors.

As of Academic Year 2025-2026, a total of 187 BEEd pre-service teachers were officially assigned to the seven (7) partner elementary schools. The distribution of the population is as follows: School A - 34 participants; School B - 16; School C - 14; School D - 24; School E - 47; School F - 26; and School G - 26. These collaborating schools provide various classroom experience environments, which enhance the acquisition of basic teaching skills and professional preparedness among pre-service teachers.

Also, ninety-six (96) cooperating teachers who were formally appointed to mentor the participating pre-service teachers were incorporated into the study population as supervisory data. They were distributed as follows: School A - 17 cooperating teachers; School B - 8; School C - 7; School D - 12; School E - 24; School F – 14; and School G -14.

Moreover, there were five (5) internship supervisors of the institution of higher learning who were involved in the research. The role of these supervisors was to oversee the implementation of internships, classroom observations, professional feedback, and assessments in the teaching performance of pre-service teachers, regardless of their school, in all partner schools.

On the other hand, to ensure that the data collected is relevant and consistent, each group of participants were screened using specific inclusion criteria. The participants were enrolled in the Bachelor of Elementary Education (BEEd) program in the Academic Year 2025-2026; were assigned to one of the identified cooperating schools of the elementary education and undergoing their own teaching internship; and had experienced at least one official classroom observation by an internship supervisor.

Also, the cooperating teachers who participated in the study were officially appointed by the school to serve as a mentor of pre-service teachers; had direct supervisory responsibility of the assigned pre-service teachers in the internship period; and participated in the assessment of teaching performance through the institutionally approved classroom observation or evaluation tool.

The main participants of the study were the pre-service teachers. Supervision quality, self-efficacy, and reflective practice data were collected using self-report surveys, whereas teaching performance data were collected throughout the internship. The study included all pre-service teachers who had met the inclusion criteria and who were included in the computed sample. This methodology provided sufficient statistical power to the multiple regression analysis and reduced sampling bias.

Besides the pre-service teachers, the study also included five (5) internship supervisors of the higher education institution as well as the cooperating teachers. For the pre-service teacher and cooperating teachers' participants, the study used a proportionate stratified random sampling method to achieve a balanced representation and minimize sampling bias. Each cooperating school was considered a stratum, and the sample size of participants per school corresponded to the total number of pre-service teachers deployed at that school. Simple random sampling was employed to select participants within each stratum, ensuring that all qualified pre-service teachers have an equal chance of participating. This method enhanced the external validity of the research in that findings correctly represent the experiences of pre-service teachers in all cooperating schools.

The sample size was calculated using Taro Yamane's formula (Yamane, 1967), which is suitable for finite populations and allows for transparent and statistically reliable estimation. With a total population of $N = 187$ and a margin of error $e = 0.05$ (at a 95% confidence level). Therefore, a sample of 127 participants was taken as a minimum to represent the sample statistics. Using proportionate allocation, the distribution of the sample is

as follows: School A - 23; School B - 11; School C - 9; School D - 16; School E - 32; School F - 18; and School G - 18.

On the other hand, the cooperating teachers and the internship supervisors, in turn, were chosen by total enumeration since the number of them was quite small and their functions were directly related to the aims of the study. The inclusion of all the internship supervisors and the collaboration with teachers guaranteed the complete comprehension of the supervisory and mentoring procedures that affected the teaching performance of pre-service teachers. The distribution of the sample for cooperating teachers is as follows: School A - 17 cooperating teachers; School B - 7 cooperating teachers; School C - 7 cooperating teachers; School D – 12 cooperating teachers; School E - 24 cooperating teachers; School F - 14 cooperating teachers; and School G - 14 cooperating teachers. On the other hand, there were 5 internship supervisors.

To sum up, the research uses a complete enumeration of pre-service teachers, cooperating teachers, and internship supervisors to guarantee full representation and enhance the validity of the results. The sampling design provided the opportunity to integrate various viewpoints on supervision quality, reflective practice, self-efficacy, and teaching performance.

Research Instruments

The research was conducted through the four research instruments that were used to collect the quantitative data on the variables of self-efficacy, reflective practice, supervision quality, and teaching performance. In the evaluation of teaching performance, the pre-service teacher observation and evaluation tool of the college was utilized in order to ensure consistency, alignment, and institutional validity.

The *Self-Efficacy Questionnaire* was used to measure the perceived confidence of the pre-service teachers to carry out teaching-associated activities, specifically classroom management, instructional delivery, and engagement with learners. The content of this instrument was restricted to expressing beliefs to draw a distinct line between self-efficacy and actual performance or reflective judgment. It was modified according to Tschannen-Moran and Hoy (2001) to assess the confidence of the pre-service teachers to manage the classroom successfully.

The second tool was the *Reflective Practice Questionnaire (RPQ)*, which relied on the theory of reflection formulated by Schon (1983) and were evaluated the involvement of pre-service teachers in reflective thinking. It featured three reflection, such as reflection-in-action, reflection-on-action, and reflection-for-action, which reflect different stages of professional reflection in the experience of teaching and after. It was used to determine the levels to which the pre-service teachers practice systematic reflection before, during and after teaching. Items concentrate on reflection thinking processes and professional learning and contain no signs of self-rating of performance to avoid overlap with self-efficacy and teaching performance measures.

The quality of guidance, feedback, monitoring, and professional support offered by collaborating teachers and internship supervisors were assessed with an adapted version of the Supervision Quality Instrument based on the Mentoring for Effective Teaching Practice Instrument. The tool will assess mentoring activities, including feedback, modelling, pedagogical guidance, and professional support that pre-service teachers receive during the internship (Hudson, Skamp, and Brooks, 2005; Ploj Virtic, Du Plessis, and Sorgo, 2021). This measure specifically targets supervisory practices and does not include indicators of teacher confidence, reflection, or self-appraisal because it is necessary to keep conceptual separation among the constructs under study.

Finally, the *Teaching Performance Evaluation Form* from the institutional evaluation tool of the aforementioned public higher education institution and was also be modified. The items are aligned with the Framework of Teaching (1996) by Danielson and the Philippine Professional Standards of Teachers (PPST). Performance in teaching was assessed through an official pre-service teacher observation tool of the college and was administered by internship supervisors and cooperating teachers. By doing so, teaching performance can be assessed in an objective and unbiased manner that is not tied to the self-report measures.

Validity and Reliability of Research Instruments

To ensure content validity, the instruments were validated by the panel members and a group of three experts in the areas of teacher education, educational psychology, and research methodology. These experts analyzed the instruments to make sure that the items are clear in terms of their intended constructs, the language used is clear, understandable, and relevant to the variables being measured, and all of the domains are covered adequately. The experts' suggestions and recommendations were then integrated to enhance the clarity, accuracy, and overall adherence of the instruments to the research objectives, making sure that the instruments are valid and fit the pre-service teachers.

After the expert validation, a pilot study was conducted to thirty (30) BEEd pre-service teachers from one of the public higher education institutions in Misamis Oriental who were not part of the main study sample. Then, Reliability testing was then conducted on the results through the use of the Cronbach alpha coefficient to assess the internal consistency of the research instrument. The alpha of Cronbach is a typical educational research tool with the purpose of evaluating the extent to which items in a scale are measuring the same underlying construct. As a rule, a reliability coefficient of 0.70 and greater is regarded as acceptable, whereas a coefficient of 0.80 and more is strong internal consistency between items in a scale (Revelle, 2024; Taber, 2021).

The obtained pilot results demonstrated that *the* Self-Efficacy Scale had a Cronbach's alpha of 0.964, and the Reflective Practice Scale had 0.968, *both with very high internal consistency.*

Meanwhile, for Supervision Quality instrument, subscales showed acceptable to very high reliability coefficients: Lesson Planning and Preparation ($\alpha = 0.707$, reliable with condition after one item was dropped), Content Knowledge and Pedagogy ($\alpha = 0.818$), Classroom Management and Learning Environment ($\alpha = 0.775$), Instructional Delivery ($\alpha = 0.894$), Assessment ($\alpha = 0.904$), and Professionalism ($a = 0.780$). Similarly, the Teaching Performance tool had high internal consistency across its domains, with Cronbach alpha values between $a = 0.883$ and $a = 0.974$, indicating very high reliability.

These findings support the validity of the research design because all the instruments employed in the study are valid and reliable. The results gathered through this design will provide empirical evidence on the predictive power of personal and supervision-related factors on the instructional competence and professional practice of pre-service teachers, and therefore, the research design is consistent with the study objectives and variables.

Scoring Procedure

In this study, the responses to the self-efficacy, reflective practice, and supervision quality scales were coded numerically and subjected to mean and standard deviation analysis. The computed mean scores were interpreted in accordance with the five-point scale of Chapter 4 as presented below:

Mean Range	Interpretation
4.51 – 5.00	Very High
3.51 – 4.50	High
2.51 – 3.50	Moderate
1.51 – 2.50	Low
1.00 – 1.50	Very Low

The level of the measured variables was determined using this scale based on the response of the participants. The mean explained the general level of the variable, and the standard deviation explained the variability of responses among participants.

Data Gathering Procedure and Ethical Considerations

The research was conducted in a systematic data-gathering process that included preparation, administration, collection, and analysis of data. Before the study was conducted, the researcher adhered to the approved research procedure of the Graduate School of Lourdes College and obtained ethical clearance from the Research Ethics Committee (REC). Following the attainment of the approval, the researcher sought permission to carry out the

study from the College President and the school heads of the seven cooperating elementary schools of publics where the BEEd pre-service teachers were posted.

After obtaining all institutional approvals, the researcher administered the research instruments to the participants. The data collection was based on two months between January and February 2026. The researcher personally administered questionnaires to ensure that there was uniformity and accuracy of responses. In cases where physical access to the participants was restricted, an online version of the questionnaire was offered using Google Forms.

The measurement of teaching performance was in the form of classroom observations by the assigned internship supervisors during the final demonstration teaching by the pre-service teachers. The ratings were done using a standardized observation rubric to provide consistency and objectivity. Moreover, the pre-service teachers were evaluated by cooperating teachers using an aligned performance evaluation tool based on their daily mentoring and supervision. The total teaching performance rating of the individual pre-service teacher consisted of the sum of the supervisor observation score and the cooperating teacher rating.

Ethical standards were also adhered to during the study. They all were presented with the objective of the study, the procedures used, and their rights as participants. All the participants, who were 18 years old and older, gave informed consent, and their participation was purely voluntary. The participants were also told that they were free to pull out of the study at any time.

The research was conducted in accordance with the set of ethical principles in the Belmont Report-Respect for Persons, Beneficence, and Justice (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). These principles were used to implement informed consent, minimize risks, and ensure the fair selection of participants.

Data privacy and confidentiality of the data of the participants were upheld according to the Data Privacy Act of 2012. There was no gathering of personal identifiers. As an alternative, participants obtained alphanumeric codes (e.g., PST-001, PST-002, CT-001, CT-002, SP-001, SP-002) to ensure anonymity. The raw data were accessible to the researcher, who saved them in the physical storage and password-protected electronic files. Any identifiable information will be destroyed forever upon completion and approval of the thesis.

The research presented limited risks to the participants. Potential risks were a slight psychological distress after self-reflection occurred while responding to the questionnaires or in the performance assessment. To avoid these risks, the participation was voluntary, no personal information considered sensitive was taken, and confidentiality was ensured.

Statistical Treatment of Data

The tabulation, encoding, and subsequent analysis of the data collected shall be done using the Statistical Package of the Social Sciences (SPSS) software after data collection has been completed.

For Problems 1, 2, 3 and 4 - Descriptive statistics such as frequency, percentage, mean, and standard deviation were used as to describe the participants' responses regarding self-efficacy, reflective practice, and supervision quality, as well as their teaching performance across the six evaluated domains: Lesson Planning and Preparation, Content Knowledge and Pedagogy, Classroom Management and Learning Environment, Instructional Delivery and Communication Skills, Assessment of Learners, and Professional Conduct.

To assess the predictive relationships of the variables, the research used the multiple regression analysis to determine the degree to which the independent variables, namely, self-efficacy, reflective practice, and the quality of supervision, can simultaneously and individually predict the dependent variable, the teaching performance.

PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

This chapter discusses, analyses, and interprets the data collected in the study in relation to the research questions. The chapter further assesses teaching performance across major domains, examines the relationships

and predictive effects of self-efficacy, reflective practice, and supervision quality on teaching performance, and concludes by identifying the model that best reflects participants' teaching performance.

Problem 1: What are the participants' self-reports of their level of self-efficacy in teaching?

Table 1 shows the descriptive statistics of the level of self-efficacy in teaching among the participants. The overall mean of 4.35 is interpreted as high (*SD* = 0.47), indicating that participants were highly self-efficacious in teaching. This indicates that pre-service teachers generally believe in their ability to perform teaching tasks effectively and are confident in their teaching skills, which contributes to a stronger teaching performance and overall instructional effectiveness. These results align with Bandura (1997), who emphasized that teachers with strong self-efficacy beliefs demonstrate greater persistence, exert more effort, and achieve higher levels of teaching effectiveness. They also feel more assured in handling classroom issues and promoting meaningful learning experiences.

Regarding the frequency of distribution, most ratings were in the high and very high range, with 56.35 percent showing high assessment on self-efficacy and 40.48 percent showing very high, with only a small percentage of 3.17 percent who assessed as moderate. In line with this, Woodcock & Hardy (2023), found that teachers with high self-efficacy tend to exhibit greater commitment and resilience in their teaching practice.

Table 1 Descriptive Statistics of Participants' Assessment on their Self-Efficacy in Teaching

Range	**Description**	**Interpretation**	**Frequency**	**Percentage**
4.51 – 5.00	Strongly Agree	Very High	51	40.48
3.51 – 4.50	Agree	High	71	56.35
2.51 – 3.50	Neutral	Moderate	4	3.17
1.51 – 2.50	Disagree	Low	0	0.00
1.00 – 1.50	Strongly Disagree	Very Low	0	0.00
	Total		**126**	**100**
	Overall Mean		**4.35**	
	SD		**0.47**	
	Interpretation		**High**	

No.	**Self-Efficacy Statement**	**Mean**	***SD***	**Description**
1	I believe that I would be able to respond to different learners effectively and handle classroom issues in the course of instruction.	4.29	0.60	Agree
2	I can prepare lessons that provide appropriate challenge to every learner.	4.33	0.62	Agree
3	I can plan alternative activities when the lesson does not go well.	4.29	0.62	Agree
4	I can answer students' questions correctly and clearly.	4.26	0.66	Agree
5	I can discuss the lesson in a manner that is understandable to students.	4.42	0.61	Agree
6	I can ask questions to make students think more about the lesson.	4.41	0.58	Agree
7	I can provide alternative explanations when students don't understand.	4.37	0.59	Agree
8	I can handle disruptive behavior in the classroom.	4.22	0.66	Agree
9	I can set clear classroom rules and routines.	4.40	0.61	Agree
10	I can maintain a learning environment that fosters student engagement.	4.37	0.59	Agree
11	I can prevent students from disrupting the learning of others.	4.25	0.62	Agree
12	I can involve students during the lessons.	4.45	0.56	Agree
13	During instruction, I can motivate students to think critically.	4.37	0.58	Agree
14	I can apply teaching methods that encourage student involvement and learning.	4.33	0.57	Agree
15	I can assess whether learners have learned what has been taught.	4.33	0.55	Agree
16	I can assess student learning with various methods.	4.27	0.62	Agree
17	I can apply the results of the assessment to better my teaching.	4.37	0.56	Agree
18	I can recognize students who require extra support based on assessment evidence.	4.42	0.59	Agree

19	I can inspire students to think that they can do well in school.	4.44	0.53	Agree
20	I can make students understand the importance of learning.	4.42	0.54	Agree
21	I can work with families to assist the academic development of students.	4.20	0.67	Agree
22	I demonstrate professional accountability in facilitating student learning.	4.41	0.58	Agree

Further analysis of the individual indicators reveals that participants were always confident in various aspects of teaching practice. The statements that received the highest mean were the indicator, "*I can involve students during the lesson"* (*M* = 4.45), then "*I can inspire students to think that they can do well in school"* (*M* = 4.44). These findings suggest that participants are particularly confident in their ability to engage, motivate, and deliver clear and effective instruction to students, fostering active involvement and promoting students' positive attitude towards the process of learning, which are the key elements of teaching. Lu and Mustafa (2021) find that high self-efficacy helps teachers employ more interactive and student-centered strategies that can enhance behavioral and emotional engagement.

Also, the indicators, *"I can discuss the lesson in a manner that is understandable to students," "I can discuss the lesson in a manner that is understandable to students,"* as well as *"I can make students understand the importance of learning,"* with the same mean of 4.42 (*M* = 4.42). Accordingly, Zee and Koomen (2021) and Holzberger et al. (2013, as cited in Liu et al., 2020) clarified that self-efficacy contributes to the readiness of teachers to use flexible teaching methods, whereas Emiru and Gedifew (2024) highlighted that confident teacher actively facilitate higher-order thinking and engagement. These results indicate that self-efficacy is an effective motivational factor that influences teacher instructional implementation.

On the other hand, the indicators that received the lowest mean, but can still be viewed as high, were as follows: "*I can work with families to assist the academic development of students"* (*M* = 4.20), *"I can handle disruptive behavior in the classroom"* (*M* = 4.22), *"I can prevent students from disrupting the learning of others"* (*M* = 4.25), *"I can answer students' questions correctly and clearly"* (*M* = 4.26). Although these are still at high levels, the slightly lower means indicate that participants can have a relatively lower confidence in parent collaboration and classroom behavior management areas than in other teaching competencies. Muamaroh (2025) and Bachman (2025) described that these areas entail more complex interpersonal and situational skills, which tend not to be well-developed in pre-service teachers. Hussner et al. (2024) also added that these competencies are acquired over time in terms of experience and mentoring. This means that although self-efficacy is good in instructional terms, it might still need external support systems to be fully transferred to other aspects of teaching.

In general, the results show that self-efficacy might not directly relate to teaching performance, but enables how teachers reflect and instruct, demonstrating that participants who have high self-efficacy, especially when it comes to involving and motivating the learners, have high confidence in their abilities to teach. This is an indication that pre-service teachers are prepared to develop interactive and meaningful learning environments. Nonetheless, the comparatively lower rating on classroom management and family collaboration points to the areas that need further development by means of guided experience and support. These findings support the statement that self-efficacy is well-established in teaching areas, but its development in more extensive teaching roles is fundamental to more comprehensive teaching effectiveness.

Problem 2. What is the participants' extent of reflective practice in terms of:

2.1. Reflection-in-action;

2.2. Reflection-on-action; and

2.3. Reflection-for-action?

Table 2 shows the descriptive statistics of the participants' level of reflective practice in terms of reflection-in-action. This dimension is concerned with the ability of the participants to think over and assess their teaching practices during the classroom instruction. The table outlines the manner in which the participants are tracking their beliefs, instructional choices, and student responses in the teaching process.

The overall mean of 4.32 and a standard deviation of (*SD*=0.50) show that the participants have a high rating of

reflection-in-action. This means that the participants rated themselves highly in their ability to reflect during teaching, monitoring, and adjusting their teaching strategies in real time, which likely contributes to a more effective teaching performance and responsiveness to students' learning needs. These skills will help teachers address the immediate needs of students, including resolving a misconception or modifying instruction when a lesson is not moving as planned. Such responsiveness makes the teaching process more flexible and efficient, which adds to an effective learning process. The teachers who demonstrate stronger self-efficacy can adjust and differentiate instructional strategies to adapt to the needs of learners more effectively (Martinez et al., 2024). Despite the overall high ability of the findings, the slight deviation indicates that there is an opportunity to improve, especially in more complex or challenging teaching scenarios.

Table 2 Descriptive Statistics of Reflective Practice of Participants in terms of Reflection-in-action

Range	**Description**	**Interpretation**	**Frequency**	**Percentage**
4.51 – 5.00	Strongly Agree	Very High	48	38.10
3.51 – 4.50	Agree	High	70	55.56
2.51 – 3.50	Neutral	Moderate	8	6.35
1.51 – 2.50	Disagree	Low	0	0.00
1.00 – 1.50	Strongly Disagree	Very Low	0	0.00
	Total		**126**	**100**
	Overall Mean		**4.32**	
	SD		**0.50**	
	Interpretation		**High**	

No.	**Reflective-in-Action (RiA) Statement**	**Mean**	***SD***	**Description**
1	I observe how my beliefs affect my teaching while I am teaching.	4.28	0.66	Agree
2	I consider my thoughts and feelings while teaching and how they influence my choices.	4.29	0.62	Agree
3	I notice how students' beliefs influence their learning.	4.26	0.60	Agree
4	I think about how students' feelings and attitudes affect their participation.	4.32	0.60	Agree
5	I reflect how my teaching choices influence students' engagement and participation.	4.35	0.58	Agree
6	I sometimes doubt whether my lesson plans suit my students while teaching.	4.42	0.64	Agree
7	I sometimes do not know how to handle different types of learners during a lesson.	4.36	0.64	Agree

Regarding the distribution of responses, 55.56 percent were in the high level, and 38.10 percent were in the very high level. The percentage of responses in the middle level is only 6.35, and the percentage of responses in the low or very low range is zero. This distribution indicates that the participants tend to think of themselves as actively thinking about their instructional practices during the teaching process.

Further analysis of the indicators reveals that the participants all along concurred with all the statements with regard to reflection-in-action. The indicator that received the highest mean was "*I sometimes doubt whether my lesson plans suit my students while teaching"* with a mean of 4.42, which means that participants often reevaluated whether their lesson plans worked in the teaching process. On the other hand, the second indicator that showed a relatively high mean is *"I reflect how my teaching choices influence students' engagement and participation,"* with a mean of 4.35, meaning that the participants are keen on how their teaching methods can impact the participation and engagement of students in the classroom. This indicates active monitoring and modification in the process of instruction. As Farrell (2022) elaborated, reflection-in-action enables educators to act instantly in response to classroom events by adjusting their tactics in line with the needs of the students. Khasawneh (2024) and Mann and Walsh (2021) also underlined that this reflection enhances the responsiveness of the instruction by allowing teachers to adjust to the changing classroom environment. Loughran (2023) further mentioned that the process enhances professional awareness, and Ryan and Ryan (2022) pointed out that it led

to the development of adaptive expertise. According to these studies, reflection-in-action is a real-time regulatory process in teaching.

Conversely, the indicator with the lowest mean score, yet still regarded as high, was found to be "*I notice how students' beliefs influence their learning"* with a mean of 4.26. Although the score still shows agreement, it indicates that participants might be a bit less concerned with the role of student beliefs in influencing learning behaviors during the teaching process than with other practices of reflection. However, the standard deviation measures are not that high, which means that the participants have similar ideas about their practices on reflection-in-action.

As mentioned by Martinez et al. (2024), there is a necessity to enhance diversity awareness among learners, which is key in responsive teaching methods that adjust instructional strategies in response to beliefs in learning by students and their different needs. This suggests that, although participants are able to modify instruction, the analysis of learner characteristics might still be in the early stages of development. Furthermore, Ryan and Ryan (2022) discovered that reflection in the teaching process assists teachers in evaluating their choices in the classroom critically and enhances their professional competence. Such results contribute to the current findings, indicating that reflection-in-action is a crucial component of improving the effectiveness of teaching and responsive classroom practices.

The findings reveal that the participants are highly reflective-in-action, meaning that they can monitor and make changes to teaching strategies in real time. Reflection-in-action can serve as an intervening variable, and can be the way self-efficacy is converted into real instructional changes. Nevertheless, the slightly reduced focus on the beliefs of learners suggests that more reflective awareness of diversity among students might be in the process of formation. In general, the results support the claim that reflection-in-action is a powerful ability of the participants that facilitates responsive teaching but also suggests that more sophisticated analytical skills should be developed.

Table 3 shows the frequency distribution and the descriptive statistics of the reflective practice of the participants in terms of reflection-on-action. The data explain the way in which the participants analyze their teaching plans, assess classroom experiences, and determine where to improve them after a lesson.

The overall mean score of 4.36 and a standard deviation of (*SD*=0.48) suggests that the participants are highly reflective-on-action. The participants' high assessment of reflection-on-action indicates that pre-service teachers critically evaluate their teaching after lessons, improving the effectiveness of their future instructional practices. This demonstrates that pre-service teachers thoroughly evaluate their teaching experiences from time-to-time. This finding is consistent with Schön (1983), emphasizing that reflection after action supports professional growth

Frequency distribution also reveals that 55.56 percent of the responses fall within the high level and 39.68 percent within the very high level. Only 4.76 percent fall in the moderate classes, and none lie in the low or very low levels. Such findings indicate that the participants take time to consider their teaching practice when they have finished their instructional activities.

Table 3 Descriptive Statistics of Reflective Practice of Participants in terms of Reflection-on-action

Range	**Description**	**Interpretation**	**Frequency**	**Percentage**
4.51 – 5.00	Strongly Agree	Very High	50	39.68
3.51 – 4.50	Agree	High	70	55.56
2.51 – 3.50	Neutral	Moderate	6	4.76
1.51 – 2.50	Disagree	Low	0	0.00
1.00 – 1.50	Strongly Disagree	Very Low	0	0.00
	Total		**126**	**100**
	Overall Mean		**4.36**	
	SD		**0.48**	
	Interpretation		**High**	

No.	Reflective-on-Action (RoA) Statement	Mean	*SD*	Description
1	I reflect on my lesson after teaching.	4.37	0.64	Agree
2	I consider how students experienced the activity afterward.	4.36	0.63	Agree
3	I review what I learned from each teaching experience.	4.42	0.62	Agree
4	I am asking myself: How well are my teaching strategies working to help students learn?	4.38	0.63	Agree
5	I reflect on my strengths as a pre-service teacher after teaching.	4.40	0.61	Agree
6	I reflect on my weaknesses and what I need to improve after each lesson.	4.42	0.66	Agree
7	I think about ways to enhance my teaching skills based on previous lessons.	4.29	0.68	Agree
8	I sometimes question whether I truly understood my students' needs after teaching.	4.29	0.63	Agree
9	I check my teaching practices to learn how well they are helping students learn.	4.32	0.67	Agree

On a more detailed look at the indicators, it is clear that the participants always agreed with everything that was said regarding reflection-on-action. The indicators with the highest means were *"I review what I learned from each teaching experience"* and *"I reflect on what I learned about my weaknesses and what I need to improve after each lesson,"* with a mean of 4.42. These findings suggest that the participants are actively evaluating their teaching experiences and understand where they can further improve after teaching. According to Schon's Reflective Practice Theory (1983), reflection-on-action allows teachers to critically examine previous teaching decisions in order to make better choices in the future. Saleem (2024) further contributed that the process enhances effective and ineffective practices identified in instructional planning. Comia et al. (2024) also highlighted the importance of reflective activities as they promote professional development through critical reflection on teaching experience. These results indicate that reflection-on-action is a developmental process of learning.

Meanwhile, the indicators that had the lowest mean, yet were still rated as high, were "*I think about ways to enhance my teaching skills based on previous lessons," and "I sometimes question whether I truly understood my students' needs after teaching,*" both with a mean score of 4.29. These results indicate that although the participants often reflect on their teaching experiences, they do not necessarily know whether they fully understand the learning requirements of their students. This aligns with the recent studies that reflective practice is prevalent among teachers, but in itself does not necessarily result in a more systematic or holistic understanding of the individual learning needs of students unless it is designed and facilitated (Yenni Rozimela et al., 2025).

The results demonstrate that the participants are very active in reflection-on-action, revealing their capacity to critically analyze their instruction-related teaching experiences. Reflection-on-action enhances the feedback cycle, assists in changing teaching experiences into better performances in the future. This means that pre-service teachers form the habit of addressing areas of improvement and strengths, which is relevant in sustaining professional growth. However, the slight hesitation in grasping the full needs of learners is an indication that further evaluative reflections can yet be developed. The findings, on the whole, reinforce the idea that reflection-on-action is an important factor in enhancing instructional choices and refining future teaching practices.

Table 4 shows the frequency distribution and descriptive statistics of the reflective practice of the participants in the form of reflection-for-action. This dimension is defined as the capacity of the participants to be reflective as a lead-up to future teaching engagements by soliciting feedback, sharing teaching experiences with others, and strategizing on how to enhance their teaching practices.

The findings indicate an overall mean of 4.40 with a standard deviation of (*SD*=0.57), which is considered to be high. The fact that the pre-service teachers rated the reflection-for-action as strong indicates that they actively use past experiences in teaching to plan and to enhance future instructional practice. It is supported by research, which reveals that structured reflective practices such as reflection-for-action contribute to the development of

pre-service teachers in terms of classroom instruction and the adaptive competence required to act thoughtfully in response to the requirements of real-world instruction (Kilic, 2022; Xie et al., 2022).

Table 4 Descriptive Statistics of Reflective Practice of Participants in terms of Reflection-for-action

Range	**Description**	**Interpretation**	**Frequency**	**Percentage**
4.51 – 5.00	Strongly Agree	Very High	61	48.41
3.51 – 4.50	Agree	High	56	44.44
2.51 – 3.50	Neutral	Moderate	9	7.14
1.51 – 2.50	Disagree	Low	0	0.00
1.00 – 1.50	Strongly Disagree	Very Low	0	0.00
	Total		**126**	**100**
	Overall Mean		**4.40**	
	SD		**0.57**	
	Interpretation		**High**	

No.	**Reflective For Action**	**Mean**	***SD***	**Description**
1	I discover new insights when I self-reflect with classmates or mentors.	4.44	0.64	Agree
2	I discuss my teaching with others to open up new ideas.	4.40	0.63	Agree
3	I share my classroom experience to help me solve teaching problems.	4.35	0.66	Agree
4	I reflect on my teaching with others to help me learn new teaching skills.	4.37	0.64	Agree
5	I believe I can improve my teaching by learning from the feedback of others.	4.44	0.63	Agree
6	I gain confidence in how I teach through reflective discussions with others.	4.41	0.62	Agree
7	I talk with others to help me clarify uncertainties about how I teach.	4.40	0.63	Agree

Considering the distribution of responses, 48.41 percent of the responses are within the very high levels, and 44.44 percent are within the high levels. The percentage in the moderate level is only 7.14 percent, and none lies in the low and very low levels. These results show that the participants often go through the process of reflective thinking that is designed to enhance their future teaching practices. According to Farrell (2022), the process enables the proactive design of improved instructional strategies by teachers and refining instructional strategies, as Burhan-Horasanli and Hart (2024) indicated. These results demonstrate that reflection-for-action facilitates future planning and career development.

Additional discussion of the indicators reveals that the participants were in strong agreement with all the statements on reflection-for-action. The indicators that received the highest means were *"I discover new insights when I self-reflect with classmates or mentors,"* and *"I believe I can improve my teaching by learning from the feedback of others,"* with a mean of 4.44 and 4.44, respectively. These results are consistent with recent studies that collaborative professional learning frameworks such as lesson study allow teachers to participate in reflective discussions with colleagues, which leads to mutual understanding and development of professional practice based on organized feedback and reflection cycles (Erbilgin and Robinson, 2025).

Conversely, the indicator that yielded the lowest mean, though classified as high, was that of *"I share my classroom experience to help me solve teaching problems"* with a mean of 4.35. Although this indicates agreement, it implies that there might be some participants who might not share their teaching experiences as much as they might share their other reflective practices. On the contrary, this trend aligns with recent studies indicating that meaningful collaborative reflection as well as sharing of particular teaching experience that must be carefully nurtured; reflective dialogue that involves a sharing of a particular experience is likely to result in more profound professional learning and more meaningful practice changes (Kamali and Javahery, 2024).

These findings show that the participants have high reflection-for-action, especially with regard to the use of feedback and collaborative discussions in order to enhance future teaching; predictive process, which connects past experience to future instructional improvement. This indicates that pre-service teachers are also proactive in the planning and refining of their teaching strategies based on past experiences. Nevertheless, the marginally less tendency to share teaching experiences indicates the necessity of increased participation in collaborative

reflection. Altogether, the results prove reflection-for-action to be the essential part of professional growth as it helps people think forward and improve constantly.

Table 5 summarizes the results of the reflective practices of the participants in three dimensions, namely, reflection-in-action, reflection-on-action, and reflection-for-action. The participants experience reflective practices regularly and in all three dimensions, as revealed in the table, the three dimensions were rated high. The grand mean of 4.06, which is interpreted as high, indicates that pre-service teachers can make adjustments to their teaching as it occurs, think critically about instructions they have already taught, and plan ahead for instruction in a thoughtful manner. This is an indicator of a good mentoring environment, which promotes professional growth, influencing the pre-service teachers' confidence, their instructional skills, and their professional growth (Ozcan & Gercek, 2024).

Table 5 Summary Table of the Participants' Assessment of their Reflective Practices

Reflective Practices	**Mean**	***SD***	**Interpretation**
Reflection-in-Action	4.32	0.50	High
Reflection-on-Action	4.36	0.48	High
Reflection-for-Action	4.40	0.57	High
Grand Mean	**4.36**	**0.46**	**High**

Of the three dimensions, *reflection-for-action* had the highest mean (M = 4.40, SD = 0.57), then *reflection-on-action* (M = 4.36, SD = 0.48), and then *reflection-in-action* (M = 4.32, SD = 0.50). The general average of 4.36 (SD = 0.46) also implies that the participants tend to demonstrate a strong reflective practice in general, which means that they tend to analyze their experiences of teaching, evaluate their previous instructional behavior, and design their future teaching experiences to be improved. This tendency suggests that reflection is a particular part of the professional preparation of the participants and can help them to improve their teaching performance and professional development.

Evidence-based practice demonstrates that all three kinds of reflection can contribute to assisting pre-service teachers in aligning theory with practice and enhancing the effectiveness of their instruction in the long term (Kilic, 2022; Kaldi and Zafeiri, 2023). Reflection-in-action helps them to respond to challenges as they arise during teaching (Tardif, 2024), whereas reflection-on-action helps them analyze earlier lessons critically to understand what was good and what needs improvement (Havadar, 2024). Reflection-for-action subsequently aids them to apply previous experiences to make decisions about future teaching more efficiently (Burhan-Horasanli and Ortactepe Hart, 2024). A combination of all three reflective practices will equip pre-service teachers more effectively in building their professional competence and responding in a thoughtful way to teaching realities (Kilic, 2022).

The findings are evidenced by wider literature on reflective practice. According to Kayima (2022), reflective writing helps pre-service teachers deepen professional understanding of their classroom experiences, while Li (2025) states that reflective practice improves pedagogical skills and critical thinking through evaluation and adaptation of strategies. Scoupe et al. (2024) also highlighted that a reflective portfolio helps pre-service teachers analyze their performance, plan ways to improve, and develop self-efficacy and lifelong learning habits.

In summary, the results indicate that the participants rated high in all three forms of reflective practice, indicating that they actively reflect on their experiences in teaching, learn what worked and what did not, and seek improvement methods in the next lesson. They do not merely perform the actions of teaching but rather take time to reflect during the teaching process, after teaching, and even before teaching. Taken together, the frequent involvement of the participants to reflective practice shows a strong commitment to continuous improvement.

Problem 3: What is the participants' assessment of the supervision quality of their cooperating teachers?

Table 6 shows the frequency and descriptive statistics in terms of how the study participants rated the quality of the supervision that they got by the teachers who were their cooperating teachers during the teaching practicum. The quality of supervision, in this context, is the mentoring, instruction, guidance, feedback, and professional

support offered to pre-service teachers by cooperating teachers to enable them to develop their teaching skills. The results are 4.60 with a standard deviation of (*SD* = 0.51), which is of high interpretation, indicating that pre-service teachers perceive cooperating teachers as good mentors who can provide valuable support and positive feedback that can help them develop as future teacher.

In terms of its distribution, 70.63 percent are in the very high levels, 23.81 percent are in the high levels, and 5.56 percent are in the moderate levels, and there are no responses in the low or very low levels. This suggests that the participants tend to believe that their cooperating teachers offer effective and helpful supervision over the course of their teaching experience. In relation to this, participants are often guided and mentored by professionals and provided with constructive feedback in the context of their teaching practice.

Table 6 Descriptive Statistics of the Participants' Assessment on the Supervision Quality of their Cooperating Teachers

Range	**Description**	**Interpretation**	**Frequency**	**Percentage**
4.51 – 5.00	Always	Very High	89	70.63
3.51 – 4.50	Often	High	30	23.81
2.51 – 3.50	Sometimes	Moderate	7	5.56
1.51 – 2.50	Rarely	Low	0	0.00
1.00 – 1.50	Never	Very Low	0	0.00
	Total		**126**	**100**
	Mean		**4.60**	
	SD		**0.51**	
	Interpretation		**High**	

No.	*How does your supervisor/immediate head/cooperating teachers…*	**Mean**	***SD***	**Description**
1	… give you clear guidance for planning to teach your lessons?	4.51	0.73	Often
2	… assist you with preparing your lessons?	4.40	0.79	Often
3	… reiterate the need to have well-designed activities for learners?	4.48	0.75	Often
4	… show you an example of an actual annual (yearly) teaching plan for the subject?	4.41	0.75	Often
5	… discuss the aims of teaching your subjects?	4.49	0.71	Often
6	… allow you flexibility in planning for teaching?	4.60	0.63	Always
7	… discuss with you the (content) knowledge you need for teaching your subject(s)?	4.53	0.67	Always
8	… show expertise in effectively teaching his/her subject?	4.60	0.65	Always
9	… show content expertise?	4.56	0.64	Always
10	… give clear expectations regarding the way you should teach your subject(s)?	4.60	0.62	Always
11	… model different teaching strategies in teaching the subject?	4.50	0.68	Often
12	… model (show) how to teach difficult concepts (aspects)?	4.53	0.67	Always
13	… assist you in implementing different teaching strategies?	4.53	0.67	Always
14	… model effective classroom management when teaching?	4.56	0.66	Always
15	… assist you with classroom management strategies for teaching?	4.55	0.65	Always
16	… explain the school's Disciplinary Code to you?	4.48	0.70	Often
17	… explain to you how the school deals with barriers to learning among learners?	4.55	0.65	Always
18	… shows empathy towards you when your teaching lesson did not play out as planned?	4.61	0.62	Always
19	… show support when you are teaching your subject(s)?	4.60	0.61	Always
20	… display enthusiasm when teaching the subject?	4.60	0.61	Always
21	… observe you in class when you were teaching?	4.69	0.59	Always
22	… observe you teach before providing feedback?	4.72	0.56	Always

23	… use hands-on teaching materials?	4.63	0.62	Always
24	… develop your strategies for teaching?	4.68	0.58	Always
25	… discuss with your questioning skills for effective teaching?	4.60	0.63	Always
26	… provide you with strategies to solve teaching problems that you encountered?	4.64	0.61	Always
27	… assist you in finding teaching resources?	4.68	0.60	Always
28	… discuss the evaluation (assessment) of your teaching?	4.61	0.63	Always
29	… clearly indicate what you need to do to improve your teaching?	4.67	0.62	Always
30	… provide you with written feedback on your teaching lessons?	4.71	0.60	Always
31	… discuss with you the (content) knowledge you need for teaching your subject(s)?	4.61	0.66	Always
32	… assist you in reflecting on improving your teaching practices?	4.64	0.61	Always
33	… show you how to assess the learner's learning effectively?	4.63	0.62	Always
34	… discuss what is expected (requirements) from you by the school in terms of teaching?	4.63	0.65	Always
35	… appear to be comfortable discussing teaching?	4.70	0.58	Always
36	… attentively listen to you in teaching matters?	4.74	0.55	Always
37	… address your teaching anxieties?	4.54	0.71	Always
38	… make you feel more confident as a teacher?	4.69	0.60	Always
39	… explain what the school requires from you as a student teacher?	4.64	0.63	Always
40	… explain the school policy (code of conduct of teachers) to you?	4.67	0.63	Always
41	… explain your role?	4.70	0.56	Always

The indicators, the statement that gave the highest mean was *"…attentively listening to you in teaching matter*s," with a mean of 4.74 (*M* = 0.55), interpreted as *Always,* indicating that cooperating teachers were perceived as genuinely attentive to the pre-service teacher's concerns and various experiences during their teaching internship. Similarly, the second nearest indicator was that of *"…observing you teach before you give feedback,"* with a mean of 4.72 (*M* = 0.56), which was also understood to be *Always*. These findings indicate that cooperating teachers are more committed to direct classroom observation prior to giving feedback to make sure that guidance is based on real teaching practice. These practices correspond with recent studies indicating that quality mentor teacher observation and feedback are key factors in pre-service teachers' professional growth and practicum readiness (Monteleone et al., 2026). The following indicators also received high ratings, *"… provide you with written feedback on your teaching lessons"* (*M* = 4.71), *"… appear to be comfortable discussing teaching,"* as well as *"… explain your role?"* both having a mean of (*M* = 4.70). Ongoing mentoring and guided reflection help bridge the theory-practice gap and prepare them for the actual classroom environment more effectively (Miler et al., 2023). Moreover, mentoring strengthens teacher confidence and professional identity by integrating theory with practice (Aspfors and Fransson, 2021).

On the other hand, the indicators that had the lowest means, but were still positively interpreted included, *"…assist you with preparing your lessons"* with a mean of 4.40 (*SD* = 0.79) and *"…show you an example of an actual annual (yearly) teaching plan of the subject"* with a mean of 4.41 (*SD* = 0.75), both interpreted as *Often*. Although these ratings remain satisfactory, they suggest that cooperating teachers provide somewhat less support in areas related to long-term instructional planning and detailed lesson preparation compared to the other aspects of supervision. Also, these indicators also received a low rating from the pre-service teachers, *"… explain the school's Disciplinary Code to you"* along with the indictor *"… reiterate the need to have well-designed activities for learners,"* both having the same mean of (*M* = 4.48). The indicator, *"… discuss the aims of teaching your subjects"* have a low rating from the participants with a mean of (*M* = 4.49).

Nonetheless, research on instructional supervision also indicates that whereas supervision in such domains as feedback, mentorship, and collaboration may be high, support on such areas as detailed lesson preparation and long-term instructional planning might be inconsistent and may be slightly less prioritized, which leaves opportunities to strengthen support on those matters (Plopino and Carbonell, 2025).

The results reveal that the participants have a high rating of supervision quality especially in supportive mentoring, active listening and classroom-based feedback. This implies that collaborating teachers are highly involved in supporting and reinforcing the professional growth of pre-service teachers. Nevertheless, the comparatively lower focus on the long-term instructional planning implies an area of improvement in mentoring practice. Comprehensively, the findings validate that quality supervision offers necessary assistance leading to increased teaching ability and confidence.

Problem 4: What is the participants' level of teaching performance considering:

4.1 Lesson Planning and Preparation;

4.2 Content Knowledge and Pedagogy;

4.3 Classroom Management and Learning Environment;

4.4 Instructional delivery and Communication Skills;

4.5 Assessment; and

4.6 Professionalism?

Table 7 shows frequencies and description statistics of the teaching performance of pre-service teachers in the domain of lesson planning and preparation. The results indicate an average of 4.27 and a standard deviation of 0.28, which can be interpreted as high. This high rating implies that pre-service teachers can create well-organized and clear structured lessons that can lead to effective classroom teaching and towards positive student learning outcomes.

Table 7 Frequency Distribution and Descriptive Statistics of the Level of Teaching Performance of Participants in terms of Lesson Planning and Preparation

Range	Description	Interpretation	Frequency	Percentage
4.51 – 5.00	Very Good	Very High	19	15.08
3.51 – 4.50	Good	High	106	84.13
2.51 – 3.50	Fair	Moderate	1	0.79
1.51 – 2.50	Poor	Low	0	0.00
1.00 – 1.50	Needs Improvement	Very Low	0	0.00
	Total		**126**	**100**
	Mean		**4.27**	
	SD		**0.28**	
	Interpretation		**High**	

No.	INDICATORS	Mean	*SD*	Description
1	Writes clear and measurable lesson objectives aligned with curriculum standards.	4.35	0.49	Good
2	Plans lessons that build on learners' prior knowledge and progress from simple to complex concepts.	4.26	0.50	Good
3	Provides learning activities appropriate to learners' abilities and learning styles.	4.28	0.58	Good
4	Aligns lesson objectives, teaching methods, materials, and assessments.	4.29	0.53	Good
5	Prepares and submits complete lesson plans and instructional materials on time.	4.23	0.54	Good
6	Uses appropriate teaching resources, including ICT, to support lesson objectives and learner understanding.	4.21	0.56	Good

Regarding distribution, 84.13% of responses were within the high level, 15.08% within the very high level, and only 0.79% within the moderate level, with none falling within the low or very low levels. These findings show that the subjects are highly competent in planning and preparing their lessons. As stated by Mok and Staub (2021), lesson planning is an important aspect of a successful teaching practice as it aids in making sure that the teaching process is organized, meaningful, and sensitive to the needs of learners. Research supports that great lesson planning skills are directly linked to teaching effectiveness, because well-planned and systematic work allows teachers to produce more engaging and meaningful learning experiences (Zaragoza et al., 2024).

A further look into the individual indicators would show that the participants rated all the indicators as *Good* consistently, meaning that they are generally doing well in their lesson preparation to be used in a classroom setting. The statement with the highest mean was achieved with the response to the question *"Writes clear and measurable lesson objectives that respond to curriculum standards"* (M = 4.35), suggesting that the participants are very competent in developing lesson objectives that clearly indicate the curriculum requirements and the intended learning outcomes. Clear and measurable objectives are all essential because they guide both instruction and assessment. The second indicator with the highest mean was *"Aligns lesson objectives, teaching methods, materials, and assessments"* (M = 4.29), followed by the statement, *"Provides learning activities that are in accordance with the abilities and learning styles of learners"* (M = 4.28). These findings suggest that the participants organize the different parts of the lesson in logical order, making sure that the learning activities and teaching strategies align with the instructional objectives while being aware of the learners' diversity. Furthermore, research indicates that pre-service educators with good lesson planning skills bridge theoretical understanding and classroom application, which results in an improved quality of instruction (Krepf & Konig, 2023). Consequently, the careful planning of lessons results in a more organized classroom management, disambiguation, and improved learning outcomes (Kwok, 2021).

On the other hand, the indicator which had the lowest mean, but still was understood as Good, was *"Uses appropriate teaching resources, including ICT, to support lesson objectives and learner understanding"* (M = 4.21). Next, closely after it came *"Prepares and delivers complete lesson plans and instructional materials on time"* (M = 4.23). Although these indicators are in still at a positive level of performance, they suggest that the participants sometimes face difficulty in integrating the instructional technologies and in the timely preparation of teaching materials. Overall, the standard deviations are relatively small (0.49-0.58), indicating that participants' responses are similar across the indicators. These data indicate that the participants share the same perceptions of their competency in lesson planning and preparation. The latter results further imply that teacher education programs need to further empower instructional planning, technology integration, and resource preparation training to make pre-service teachers feel more prepared and confident to teach in the real world (Drajati et al., 2021; Zambak et al., 2021).

Overall, the findings show that the participants have strong skills in developing a well-organized lesson plan before teaching. The findings indicate that the participants are well skillful in the lesson planning and preparation, especially the establishment of clear objectives and the consistency of instructional elements. This means that pre-service teachers can design structured and efficient lessons that facilitate student learning. Nevertheless, the fact that the use of instructional resources and ICT is slightly lower, indicates that more should be done to improve technology integration. On the whole, the analysis of the research results proves that the ability to plan is the critical strength of the participants, which becomes the basis of successful teaching practice.

The frequency distribution and descriptive statistics of the level of instructional performance of the participants in terms of the content knowledge and pedagogy are provided in Table 8. The findings show that the average score is 4.18 with a standard deviation of 0.23, which is interpreted as *High*. This means that pre-service teachers are familiar in the subject matter they teach and are able to use effective instructional strategies to convey it.

Table 8 Frequency Distribution and Descriptive Statistics of the Level of Teaching Performance of Participants in terms of Content Knowledge and Pedagogy

Range	Description	Interpretation	Frequency	Percentage
4.51 – 5.00	Very Good	Very High	9	7.14
3.51 – 4.50	Good	High	117	92.86

2.51 – 3.50	Fair	Moderate	0	0.00
1.51 – 2.50	Poor	Low	0	0.00
1.00 – 1.50	Needs Improvement	Very Low	0	0.00
	Total		**126**	**100**
	Mean		**4.18**	
	SD		**0.23**	
	Interpretation		**High**	

No.	INDICATORS	Mean	*SD*	Description
1	Demonstrates mastery of the lesson topic and uses accurate content knowledge.	4.18	0.59	Good
2	Relates and applies lessons to real-life examples and other subjects.	4.28	0.52	Good
3	Demonstrate content knowledge and effectively apply this knowledge within and across relevant curriculum areas.	4.17	0.54	Good
4	Helps learners to use learnt concepts in practical or real-world activities.	4.21	0.54	Good
5	Gives out responses to questions by learners regarding the contents of the lesson properly and confidently.	4.22	0.47	Good
6	Apply teaching strategies that foster critical and creative thinking, as well as other higher-order cognitive skills.	4.22	0.51	Good
7	Demonstrate an understanding of instructional strategies that effectively enhance learners' literacy and numeracy skills.	4.14	0.53	Good
8	Demonstrates the ability to present content clearly, using appropriate examples and explanations that align with learners' level of understanding.	4.06	0.53	Good

The frequency distribution shows that 92.86 percent of responses fall under the high level, and 7.14 percent fall under the very high level. These results imply that the participants show a high degree of mastery of lesson content and the use of proper teaching methods in teaching.

Further analysis of the individual indicators demonstrates that all statements related to content knowledge and pedagogy were rated favorably by the participants. The highest mean (M = 4.28) belongs to the indicator *"Relates and applies lessons to real-life examples and other subjects."* This result suggests that the participants can connect classroom learning to real-world situations and other subject areas, which can make learners more aware of how the information they are learning applies to real-life situations. Also, other indicators with fairly high ratings *are "Gives out responses to questions by learners regarding the contents of the lesson properly and confidently"* and *"Apply teaching strategies that foster critical and creative thinking, as well as other higher-order cognitive skills,"* consecutively with both having a mean of 4.22. The findings indicate that the participants can provide clear explanations of lesson concepts and can guide learners toward thinking more deeply about the lesson. Studies indicate that by employing higher-order questioning and communicative activities, pre-service teachers can support their students in the development of critical thinking skills (Pang-anoron-Jabonete, 2022). Moreover, guided methods of learning have been discovered to enhance critical thinking skills of pre-service teachers in analysis, evaluation, and decision-making significantly (Prayogi et al., 2022).

Conversely, the indicator that has the least mean (M = 4.06) is *"Demonstrates the ability to present content clearly, using appropriate examples and explanations that align with learners' level of understanding."* Even though this rating is still considered high, it means that some participants might still need to improve on how they simplify complex ideas, as well as how they adjust their explanations depending on what the learners already know and understand.

In general, the results show that the participants possess the content knowledge and the pedagogical skills required to teach effectively. Teachers with good subject knowledge and the use of appropriate teaching strategies can create a meaningful learning experience and help learners understand challenging concepts (Guerriero, 2022). Integrating pedagogy with is important so that pre-service teachers develop strong good pedagogical content knowledge who can better apply theory into real classroom practice (Rafiq et al., 2022). Moreover, teachers' professional knowledge, including content mastery and implementation of instructional

strategies enables students to grasp the complicated concepts and achieve better learning outcomes (Konig et al., 2022). The studies have confirmed that the better teachers know the content, the more they can use the various aspects of pedagogical content knowledge, which translates to more effective teaching (Şen et al., 2022). The teacher education programs are crucial in assisting pre-service teachers to acquire such knowledge and implement it in the classroom context (Subramaniam, 2021). Research also indicates that pedagogical content knowledge helps teachers to describe complex concepts in clear language, relate lessons to real-life examples, and apply instructional strategies that assist students to comprehend more (Wood & Andrew, 2022). These studies are in line with the present research, in which the participants exhibited strong content knowledge and pedagogical competence, which are important aspects of good teaching.

The results suggest that the participants manage to create positive classroom conditions particularly through good teache-learner relationships and inclusive classroom. This implies that pre-service teachers are capable of being able to create conducive and interesting learning environments. However, the fact that the performance in terms of behavior management was slightly lower also shows that there may be a need to further improve the ways of maintaining the spirit of discipline and promoting positive behavior. Overall, one can say that the management in the classroom is a good skill that should still be enhanced to provide a more exhaustive and comprehensive control and organization.

Table 9 shows the frequency distribution and descriptive statistics for the participants' teaching performance in terms of classroom management and learning environment. This dimension looks at how well participants establish classroom routines, maintain discipline, manage time, and create a safe, favorable, and inclusive learning environment. The findings indicate an overall mean of 4.19, interpreted as High, indicating that pre-service teachers effectively create a structured, supportive, and engaging setting that promotes student learning and participation. The frequency distribution indicates that 92.86 percent of responses are at the High level; while 7.14 percent fall at the Very High level. The moderate, low and very low categories recorded no responses. These results suggest that the participants demonstrate effective practice of classroom management and positive learning environment that facilitates student participation and engagement.

Considering each indicator, the rating of all statements was positive in terms of classroom management and learning environment. The indicator with the highest mean (M = 4.25) was *"Shows a positive teacher-student relationship (speaks in a kind voice, smiles, listens to the student),"* where the participants express the importance of establishing a positive and respectful relationship with the learners, which is significant in ensuring a productive classroom environment. Other indicators that can be characterized by relatively high mean are *"Prepares the physical classroom to facilitate learning and safety (seats the chairs so that they can see and move around)"* with a mean of 4.23, and *"Recognizes individual differences and uses inclusive language and examples,"* with a mean of 4.22. The findings indicate that the participants are concerned with the establishment of an orderly, safe, and inclusive classroom environment for all learners. Conversely, the indicator with the lowest mean of 4.11 was *"Uses positive reinforcement and fair discipline, encouraging and maintaining good behavior,"* which, however, is high, indicating that some participants still require improvement of strategies on keeping discipline and enhancing positive behavior among learners.

Table 9 Descriptive Statistics of the Level of Teaching Performance of Participants in terms of Classroom Management and Learning Environment

Range	**Description**	**Interpretation**	**Frequency**	**Percentage**
4.51 – 5.00	Very Good	Very High	9	7.14
3.51 – 4.50	Good	High	117	92.86
2.51 – 3.50	Fair	Moderate	0	0.00
1.51 – 2.50	Poor	Low	0	0.00
1.00 – 1.50	Needs Improvement	Very Low	0	0.00
	Total		**126**	**100**
	Mean		**4.19**	
	SD		**0.23**	
	Interpretation		**High**	

No.	INDICATORS	Mean	*SD*	Description
1	Establishes and follows consistent classroom routines (greeting, attendance, transitions, and clean up).	4.21	0.57	Good
2	Employs active attention-getters to get attention back on track.	4.17	0.47	Good
3	Uses positive reinforcement and fair discipline, encouraging and maintaining good behaviour.	4.11	0.61	Good
4	Manages time effectively to maximize learning opportunities.	4.14	0.57	Good
5	Manages the class appropriately, observing/systematizing class routine with less unnecessary noise and no distractive behaviour of pupils/students	4.17	0.53	Good
6	Shows a positive teacher-student relationship (speaks in a kind voice, smiles, listens to the student).	4.25	0.56	Good
7	Prepares the physical classroom to facilitate learning and safety (seats the chairs so that they can see and move around).	4.23	0.54	Good
8	Establishes a classroom atmosphere that is positive, safe, and inclusive.	4.19	0.54	Good
9	Recognizes individual differences and uses inclusive language and examples.	4.22	0.52	Good

In sum, the results indicate that participants can create a well-organized classroom, develop regular routines, and develop respectful relationships with students that can be useful to minimize their disruptive effects, make the most of classroom time, and enhance student engagement. The studies indicate that effective classroom management practices are essential in determining student academic achievement and classroom experiences (Sims et al., 2023). Research also indicates that when teachers develop positive routines and relationships with students, they tend to develop productive learning environments by involving and collaborating with students (Farkhani et al., 2022). There are also systematic reviews of teacher professional development, indicating that effective classroom management assists teachers in establishing both structured and inclusive learning environments, which enable students to develop academically and socially (Dacholfany et al., 2024). These results are consistent with the present findings, in which participants displayed high classroom management skills that lead to positive and supportive learning environment.

Table 10 presents the frequency distribution and descriptive statistics for the participants' teaching performance in instructional delivery, which determines the degree to which participants deliver lessons clearly, communicate ideas, implement especially relevant teaching strategies, and utilize teaching materials to facilitate understanding of learners. The total mean is 4.19, which can be seen as high, meaning that pre-service teachers are able to deliver lesson content, involve students and employ strategies that facilitate understanding and active learning. The frequency distribution indicates that 89.68 percent of the responses are below the high level and 10.32 percent below the very high level with no responses in the moderate, low, or very low levels.

Table 10 Frequency Distribution and Descriptive Statistics of the Level of Teaching Performance of Participants in terms of Instructional Delivery and Communication Skills

Range	Description	Interpretation	Frequency	Percentage
4.51 – 5.00	Very Good	Very High	13	10.32
3.51 – 4.50	Good	High	113	89.68
2.51 – 3.50	Fair	Moderate	0	0.00
1.51 – 2.50	Poor	Low	0	0.00
1.00 – 1.50	Needs Improvement	Very Low	0	0.00
	Total		**126**	**100**
	Mean		**4.19**	
	SD		**0.26**	
	Interpretation		**High**	

No.	INDICATORS	Mean	*SD*	Description
1	Presents lesson logically, with clear sequencing and transitions.	4.19	0.51	Good

2	Communicates ideas clearly using appropriate language, tone, and pacing suited to learners' level.	4.22	0.51	Good
3	Uses correct grammar, pronunciation, facial expression, and non-verbal cues (eye contact, gestures, posture) to enhance understanding.	4.22	0.53	Good
4	Appropriately applies different teaching techniques based on the needs of the learners.	4.21	0.57	Good
5	Uses instructional materials that are developmentally appropriate to their grade level and were easily utilized by the teacher.	4.19	0.50	Good
6	Employs instructional materials and other examples to illustrate the lesson	4.12	0.61	Good

Based on the individual indicators, the ratings of the participants were positive throughout all the statements. Both indicators with the highest rating, a mean of 4.22, are *"Communicates ideas clearly with the help of appropriate language, tone, and pacing according to the level of learners"* and *"Uses correct grammar, pronunciation, facial expression, and non-verbal (eye contact, gesticulations, posture) to improve understanding."* These results imply that the participants have well-developed communication skills, which make them effective in instructional delivery. Studies indicate that communication skills, such as nonverbal cues and the appropriate use of language, of pre-service teachers are a major contributor to classroom effectiveness and can still be improved through specific training and practice using simulations (Insan, 2025; Azukas & Gibson, 2025). The other high rated indicator was *"Appropriately applies different teaching techniques based on the needs of the learners,"* (*M* = 4.21), which indicates that the participants are very flexible in the way they change their teaching strategies to suit the various needs of the learners.

Meanwhile, the lowest mean (*M* = 4.12) belonged to the indicator *"Employs instructional materials and other examples to illustrate the lesson."* Despite the high rating, it indicates that participants might require additional practice on how to use teaching resources and visual aids in making students understand the concepts of a lesson. This can be assisted by teacher educators who can work with educative curriculum materials that demonstrate how to use instructional materials effectively and give a chance to practice (Melton and Mikeska, 2025; Hanuscin et al., 2025).

Table 11 shows the frequency and descriptive statistics of the performance of the participants on the assessment teaching performance. The mean is 4.18 in total, which is high, and shows that pre-service teachers use relevant assessment strategies and feedback mechanisms to track student progress and improve learning outcomes.

Table 11 Descriptive Statistics of the Level of Teaching Performance of Participants in Terms of Assessment

Range	**Description**	**Interpretation**	**Frequency**	**Percentage**
4.51 – 5.00	Very Good	Very High	11	8.73
3.51 – 4.50	Good	High	113	89.68
2.51 – 3.50	Fair	Moderate	2	1.59
1.51 – 2.50	Poor	Low	0	0.00
1.00 – 1.50	Needs Improvement	Very Low	0	0.00
	Total		**126**	**100**
	Mean		**4.18**	
	SD		**0.28**	
	Interpretation		**High**	

No.	**INDICATORS**	**Mean**	***SD***	**Description**
1	The teacher uses diagnostic assessments to identify learners' prior knowledge.	4.17	0.50	Good
2	The teacher uses formative assessments to check learners' understanding during lessons.	4.23	0.53	Good
3	The teacher uses summative assessments to measure learners' achievement at the end of a lesson or unit.	4.19	0.55	Good

4	The teacher designs assessment tasks that align with curriculum requirements.	4.13	0.57	Good
5	The teacher selects assessment methods that are suitable for the learning objectives.	4.20	0.57	Good

These results indicate that the participants possess the same skills of assessment and can assess student learning. Studies also indicate that teacher practitioners can build assessment literacy by receiving explicit training, observing assessment practices, and receiving training in providing feedback (Dustin et al., 2024). Also, technology-supported feedback has been revealed to assist pre-service teachers in enhancing their teaching practice by ensuring the feedback is more personal and actionable (Nel and Marias, 2022).

The assessment practices frequency analysis demonstrates that 89.68 percent of the answers are of the high level, 8.73 percent are of the very high level, and 1.59 percent are of the moderate level, with no answers in the low or very low levels. In the case of the individual indicators, the five indicators were rated to be good, which points to the fact that the participants are doing well in the assessment.

The greatest mean (M = 4.23) was with *"The teacher uses formative assessments to monitor the learning of the learners during the lessons,"* indicating that the participants had confidence in their ability to track student learning in the process of teaching and to modify their instruction as necessary. Evidence supports the statement that formative assessment supports teachers to collect data on student learning and adjust teaching to suit the needs of students (Black and Wiliam, 2021).

The second highest was *"The teacher selects assessment methods appropriate to the learning objectives"* (M = 4.20), followed by *"The teacher uses summative assessment to see how learners have achieved their goals at the end of a lesson or unit"* (M = 4.19), which demonstrates that the participants align assessment types to the learning objectives and are capable of successfully measuring the achievement of the students. The mean of 4.13 was the lowest, and it was of *"The teacher designs assessment tasks that meet curriculum requirements," which* indicates that participants might encounter certain difficulties in correctly incorporating curriculum requirements into their assessment tasks. The small standard deviations (0.50-0.57) show that the participants have similar perceptions regarding their assessment practices.

On the whole, participants are capable of applying different forms of assessment to track, instruct, and assess learning, which is crucial to student achievement and teaching effectiveness. Diagnostic, formative, and summative assessment practices assist the teacher in understanding what students have learned and giving them constructive feedback (Brookhart, 2023). Strongly assessment-literate teachers are in a better position to develop quality tasks that meet the learning outcomes (DeLuca et al., 2021). The results suggest that the participants can not only use assessment to measure learning outcomes but also to improve instructional effectiveness and facilitate the learning process.

The frequency and descriptive statistics of the participants' teaching performance in terms of professionalism are presented in Table 12. This dimension examines punctuality, readiness, adherence to school policy, appearance, confidence, classroom presence, enthusiasm, initiative, and responsiveness to feedback. The average is 4.36, which can be viewed as high, showing that pre-service teachers engage in ethical behavior, responsibility, and professional standards commitment consistently and regularly. The data indicates that 72.22% of the answers belonged to the high level and 27.78% to the very high level, with none under the moderate, low, or very low levels.

Table 12 Frequency Distribution and Descriptive Statistics of the Level of Teaching Performance of Participants in terms of Professionalism

Range	**Description**	**Interpretation**	**Frequency**	**Percentage**
4.51 – 5.00	Very Good	Very High	35	27.78
3.51 – 4.50	Good	High	91	72.22
2.51 – 3.50	Fair	Moderate	0	0.00
1.51 – 2.50	Poor	Low	0	0.00

1.00 – 1.50	Needs Improvement	Very Low	0	0.00
	Total		**126**	**100**
	Mean		**4.36**	
	SD		**0.25**	
	Interpretation		**High**	

No.	INDICATORS	Mean	*SD*	Description
1	The teacher is punctual, prepared, and complies with school policies and procedures.	4.56	0.38	Very Good
2	The teacher maintains proper grooming, appropriate attire, and professional behaviour in school.	4.50	0.49	Very Good
3	The teacher demonstrates confidence, self-control, and classroom presence that promote learner focus and respect.	4.33	0.51	Good
4	The teacher shows enthusiasm, initiative, and a positive attitude in performing teaching duties.	4.19	0.52	Good
5	The teacher accepts feedback from the cooperating teacher and uses it to improve teaching practice.	4.21	0.50	Good

Looking at the individual indicators, the mean of 4.56 (M = 4.56) was the highest, which was in the case of *"The teacher is punctual, prepared and follows school policies and procedures, demonstrating a strong dedication to professional responsibility,"* which means that a person is strongly committed to their professional responsibilities. The second group (M = 4.50) was the highest: "*The teacher keeps good grooming, proper dressing, and professional behavior at school, showing that the participants have professional standards."* Other high-rated indicators are *"The teacher demonstrates confidence, self-control, and classroom presence that facilitates learner focus and respec*t" (M = 4.33) and "*The teacher accepts feedback provided by the cooperating teacher and uses it to improve the teaching practice"* (M = 4.21).

The least average (M = 4.19) was on *"The teacher exhibits enthusiasm, initiative, and positive attitude in execution of teaching roles,"* indicating that although the participants are highly professional, engagement and initiative can still be improved further. The low standard deviations (0.38-0.52) indicate uniformity in answers.

Studies reveal that professionalism, such as responsibility, commitment, and a positive attitude, can help establish a successful learning experience and a positive working relationship in the school community (Tschannen-Moran and Hoy, 2022). When actively seeking feedback and practicing reflectively, teachers are in a better position to enhance classroom performance and solve problems (Darling-Hammond et al., 2021). On the other hand, professionalism helps in supporting the credibility, respect, and effective classroom management, which are critical elements of student learning. During the teaching internship, professional behavior may be reinforced again by mentoring, modeling, and practice-based feedback.

Research supports this hypothesis by demonstrating that professionalism is a fundamental competency that is acquired in field experiences and that teacher candidates, cooperating teachers, and university supervisors share the view that it is a component of an effective teacher (Myers et al., 2023). Mentoring and structured feedback have a significant role in creating teacher confidence and competence in the profession (Tveitnes and Hvalby, 2023). Pre-service teachers are more professional in such aspects as punctuality, readiness, and responsiveness to comments when their supervising instructors offer high-quality mentoring support, including modeling and positive feedback (Villanca, 2022).

These results are in line with the existing findings, wherein participants demonstrated much-needed professionalism in both punctuality, obedience to school policies, professional appearance, confidence, and acceptance of feedback.

Table 13 provides a summary of the pre-service teachers' teaching performance on six dimensions: Lesson Planning and Preparation, Content Knowledge and Pedagogy, Classroom Management and Learning Environment, Instructional Delivery, Assessment, and Professionalism. The expected competencies are reflected in the grand mean of 4.23, which is high, suggesting that the participants exhibit the desired competencies during

their teaching practicum. From the data, it reveals that they consistently demonstrate effective instructional practices and professional competencies that support a positive and productive learning environment.

Table 13 Summary Table for Teaching Performance

Reflective Practices	**Mean**	***SD***	**Interpretation**
Lesson Planning and Preparation	4.27	0.28	High
Content Knowledge and Pedagogy	4.18	0.23	High
Classroom Management and Learning Environment	4.19	0.23	High
Instructional Delivery and Communication Skills	4.19	0.26	High
Assessment	4.18	0.28	High
Professionalism	4.36	0.25	High
Grand Mean	**4.23**	**0.17**	**High**

Professionalism (M = 4.36) was rated the best, and Content Knowledge and Pedagogy (M = 4.18), and Assessment (M = 4.18) were also rated highly. The dimensions have small standard deviations (0.17-0.28), which demonstrates that the participants have the same perceptions regarding their teaching competencies. In general, the results point out that the participants are ready to use the theoretical concepts in practical teaching. Of these areas, professionalism gave the best mean (M = 4.36), although the other areas also gave high ratings. Such results suggest that the pre-service teachers have the necessary competencies to deliver effective teaching practice. Teaching performance encompasses a combination of instructional planning, pedagogical competence, classroom management, assessment practices, and attitudes of a professional nature that facilitate the learning of students (Darling-Hammond et al., 2021). It has been demonstrated that teachers who are competent in all of these domains can more effectively develop meaningful learning experiences and address various situations related to the classroom (Konig et al., 2022). Teaching effectiveness and continuous development require professionalism, which is characterized by responsibility, readiness, and willingness to provide feedback (Tschannen-Moran and Hoy, 2022). The fact that scores across all six domains are high indicates that the teacher education program has been effective in equipping participants with the knowledge, skills, and professional attitudes that are required in classroom teaching.

Additionally, further research confirms that pre-service teachers who develop competencies across multiple teaching domains are better prepared for effective classroom practice. (Jade et al., 2024) found that academic preparation in lesson planning, assessment, and ICT competency significantly predicts teaching performance. Muzakie (2023) reported that lesson plan development enhances pre-service teachers' pedagogical competence in formulating objectives, designing activities, and creating assessments. Regarding professionalism, Dack (2024) emphasized that professional dispositions—such as punctuality, preparedness, and openness to feedback—must be intentionally cultivated through mentoring during the internship. Together, these studies support the finding that participants demonstrated balanced development of pedagogical skills and professional dispositions, indicating their readiness for classroom practice

Problem 5: What model best fits pre-service teachers' teaching performance?

H_o5: None of the model best fits pre-service teachers' teaching performance.

Before conducting Structural equation modeling (SEM), a preliminary analysis was conducted to examine the relationship of the variables included in the study. Canonical analysis was initially carried out; however, it shows no significant relationship between the sets of variables. With this, it indicates that self-efficacy in teaching, reflective practice, and supervision quality do not meaningfully demonstrate their relationship with the pre-service teachers' teaching performance, whether considered individually or collectively (see Appendix J).

Additionally, multiple regression analysis was also conducted to determine the predictive influence of self-efficacy in teaching, reflective practice, and supervision quality on teaching performance. The findings of the study show that the combined predictors did not show a statistically significant influence on the pre-service teachers' teaching performance, and none of the independent variables was found to be a significant contributor

to the model. It also suggests that the variables have minimal direct influence on teaching performance when examined using linear analytical methods (see Appendix J).

Given these results, Structural equation modeling (SEM) was employed to further investigate the underlying structural relationships among the variables and to identify the model that best fits teaching performance, considering both direct and indirect effects as proposed in the conceptual framework.

Table 14 shows the fit indices for Model 1 (Figure 1), which represents the relationship among Self-Efficacy, Reflective Practice, Supervision Quality, and Teaching Performance.

Table 14 Model 1 Fit Indices

Index	**Estimate**	**Cut-off Criterion**	**Interpretation**
Cmin/df	2.168	Between 0 and 3	Acceptable
CFI	0.908	≥0.90	Acceptable
SRMR	0.065	≤0.08	Acceptable
RMSEA	0.097	<.08	Poor
PCLOSE	0.005	>0.05	Poor
Note. *Cmin/df = Minimum Discrepancy divided by Degrees of Freedom; CFI = Comparative Fit Index; SRMR = Standardized Root Mean Square Residual; RMSEA = Root Mean Square Error of Approximation; PCLOSE = Probability of Close Fit. Source: Hu and Bentler (1999), "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis*			

In Table 14, the Cmin/df value of 2.168 is within the acceptable range, 0 to 3, which indicates an acceptable fit. The Comparative Fit Index (*CFI*) value of 0.908 is greater than the 0.90 threshold, indicating that the incremental fit is acceptable. The Standardized Root Mean Square Residual (*SRMR*) of 0.065 is less than the cutoff of 0.08, which is also indicative of a good fit. Nonetheless, the *RMSEA* measure of 0.097 is greater than the recommended cut-off value of 0.08, implying that there is poor approximation error. In addition, the rationale of the *PCLOSE* value of 0.005 falls below the recommended value of 0.05, meaning that the model does not give a close fit with the data. The results imply that the model may not fully represent the relationships among Self-Efficacy, Reflective Practice, Supervision Quality, and Teaching Performance.

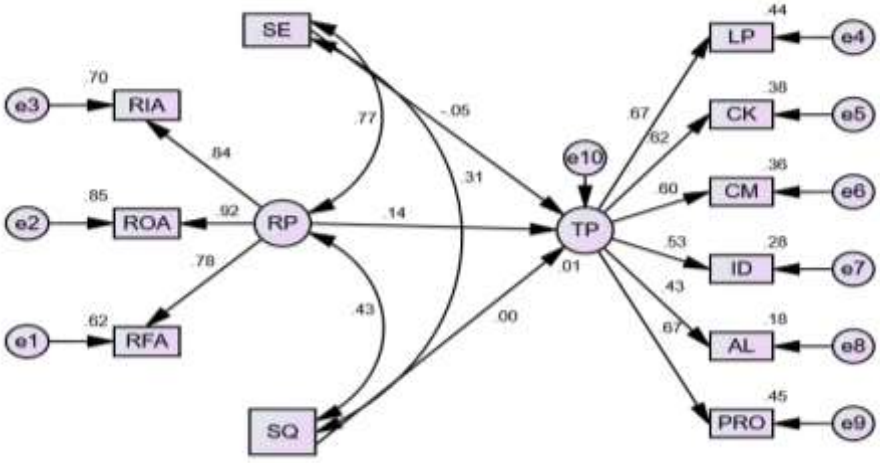

Figure 2. Model 1 Path Diagram of the Relationship among Self-Efficacy, Reflective Practice, Supervision Quality, and Teaching Performance

Legend: SE = Self-efficacy; RP =Reflective Practices; RIA = Reflection-in-Action; ROA = Reflection-on-Action; RFA = Reflection-for-Action; SQ = Supervision Quality; TP = Teaching Performance; LP = Lesson Planning and Preparation, CK = Content Knowledge and Pedagogy, CM = Classroom Management and Learning Environment, ID = Instructional Delivery, AL = Assessment of Learning, PRO = Professionalism

With this, Model 1 represents a general framework in which all external support (quality of supervision), internal belief (self-efficacy), and reflective thinking (reflection-in-action, reflection-on-action, and reflection-for-action) of pre-service teachers are assumed to have an independent and direct impact on teaching performance. The path diagram shows a very interconnected structure, with several direct paths between these variables and the result. But when both are considered, the fit indices and diagram indicate that this model explains the relationship among the variables only partially and in a limited way. Although the model shows a satisfactory performance level on certain fundamental measures, it fails to provide enough clarity on how these variables are measured and applied within the real teaching situation.

On the other hand, the design presented in Figure 1 reveals a highly connected and complex structure, where almost all variables are related to one another. While this approach is theoretical, it assumes that all the factors play independently, at the same time in influencing the pre-service teachers' roles in teaching performance. However, this assumption defies the fact that these variables are more likely to influence each other in a step-by-step and interconnected way. Additionally, the analysis of Model 1 shows that this structure can be too simple in its assumptions and too complex in its form. The model lacks focus as it has numerous direct pathways, not establishing the most significant relationship among the variables. Specifically, the assumption that all dimensions of reflective practice have equal predictive power of teaching performance might lessen the clarity of explanation of the model. Probably, these dimensions do not work in the same manner or with an equal level of significance.

Overall, the combined interpretation of Table 14 and Figure 1 suggests that teaching performance cannot be fully explained by simply combining several independent factors. The fact that some indices are within acceptable ranges, complemented by poor *RMSEA* and *PCLOSE*, suggests that the model might not be an adequate representation of the correlation between the study variables. Instead, it's influenced by interrelated processes in which some variables influence other variables before leading to an outcome. These identified limitations of Model 1 highlight the need for a more focused and theoretically consistent model that better reflects the underlying dynamics of teacher development.

Table 15 shows the fit indices of Model 2, which examines the relationships among Self-Efficacy, Reflective Practice, Supervision Quality, and Teaching Performance. This model is simpler and focused, emphasizing the connection among the variables and the importance of developmental pathways rather than multiple direct effects. Variables were the same as in Model 1, only that their relationships were redefined to imply a more theoretically consistent framework, with Reflection-for-Action being the only dimension of reflective practice that was continued to be relevant.

The Cmin/df value of 1.706 falls within the recommended range of 0 to 3, indicating an excellent fit. The Comparative Fit Index (*CFI*) is 0.958, exceeding the 0.90 threshold, demonstrating excellent incremental fit. The Standardized Root Mean Square Residual (*SRMR*) is 0.052, below the 0.08 criterion, indicating excellent fit. The *RMSEA* is 0.075, slightly below the 0.08 cutoff, reflecting acceptable approximation error. The *PCLOSE* value of 0.236, greater than 0.05, further supports a close fit. Overall, the indices indicate that Model 2 fits the data well. The results suggest that this model provides a reliable representation of the relationships among Self-Efficacy, Reflective Practice, Supervision Quality, and Teaching Performance.

Table 15 Model 2 Fit Indices

Index	**Estimate**	**Cut-off Criterion**	**Interpretation**
Cmin/df	1.706	Between 0 and 3	Excellent
CFI	0.958	≥0.90	Excellent
SRMR	0.052	≤0.08	Excellent
RMSEA	0.075	<.08	Acceptable
PCLOSE	0.236	>0.05	Excellent

Note. *Cmin/df = Minimum Discrepancy divided by Degrees of Freedom; CFI = Comparative Fit Index; SRMR = Standardized Root Mean Square Residual; RMSEA = Root Mean Square Error of Approximation; PCLOSE = Probability of Close Fit. Source: Hu and Bentler (1999), "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis*

Figure 3 presents the path diagram of Model 2, showing the relationships among Self-Efficacy (SE), Reflection-for-Action (RFA), Supervision Quality (SQ), and Teaching Performance (TP). Self-Efficacy (SE) is influenced by Supervision Quality (SQ) with a moderate loading of 0.31 and has a strong direct effect on Reflection-for-Action (RFA, 0.53). Supervision Quality has a smaller, non- significant direct effect on RFA (0.13).Reflection-for-Action directly affects Teaching Performance (TP) with a modest loading of 0.28. Teaching Performance (TP) is measured by Lesson Planning and Preparation (LP, 0.66), Content Knowledge and Pedagogy (CK, 0.57), and Professionalism (PRO, 0.73), showing that Professionalism and LP are the strongest dimensions contributing to Teaching Performance (TP). Overall, the model suggests that Self-Efficacy, shaped by Supervision Quality, primarily influences Reflection-for-Action, which in turn positively impacts Teaching Performance. The diagram highlights that reflective practice acts as a key pathway linking self-efficacy to teaching performance, while supervision quality has a limited indirect role.

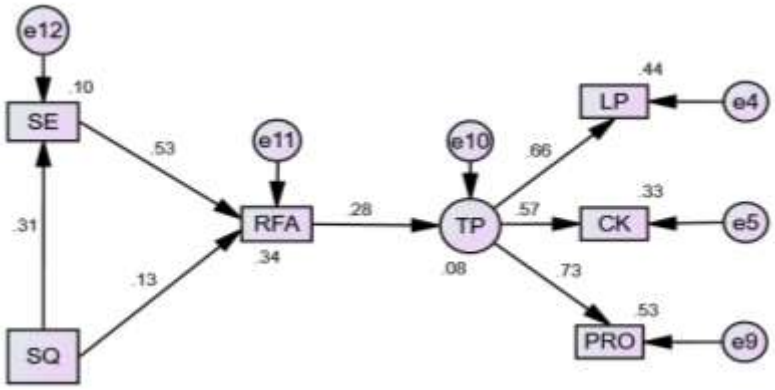

Figure 3. Model 2 Path Diagram of the Relationship among Self-Efficacy, Reflective Practice, Supervision Quality, and Teaching Performance

Legend: SE = Self-efficacy, RFA = Reflection-for-Action, SQ = Supervision Quality, TP = Teaching Performance, LP = Lesson Planning and Preparation, CK = Content Knowledge and Pedagogy, PRO = Professionalism

The combined results suggest that Model 2 better explains the relationships among the variables, in a clearer, more accurate, and meaningful way. The improvement in the model's performance indicates the shift toward a structure that is more consistent with both theoretical assumptions and observed data. Additionally, Figure 2 depicts a simplified and sequential process. The model starts with the quality of supervision, which represents the external support given to pre-service teachers. This support influences self-efficacy, which highlighting the important role of mentoring and guidance in building confidence. Self-efficacy then affects reflection-for-action, a form of reflective practice meant for planning and improving future teaching. Finally, reflection-for-action is directly influencing teaching performance.

This framework underlines the fact that the interaction between the variables is indirect and dependent on one another. The quality of supervision has does not directly improve teaching performance; instead, it operates through enhancing the confidence of teachers. This confidence, on the other hand, encourages reflective thinking, which ultimately leads to improved teaching performance.

Another important finding of Model 2 is the important role of self-efficacy in mediating the external support and professional practice. It demonstrates that a teacher needs to first build a sense of confidence in their abilities before they can effectively engage in reflection and become a better teacher. It is also important to consider reflection-for-action as the most relevant dimension of reflective practice. Compared to other forms of reflection, reflection-for-action is focused on planning, foreseeing difficulties, and making informed decisions for future teaching. This form of reflection makes it the main process by which the pre-service teachers' beliefs are translated into real teaching action.

The model further explains that not all possible relationships are needed to explain teaching performance. By focusing only on the most meaningful connection, Model 2 becomes more realistic and easier to understand. All in all, Table 16 and Figure 2 show that teaching performance develops through an organized process involving support, confidence, and reflective practice, providing a clearer and more consistent explanation of how pre-service teachers become competent teachers.

Table 16 indicates a comparison of the fit indices of Model 1 and Model 2 and how well each hypothesized structure accounts the relationships among the variables in the study: Self-Efficacy, Reflective Practice, Supervision Quality, and Teaching Performance. Despite the fact that both models strive to demonstrate the relationship between these variables, they differ in their structure and conceptual focus.

The fit indices of the two tested models are summarized. Model 1 showed Cmin/df = 2.168, CFI = 0.908, SRMR = 0.065, and RMSEA = 0.097, but PCLOSE = 0.005, which satisfies most of the acceptable cut-off values. Although a number of the indices showed acceptable values, the ratio of RMSEA was below the recommended limit, and PCLOSE did not reach the acceptable level, which shows a weak fit model. These values indicate that Model 1 demonstrated a marginal fit with the data. Hence, Model 2 showed better fit measures and met the recommended cut-off values more closely: Cmin/df = 1.706, CFI = 0.958, SRMR = 0.052, RMSEA = 0.075, and PCLOSE = 0.236, which means that the associations among the variables were better represented.

Table 16 Summary of the Model Fit Indices

Index	**Model 1**	**Model 2***	**Cut-off Criterion**
Cmin/df	2.168	1.706	Between 0 and 3
CFI	0.908	0.958	$\geq$0.90
SRMR	0.065	0.052	$\leq$0.08
RMSEA	0.097	0.075	<0.08
PCLOSE	0.005	0.236	>.05
Note. *Cmin/df = Minimum Discrepancy divided by Degrees of Freedom; CFI = Comparative Fit Index; SRMR = Standardized Root Mean Square Residual; RMSEA = Root Mean Square Error of Approximation; PClose = Probability of Close Fit. Source: Hu and Bentler (1999), "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis. *Best fit Model*			

In Model 1, it was assumed that all the key variables have a direct effect on teaching performance. Self-Efficacy and Supervision Quality were considered as independent predictors, and all three dimensions of Reflective Practice, such as Reflection-in-Action, Reflection-on-Action, and Reflection-for-Action were seen as independent contributors. All variables were hypothesized to have a direct influence on Teaching Performance, indicating that teaching effectiveness is the product of the cumulative influence of confidence, support, and reflection.

The model provided mixed fit results. Simple measures of simplicity and overall improvement in fit were *satisfactory*, and the *Comparative Fit Index (CFI)* met the minimum threshold of 0.90 or above, which is considered acceptable, while values 0.95 or higher are seen as indicative of a very good fit. *The Standardized Root Mean Square Residual (SRMR)* showed only a small difference between observed and predicted data. The *Root Mean Square Error of Approximation (RMSEA)* was, however, above the recommended values, and the Probability of Close Approximation (PCLOSE) was below the desired level. These findings show that even though Model 1 captured some patterns in the data, it was not a complete representation of the complex relationships existing among self-efficacy, supervision quality, and reflective practice. That is, the assumption of direct effects only is a simplistic way to understand the developmental process of pre-service teachers.

Model 2 suggested a more refined, theoretically guided framework that emphasizes the developmental pathways rather than their direct effects. Among the dimensions of Reflective Practice, only Reflection-for-Action remained, founded on the idea that forward-looking reflection is most effective in translating confidence and support into measurable and improved teaching outcomes. In this model, Supervision Quality influences Self-Efficacy, which would in turn affect Reflection-for-Action and finally, Teaching Performance. This framework indicates the developmental process of pre-service teachers: external support strengthens internal confidence, which inspires reflective habits that enhance classroom practice.

In addition, the major understanding of teacher development is seen by comparing the two models. In model 1, teaching effectiveness is viewed as the sum of the independent factors, such as confidence, support, and reflection. In Model 2, teaching effectiveness is described as a developmental process: support builds confidence, which motivates reflection-for-action, and through this reflective practice, confidence is translated into a measurable performance of teaching. It has been compared that, in all cases, Model 2 is better than Model 1 in terms of the relationship that it gives between the variables. Although Model 1 describes some of the data, it does not describe the structure of the relationship comprehensively, especially the way the variables interact.

The fact that Model 2 has a high performance on all the fit indices confirms that pre-service teacher development is more of a developmental pathway rather than a collection of independent effects. As the most noticeable measure of teaching performance, professionalism reveals whether pre-service teachers follow the school policies, are prepared, present, and sensitive to feedback. These are some of the most important results of the process.

Lastly, as indicated in Table 16, Model 2 is the most appropriate to depict how self-efficacy, reflective practice, and supervision quality relate to teaching performance. Research proves that teacher self-efficacy affects engagement and professional practice based on reflection, and reflective practice enhances efficacy and growth in instruction further (Heng and Chu, 2023; Agnihotri et al., 2024). This implies that there is a developmental progression whereby, with the help of supportive supervision, confidence is built, which leads to reflective habits that can improve classroom performance and professional dispositions. Supervision, confidence-building, and intentional development of reflective and professional practices should thus be the focus of teacher education programs to enhance the effectiveness of teaching.

The regression weights of the structural paths in the best-fit Model 2 in Table 17 establish the statistical basis of the relationships in Figure 2. These coefficients indicate the strength, direction, and importance of each of the hypothesized pathways, which is important to provide valuable insights into the interaction between Supervision Quality, Self-Efficacy, Reflection-for-Action, and Teaching Performance to impact instructional effectiveness among pre-service teachers.

The findings shown in the table indicate that there is a significant direct relationship between supervision quality and self-efficacy, with an estimation of 0.284 and p <.001. Self-efficacy also has a direct impact on reflection-for-action, which is significant and strong with a value of 0.644 and p =.001.

Table 17 Model 2 Regression Weights

Path			**Estimate**	**S.E.**	**C.R.**	**P**
Self-Efficacy	<---	Supervision Quality	.284	.078	3.661*	<.001
Reflection-for-Action	<---	Self-Efficacy	.644	.093	6.948*	<.001
Reflection-for-Action	<---	Supervision Quality	.147	.085	1.737	.082
Teaching Performance	<---	Reflection-for-Action	.089	.035	2.509*	.012
**Significant at 0.05 alpha level.*						

The first direction between Supervision Quality and Self-Efficacy demonstrates a statistically significant positive correlation, implying that pre-service teachers who believe that their cooperating teachers mentor them with quality, provide guidance and feedback, express greater confidence in their ability to teach successfully. This finding highlights the primary role of supervision in teacher growth and development. The presence of a cooperating teacher who provides clear instructional guidance, constructive feedback, emotional support, and valuable experiences through professional dialogue is an important source of mastery of experiences and vicarious learning (Xu et al., 2024). These, according to Social Cognitive Theory, are the main processes by which self-efficacy beliefs are developed and reinforced, becoming an effective teacher.

The Self-Efficacy to Reflection-for-Action is the second track, which reflects the most positive relationship in the whole model, as it has a strong positive correlation between confidence and the practice of reflecting prospectively. Higher confidence levels in their teaching skills make pre-service teachers much more likely to take part in the process of reviewing past teaching experiences, synthesizing feedback, evaluating instructional

decisions, and strategically planning future improvements. This is consistent with theoretical insights that people who have high self-efficacy are more persistent and ready to face adversities and more likely to implement self-control mechanisms that facilitate an ongoing process of improvement (Heng & Chu, 2023).

The third route, between Supervision Quality and Reflection-for-Action, is not significant, meaning the quality of supervision does not have a direct impact on increasing the reflective practice among pre-service teachers. This result shows a mediated direction: instead of impacting directly reflective practice, supervision has its influence indirectly through self-efficacy. Supervision initially fosters the trust of the pre-service teachers and it is this increase in self-efficacy that then leads to reflection-for-action. This result underscores that supervisory support alone is not enough to change teachers' reflective habits; it will only work when it helps teacher build their confidence and internal belief on their ability to teach, which then encourages them to reflect (Luo et al., 2024).

The fourth direction is between Reflection-for-Action and Teaching Performance, where forward-looking reflective practice exhibits a statistically significant positive relationship, where pre-service teachers who take forward actions in reflection practices have higher levels of teaching performance in the various domains. This observation confirms the idea that pre-service teachers who are used to reflecting on what they can do to improve their teaching methods, to listen to their mentors, and take the initiative to solve instructional problems are more likely to teach in a well-planned, pedagogically effective, and professionally executed (Hußner et al., 2023). This correlation shows that the reflection-for-action fills the gap between what teachers learn in the teacher education programs and what they need to know to teach in the classroom.

All four paths taken together present a logical developmental trajectory that sheds light on the way pre-service teachers become effective teachers. According to the model, Supervision Quality has an indirect effect via Self-Efficacy that, in turn, has a strong influence on Reflection-for-Action that, in turn, has a meaningful impact on Teaching Performance. The non-significant direct relationship between supervision and reflection indicates that the supervision fosters reflective practice indirectly through self-efficacy. Likewise, when no direct impacts of supervision or self-efficacy on teaching performance were identified, it is highlighted that Reflection-for-Action is the most important mechanism through which confidence and support can be translated into effective teaching (Heng & Chu, 2023; Yang and Du, 2024).

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter summarizes the problem, methods, and findings. It also contains the study's conclusions and recommendations.

Summary

The Problem. This study determined whether self-efficacy in teaching, reflective practice, and supervision quality predict the teaching performance of pre-service teachers. It described the participants' levels across these variables and examined the associations among them. With Structural Equation Modeling (SEM) the study was able to determine the model that best fits the observed data on teaching performance. Specifically, the study sought to answer the following questions: 1. What is the participants' self-report of their level of self-efficacy in teaching? 2. What is the participants' extent of reflective practice in terms of: 2.1 Reflection-in-action; 2.2 Reflection-on-action; and 2.3 Reflection-for-action? 3. What is the participants' assessment of supervision quality? 4. What is the participants' level of teaching performance considering: 4.1 Lesson Planning and Preparation; 4.2 Content Knowledge and Pedagogy; 4.3 Classroom Management and Learning Environment; 4.4 Instructional Delivery; 4.5 Assessment; and 4.6 Professionalism; 5. Is there a significant association between teaching performance and their: 5.1 Self-efficacy in Teaching; 5.2 Reflective Practice; 5.3 Supervision Quality; 6. Do the participants' self-efficacy in teaching, reflective practice, and assessment of supervision quality significantly predict their teaching performance? 7. What model best fits participants' teaching performance?

Methods. The research design was a quantitative, descriptive-correlational design with SEM as the primary analysis method. The sample of the study was 126 pre-service teachers on the Bachelor of Elementary Education (BEEd) program undertaking their practice teaching internship in identified public elementary schools in

Misamis Oriental in School Year 20252026. They were chosen according to their participation in the teaching practicum.

Four instruments were used. Self-Efficacy in Teaching Scale was used to measure confidence in instructional tasks. The Reflective Practice Scale measured reflection-in-action, reflection-on-action and reflection-for-action. The Supervision Quality Instrument was a measure of how supervisors and cooperating teachers perceived mentoring, feedback and guidance. The Teaching Performance Evaluation Form, which is based on the Philippine Professional Standards of Teachers (PPST) and the Framework of Teaching by Danielson, measured performance in six areas: lesson planning and preparation, content knowledge and pedagogy, classroom management and learning environment, instructional delivery, assessment, and professionalism.

Experts in the field of teacher education, educational psychology, and research methodology went through all the instruments and pilot tested them on 30 pre-service teachers. Results derived from Cronbach's alpha indicated very high internal consistency in all scales. The data on the responses of the participants were characterized by means of descriptive statistics and tested by means of SEM the direct effects and predictive contribution of the independent variables to the teaching performance and the selection of the most appropriate structural model.

To examine the predictive relationships among the variables, Structural Equation Modeling (SEM) was employed. SEM analysis enabled the researcher to simultaneously examine the relationships between the independent variables—self-efficacy in teaching, reflective practice, and supervision quality—and the dependent variable, teaching performance. This statistical technique allowed the study to determine both the direct effects and predictive contributions of the independent variables on teaching performance.

Findings

Based on the data gathered, the following are the salient findings revealed in this study:

1. The levels of self-efficacy in teaching, reflection (especially reflection-for-action), and the quality of supervision were found to be high among pre-service teachers, which means that the participants feel confident in their teaching skills, are active in the process of reflection, and are supervised properly throughout their teaching internship.
2. Teaching performance scored high in its key domains of lesson planning and preparation, content knowledge and pedagogy, and professionalism, indicating that pre-service teachers tend to be capable in their ability to organize instruction, teach effectively, and exhibit professional behavior.
3. Model 2 was the best-fit model, being more efficient and theoretically consistent, with the relationships among variables, and was accepted with satisfactory goodness-of-fit indices.
4. Reflection-for-action, as a form of reflective practice, was also identified to have a direct effect on teaching performance, which can be translated into the fact that pre-service teachers who practice anticipatory reflection, wherein they are planning ahead of time, thinking about the teaching strategies they could follow, and anticipating what might happen in the classroom, are more likely to show better instructional performance.
5. Self-efficacy was also a strong predictor of reflection-for-action, implying that pre-service teachers who are more confident in their teaching abilities have higher chances of practicing purposeful reflection and proactive instructional planning.
6. Supervision quality was also found to have effects on self-efficacy and reflective practice, which implied that effective mentoring, constructive feedback, and professional assistance by collaborating teachers can improve the confidence and reflective skills of pre-service teachers.
7. Self-efficacy and the quality of supervision did not have a direct effect on the teaching performance; rather, the effect was mediated by reflection-for-action. Here, it is emphasized that confidence and supervision are insufficient unless these are translated into reflective and meaningful teaching practices.
8. To sum it up, reflection-for-action served as an important mediating variable between self-efficacy, supervision quality, and teaching performance, highlighting its central position in changing internal beliefs and external support into actual teaching competence.

Conclusions

The findings of this study provide important insights into the interrelationship of self-efficacy in teaching, reflective practice, and supervision quality in relation to the teaching performance of pre-service teachers. These results can be interpreted through Social Cognitive Theory, Reflective Practice Theory, Sociocultural Theory, and Danielson's Framework for Teaching, which collectively highlight the interaction of personal beliefs, reflective processes, and supportive learning environments in shaping effective instructional practice.

This study also provides good empirical support that self-efficacy in teaching, reflection practice, and the quality of supervision are important predictors of pre-service teacher performance. The findings of Structural Equation Modeling (SEM) showed that the hypothesized model had a good fit in the data because of acceptable levels of fit indices, revealing the validity and reliability of the measurement model. Their observed indicators supported the underlying factors of self-efficacy, reflective practice, and supervision quality, showing that the measures were appropriately related to their intended factors and are distinct from each other.

In particular, pre-service teachers who had high self-efficacy levels were found to be competent in terms of lesson planning, instructional delivery, and classroom management, which supported the motivational role of self-efficacy in shaping teaching practices. Equally, systematic reflective practice, specifically reflection-in-action and reflection-on-action, was linked to better adjustments in the instruction, better practices in assessment, and better professional decisions. Quality supervision modelled by cooperating teachers and mentors offered essential scaffolding, feedback, and guidance, which translated into an increase in observed teaching performance on all of the domains measured.

The SEM analysis also revealed that the three predictors are able to explain a significant percentage of the teacher performance variance, which shows the interactive and complementary effect of cognitive, reflective, and contextual variables in teacher development. These findings are consistent with the theoretical assumptions of Social Cognitive Theory, Reflective Practice Theory, and the Sociocultural framework by Vygotsky, and demonstrate that the confidence and reflective capacity of pre-service teachers, as well as their exposure to quality supervision, are dynamically interconnected to increase the instructional performance and professional behavior of pre-service teachers.

To sum it up, the research confirms that self-efficacy development, structured reflective practice, and high-quality supervision should be integrated into teacher education programs. Through a systematic improvement of these aspects, the institutions can develop pre-service teachers not only competent in instructional and assessment practice but also flexible, reflective, and professionally accountable. The results confirm the practical usefulness of the SEM-based model and deliver evidence-based recommendations to teacher preparation courses that tend to improve teaching performance to international standards of quality education.

Recommendations

In light of the findings and conclusions of the study, several recommendations are proposed.

1. **Teacher education institutions** may continue strengthening their practicum programs by providing learning experiences that enhance the self-efficacy, reflective abilities, and teaching competencies of pre-service teachers. Institutions may also integrate structured reflective activities and mentoring systems that support the professional growth of practice teachers during their internship.
2. **Mentor teachers and supervisors** may continue providing consistent guidance, classroom observation, and constructive feedback to pre-service teachers to support their professional development. They may also encourage reflective discussions and collaborative evaluation of teaching experiences to further improve instructional practices.
3. **Pre-service teachers** are encouraged to continue developing their reflective thinking and actively seek feedback from their mentors and supervisors. By engaging in continuous reflection and professional dialogue, they may further strengthen their instructional skills, classroom management strategies, and assessment practices.

4. **School administrators and educational leaders** may support mentoring programs and professional learning communities that facilitate the growth of pre-service teachers during their practicum experience. Providing a supportive and collaborative learning environment may help bridge the gap between theoretical knowledge and actual classroom practice.
5. **Future researchers** may conduct similar studies that explore other factors that may influence teaching performance, such as pedagogical knowledge, motivation to teach, classroom climate, emotional intelligence, and institutional support. They can also consider other variables affecting teaching performance and are advised to use Confirmatory Factor Analysis (CFA), especially in the validation of constructs like quality of supervision. They can also employ bigger samples, different research designs, or mixed methods to ensure a more in-depth understanding since these variables could still interact and change over time.

REFERENCES

1. Abela, R., Manaig, M., & Mamolo, L. (2025). Self-efficacy and learning experiences of preservice teachers in a state university. Journal of Curriculum & Teaching, 14(1), 163. https://doi.org/10.5430/jct.v14n1p163
2. Abualrob, M. (2025). From reflection to re-reflection: ChatGPT and transformative learning in preservice elementary science education. International Journal of Learning, Teaching and Educational Research, 24(10), 769–793. https://doi.org/10.26803/ijlter.24.10.37
3. Agnihotri, S., Mamoria, P., Moorthygari, Chandel, P., & Raju, S. G. (2024). The Role of Reflective Practice in Enhancing Teacher Efficacy. Educational Administration: Theory and Practice, 30(6), 1689–1696. https://doi.org/10.53555/kuey.v30i6.5574.
4. Aguilar, J. & Aguilar, J. P. (2025). Academic Resilience and Performance of Pre-Service Teachers in the Post-Pandemic Era. Journal of Interdisciplinary Perspectives, 3(7), 572-579. https://doi.org/10.69569/jip.2024.490
5. Al-Bahlani, S. M. (2023). Assessment competence and practices including digital aspects in teacher education. Studies in Educational Evaluation. https://doi.org/10.1080/2331186X.2023.2239535
6. Alcazaren, H. K. G. (2024). Developing language assessment literacy of Filipino pre-service teachers: reflections from a language assessment course. TEFLIN Journal - a Publication on the Teaching and Learning of English, 35(2), 216–231. https://doi.org/10.15639/teflinjournal.v35i2/216-231
7. Aldo, A. Donald A. Schön-The Reflective Practitioner_ How Professionals Think In Action-Basic Books (1984).pdf.
8. Almajnuni, K. M., & Alwerthan, T. A. (2024). Enhancing teacher self-efficacy: The power of effective training programs. Journal of Pedagogical Research, 8(3), 34-47. https://doi.org/10.33902/JPR.202427265
9. Almeida, F. (2025). Structural equation modeling: Steps and analysis. Journal of Multidisciplinary Studies in Education. https://dergipark.org.tr/tr/pub/jmse/article/1816907
10. Anam, F., Muharlisiani, L. T., Soewardini, H. M. D., & Purnomo, A. (2023). Reflections on 4F Model learning for professionalism development of prospective teachers. Journal of Education Research, 4(4), 2498–2510. https://doi.org/10.37985/jer.v4i4.740
11. Available from the Danielson Group website: https://danielsongroup.org/resources/the-framework-for-teaching-evaluation-instrument/. https://education.oregonstate.edu/sites/education.oregonstate.edu/files/danielson-2013-rubric-only_0.pdf
12. Azukas, M. E., & Gibson, D. (2025). Teacher Talk: simschool Implementation in Teacher Education. Technology, Knowledge and Learning, 30(4), 1943–1958. https://doi.org/10.1007/s10758-025-09870-6
13. Bachman, H. F., & Beard, K. S. (2025). Family engagement efficacy beliefs of educators: confirming a new measure. Teachers and Teaching, 1–18. https://doi.org/10.1080/13540602.2025.2497793
14. Bacus, R. C., Picardal, M. T., Perez, N. B., & Balo, V. T. M. (2024). Predictors of beginning teachers' teaching performance. Frontiers in Education, 9. https://doi.org/10.3389/feduc.2024.1375726
15. Baier-Mosch, F., Timo, K., & Kuhn, C. (2024). Pre-service teachers' knowledge about classroom management: Sources and implications. Frontiers in Education, 9, 1365005. https://doi.org/10.3389/feduc.2024.1365005

16. Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice-Hall.
17. Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice-Hall.
18. Bandura, A. (1991). Social cognitive theory of self-regulation. Organizational Behavior and Human Decision Processes, 50(2), 248–287. https://doi.org/10.1016/0749-5978(91)90022-L
19. Bataineh, O. T., Mahasneh, A. M., Al-Zoubi, Z. H., Qablan, A., & Alkaabi, A. M. (2025). The relationship between teacher commitment, teacher self-efficacy, and work-related quality of life among science teachers. PLOS ONE, 20(7), e0326994. https://doi.org/10.1371/journal.pone.0326994
20. Beckmann, T., et al. (2023). Informal and formal lesson planning in school internships. Teaching and Teacher Education, 124, 104125. https://doi.org/10.1016/j.tate.2023.104249
21. Benton, S., & Li, D. (2021, May). Teacher clarity: Cornerstone of effective teaching (IDEA Paper No. 83). Anthology. https://www.ideaedu.org/idea_papers/teacher-clarity-cornerstone-of-effective-teaching/index.html
22. Bergdahl, N., & Bond, M. (2024). Unpacking student engagement in higher education learning analytics: A systematic review. International Journal of Educational Technology in Higher Education, 21(14). https://educationaltechnologyjournal.springeropen.com/articles/10.1186/s41239-024-00493-y
23. Berger, N. (2023). Instructional Clarity, Classroom Disorder, and Student Achievement in Mathematics (Working paper, ERIC). https://files.eric.ed.gov/fulltext/ED631605.pdf
24. Black, P., & Wiliam, D. (2021). Classroom assessment and pedagogy. Assessment in Education: Principles, Policy & Practice, 28(6), 551–575. https://doi.org/10.1080/0969594X.2021.1951169
25. Bouckaert, M. (2023). The assessment of students' creative and critical thinking skills in higher education across OECD countries: A review of policies and related practices https://one.oecd.org/document/EDU/WKP(2022)1/En/pdf
26. Bozkus, K. (2021). A systematic review of studies on classroom management. Journal of Education and Learning, 10(3), 45–62. ERIC. https://files.eric.ed.gov/fulltext/EJ1297870.pdf
27. Brady, A., & Talanquer, V. (2023). Reflective practice and the use of assessment to inform instruction. CBE—Life Sciences Education, 22(3). https://doi.org/10.1187/cbe.22-07-0148
28. Brandmo, C., & Gamlem, S. M. (2025). Students' perceptions and outcome of teacher feedback: A systematic review. Frontiers in Education, 10, 1572950. https://doi.org/10.3389/feduc.2025.1572950
29. Brenner, C.A. Self-regulated learning, self-determination theory and teacher candidates' development of competency-based teaching practices. Smart Learn. Environ. 9, 3 (2022). https://doi.org/10.1186/s40561-021-00184-5
30. Brookhart, S. M. (2023). Classroom assessment and grading that work. ASCD. https://www.ascd.org/books/classroom-assessment-and-grading-that-work
31. Bureau, J. S., Howard, J. L., Chong, J. X. Y., & Guay, F. (2022, February). Pathways to student motivation: A meta-analysis of antecedents of autonomous and controlled motivations. Review of educational research. https://pmc.ncbi.nlm.nih.gov/articles/PMC8935530/
32. Burhan-Horasanlı, E., & Hart, D. O. (2024). Conceptualizing reflection-for-action: Empowering teachers as agents of collaborative and collective transformation. Teaching and Teacher Education, 152, 104802. https://doi.org/10.1016/j.tate.2024.104802
33. Burhan-Horasanlı, E., & Ortaçtepe Hart, D. (2024). Conceptualizing reflection-for-action: Empowering teachers as agents of collaborative and collective transformation. Teaching and Teacher Education, 152, 104787. https://doi.org/10.1016/j.tate.2024.104802
34. Cadiz, A. P. (2022). Pre-Service Teachers' Reflective Practice and their Teaching Practicum Beliefs. Jurnal Inovatif Ilmu Pendidikan, 3(2), 105–119. https://doi.org/10.23960/jiip.v3i2.22854
35. Calamlam, J. M., & Mokshein, S. E. (2019). Cooperating Teachers' Mentoring Moves During Internship of Early Childhood Pre-Service Teachers. Journal of Research, Policy & Practice of Teachers & Teacher Education, 9(1), 20–32. https://doi.org/10.37134/jrpptte.vol9.no1.3.2019
36. Chalies, S., Xiong, Z., & Matthews, R. (2021). Mentoring and building professional competences of pre-service teachers: Theoretical proposals and empirical illustrations. Professional Development in Education, 47(5), 796–814. https://doi.org/10.1080/19415257.2019.1651753
37. Chartered College of Teaching. (2024). Revisiting the notion of teacher professionalism. https://chartered.college/wp-content/uploads/2025/01/Professionalism-report_v.2_FINAL-FOR-PUBLICATION_2-May-1.pdf

38. Chaseley, T. L. (2025). Using scaffolds to support preservice teachers' reflective metacognitive and problem-solving abilities. Frontiers in Education, 10, 1621269. https://doi.org/10.3389/feduc.2025.1621269
39. Chen, X. (2023). Instructional clarity and classroom management are linked to attitudes towards mathematics. British Journal of Educational Psychology, 93(2), 591–607. https://doi.org/10.1111/bjep.12580
40. Chen, X., et al. (2022). How classroom management and instructional clarity relate to students' academic emotions in Hong Kong and England: A multi-group analysis based on the control-value theory. https://doi.org/10.1016/j.lindif.2022.102183
41. Chen, Y. (2024). Teaching self-efficacy, professional development, and teaching performance among Chinese public elementary teachers. International Journal of Research Studies in Education. https://doi.org/10.5861/ijrse.2024.24745
42. Comia, M. J., Bae, M. D., Labine, C. R., & Kimberly Cabrera Rivera. (2024). Edukasiana: Jurnal Inovasi Pendidikan Field Study Experiences of Pre-service Teachers in the Philippines. ResearchGate, 3(4), 479–494. https://doi.org/10.56916/ejip.v3i4.935
43. Conceição, T., Baptista, M., & da Ponte, J. P. (2022). Examining pre-service science teachers' pedagogical content knowledge through lesson study. Eurasia Journal of Mathematics, Science and Technology Education, 18(1), em2060. https://doi.org/10.29333/ejmste/11442
44. Cultivating innovation in an upskilling STEAM training program. Eurasia Journal of Mathematics, Science and Technology Education, 21(1), em2398. https://doi.org/10.29333/ejmste/16048
45. Dacer, C. B. (2024). Assessment of the competence of pre-service teachers on the essential aspects of teaching. International Journal of Research and Innovation in Social Science. https://dx.doi.org/10.47772/IJRISS.2024.803201S
46. Dacholfany, M. I., Susanto, S., & Rahman, A. (2024). The effectiveness of teacher professional development program on classroom and behavior management: A systematic review. Journal of Education Culture and Society, 15(2), 451–470. https://doi.org/10.15503/jecs2024.2.451.470
47. Dack, H. (2024). Supporting middle grades pre-service teachers in building professional dispositions. Current Issues in Middle Level Education, 28(1), Article 3. https://doi.org/10.20429/cimle.2024.280103
48. Daigon, M. E., & Alcopra, A. R. (2024). Instructional supervision practices and efficacy of teachers. International Journal of Multidisciplinary Research and Analysis, 7(08), 3738–3746. https://doi.org/10.47191/ijmra/v7-i08-13
49. Danielson Framework: A Teacher's Complete Guide. (2026). Structural-Learning.com. https://www.structural-learning.com/post/danielson-framework-teachers-guide
50. Danielson, C. (2013). The framework for teaching evaluation instrument. The Danielson Group.
51. Danielson, C. (2013). The framework for teaching evaluation instrument (2013 ed.). The Danielson Group.
52. Darling-Hammond, L. (2021). Defining teaching quality around the world. European Journal of Teacher Education, 44(3), 295–308. https://doi.org/10.1080/02619768.2021.1919080
53. Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2021). Implications for educational practice of the science of learning and development. Applied Developmental Science, 25(2), 97–140. https://doi.org/10.1080/10888691.2018.1537791
54. Datulio, J. S. (2025). A structural equation modeling on school performance: Perceived organizational support, job satisfaction, and work commitment. Asian Journal of Education and Social Studies. https://journalajess.com/index.php/AJESS/article/view/1812
55. De La Torre, J. V., Satojito, J. P., & Martir, E. M. (2025). Implementation of Education 4.0, teaching innovativeness and instructional practices. International Journal of Science and Management Studies, 8(3), 66–81. https://doi.org/10.51386/25815946/ijsms-v8i3p105
56. Deci, E., & Ryan, R. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior: Psychological inquiry: Vol 11, no 4. https://www.tandfonline.com/doi/abs/10.1207/S15327965PLI1104_01
57. DeLuca, C., Coombs, A., & LaPointe-McEwan, D. (2021). Assessment literacy in teacher education: A review of research. Teaching and Teacher Education, 99, 103286. https://doi.org/10.1016/j.tate.2021.103286

58. Department of Education, Philippines. (2025). DepEd pushes teacher education reform to address learning loss, future challenges. Retrieved from https://www.deped.gov.ph/2025/01/23/deped-pushes-teacher-education-reform-to-address-learning-loss-future-challenges/
59. Drajati, N. A., Rakerda, H., Sulistyawati, H., Nurkamto, J., & Ilmi, M. (2021). Investigating the adoption of TPACK-21CL by English pre-service teachers in a COVID-19 teaching practicum. Indonesian Journal of Applied Linguistics, 11(1), 1–12. https://doi.org/10.17509/ijal.v11i1.34625
60. Duan, S., Bissaker, K., & Xu, Z. (2024). Correlates of teachers' classroom management self-efficacy: A systematic review and meta-analysis. Educational Psychology Review, 36, Article 43. https://doi.org/10.1007/s10648-024-09881-2
61. Dustin, Gotch, C. M., & Carbonneau, K. J. (2024). Preparing Teacher Candidates to Assess for Learning: A Systematic Review. Review of Educational Research. https://doi.org/10.3102/00346543241233015
62. Educational Psychology Review, 31(2), 567-590. https://doi.org/10.33828/sei.v30.i4.4
63. Ekiz-Kiran, B., Boz, Y., & Oztay, E. S. (2021). Development of pre-service teachers' pedagogical content knowledge through a PCK-based school experience course. Chemistry Education Research and Practice, 22(2), 415–430. https://doi.org/10.1039/d0rp00225a
64. ElSayary, A. (2025). Enhancing teachers' design thinking mindsets through reflective practice:
65. Emiru, E. K., & Gedefaw, M. T. (2024). The effect of teacher self-efficacy on learning engagement of secondary school students. Cogent Education, 11(1). https://doi.org/10.1080/2331186x.2024.2308432
66. Englewood Cliffs, N.J. : Prentice-Hall. (1986, January 1). Social Foundations of thought and action : A social cognitive theory : Bandura, Albert, 1925-2021 : Free Download, borrow, and streaming. Internet Archive. https://archive.org/details/socialfoundation0000band/page/n17/mode/
67. Erbilgin, E., & Robinson, J. M. (2025). A Reflective Account of Facilitating Teachers' Professional Learning in Two Different Lesson Study Settings. Education Sciences, 15(1), 59. https://doi.org/10.3390/educsci15010059
68. Esparcia, G. M. , & Fajardo, M. T. M. (2025). Self-Regulated Learning and Industry Readiness: Evidence from Pre-Service Teachers in Philippine Technical Education. Journal of Innovations in Teaching and Learning, 5(2), 98-102. https://pubs.sciepub.com/jitl/5/2/2.
69. Espiritu, R. D. (2021). AWARENESS AND COMPETENCY OF PRE-SERVICE TEACHERS ON THE PHILIPPINE PROFESSIONAL STANDARDS FOR TEACHERS (PPST): A BASIS FOR TRAINING PROGRAM. JournalNX - a Multidisciplinary Peer Reviewed Journal, 7(11), 83–105. https://doi.org/10.17605/OSF.IO/FY8MC
70. Estaji, M., & Fatalaki, J. A. (2023). Development and validation of teacher reflective practice scale for EFL teachers. Reflective Practice, 24(4), 464–480. https://doi.org/10.1080/14623943.2023.2210068
71. Estipona, J. D. R. (2025). Enhancing student-teachers' readiness through structured coaching and mentoring. Journal of Tertiary Education and Learning, 3(3), 31–42. https://doi.org/10.54536/jtel.v3i3.5100
72. Falsario, Dr. H. N., Montaño, Dr. H. T., Balisang, F. M., Delfin, J. C., Nacionales, E. N., & Naciongayo, R. A. P. (2021). Factors related to the teaching performance of pre-service teachers. Psychology and Education Journal. https://psychologyandeducation.net/pae/index.php/pae/article/view/5595
73. Fang, J., & Qi, Z. (2023). The influence of school climate on teachers' job satisfaction: The mediating role of teachers' self-efficacy. PLOS ONE, 18(10), e0287555. https://doi.org/10.1371/journal.pone.0287555
74. Farkhani, Z. A., Badiei, G., & Rostami, F. (2022). Investigating teachers' perceptions of classroom management and teaching self-efficacy during the COVID-19 pandemic in online EFL courses. Asian-Pacific Journal of Second and Foreign Language Education, 7(25). https://doi.org/10.1186/s40862-022-00152-7
75. Farrell, T. S. C. (2022). Reflective practice in language teaching: A guide for educators (2nd ed.). Routledge. https://doi.org/10.4324/9781003277877
76. Fitria, W., Faizah, N., & Saijun, S. (2024). Reflective journal on pre-service English teachers' practicum teaching. Journal of English Education and Teaching, 8(4), 798–815. https://doi.org/10.33369/jeet.8.4.798-815
77. Fitzgerald, M. M., Fitzgerald, E., & Fitzgerald, J. (2022). Promoting educator social emotional competence, well-being, and student–teacher relationships: A review of research and practice. Frontiers in Education, 7. https://doi.org/10.3389/feduc.2022.

78. Fitzsimons, S., Sexton, P. J., Lehane, P., Donlon, E., McDonald, E., Karakolidis, A., & McKeever, C. (2025). Understanding pre-service teachers' improvement in professional practice: a quantitative perspective. Irish Educational Studies, 44(2), 341–357. https://doi.org/10.1080/03323315.2024.2330883
79. Foster, H. (2024). The impact of formative assessment on student learning outcomes: A meta-analytical review. www.abacademies.org. https://www.abacademies.org/articles/the-impact-of-formative-assessment-on-student-learning-outcomes-a-metaanalytical-review-16948.html?
80. Franco, D., Vanderlinde, R., & Valcke, M. (2023). Empowering Novice Teachers: The Design and Validation of a Competence Model to Manage Verbal Aggressive Behaviour in the Classroom. Education Sciences, 13(10), 971. https://doi.org/10.3390/educsci13100971
81. Fredricks, J. A. (2023). Getting students engaged in learning. Kappa Delta Pi Record, 59(3), 167–173. https://files.eric.ed.gov/fulltext/EJ1404402.pdf
82. Fryer, L. K., & Leenknecht, M. J. M. (2023). Toward an organising theoretical model for teacher clarity, feedback and self-efficacy in the classroom. Educational Psychology Review, 35(3). https://doi.org/10.1007/s10648-023-09787-5
83. Fuhrman, R. (2022b, January 27). 7 Attention-Getters to use instead of raising your voice. Edutopia. https://www.edutopia.org/article/7-attention-getters-use-instead-raising-your-voice
84. Gabuya, M. F., & Vadil, C. F. (2025). Examining the link between transformational leadership of school administrators and teachers' professionalism in DepEd–Bambang integrated schools. International Journal of Research Studies in Education, 14(9), 89-103. https://doi.org/10.5861/ijrse.2025.25094
85. Gao, Y., Gan, L., & Zhang, X., et al. (2025). Knowledge-building activities foster reflective mindsets in EFL preservice teachers: Enhancing creative teaching practices. Humanities & Social Sciences Communications, 12, Article 1535. https://doi.org/10.1038/s41599-025-05818-4
86. García-Lázaro, I., Colás-Bravo, M. P., & Conde-Jiménez, J. (2022). The Impact of Perceived Self-Efficacy and Satisfaction on Preservice Teachers' Well-Being during the Practicum Experience. Sustainability, 14(16), 10185. https://doi.org/10.3390/su141610185
87. Goertzen, L., Heeneman, S., & Schils, T. (2025). The impact of formative assessment on pupil academic achievement: An empirical study of the effects of a formative assessment practices program that was co-designed in a teacher community. Learning and Instruction, 99, 102153. https://doi.org/10.1016/j.learninstruc.2025.102153
88. Goldberg, P., Schwerter, J., Seidel, T., Muller, K., & Sturmer, K. (2021). How does learners' behavior attract preservice teachers' attention during teaching. https://doi.org/10.1016/j.tate.2020.103213. https://www.sciencedirect.com/science/article/pii/S0742051X20314049
89. Granger, K.L., Chow, J.C., Montesion, A. et al. Teacher's Classroom Management Self-Efficacy and Teacher–Child Conflict as a Function of Child Ordinal Behavior Ranking. School Mental Health 17, 90–105 (2025). https://doi.org/10.1007/s12310-025-09741-6
90. Guerriero, S. (2022). Teachers' pedagogical knowledge and the teaching profession. Educational Research Review, 36, 100449. https://doi.org/10.1016/j.edurev.2022.100449
91. Guevarra, J. X. L., Bendicio, M. K. T., Aleroza, J. J., & Ilao, A. T. (2024, June). Assessment skills of pre-service teachers. International Research Journal of Education and Technology. https://www.irjweb.com/ASSESSMENT%20SKILLS%20OF%20PRESERVICE%20TEACHERSBASIS.pdf
92. Günbaş, N., & Gözüküçük, M. (2023, June 30). Pre-Service Primary Teachers' TPACK Improvement Through Listening Activities: Design, Observe and Evaluate. https://iojpe.org/index.php/iojpe/article/view/228
93. Gundran, T., Samson, J., Javier, J., & Visaya, A. (2025). Philosophy meets practice: The lived experiences of the teacher interns in their field practicum. International Journal of Research Studies in Education, 14(1), 253-262. https://doi.org/10.5861/ijrse.2025.25022
94. Handayani, A., Sudadi, S., & Baitaputra, M. H. (2024). The effectiveness of the Cogan, Goldhammer, and Glickman clinical supervision approach: An adaptive study for the development of teachers' professional competence in elementary schools. Idarotuna: Journal of Administrative Science, 5(2), 196–210. https://doi.org/10.54471/idarotuna.v5i2.112
95. Hanuscin, D., Borda, E., Melton, J., & Mikeska, J. N. (2024). Designing educative curriculum materials for teacher educators: Supporting preservice elementary teachers' content knowledge for teaching about

matter and its interactions. International Journal of Science and Mathematics Education. https://doi.org/10.1007/s10763-024-10453-7

96. Harris, B. (2025, September 18). The Framework for Teaching (FFT) | Enhancing Professional Practice for teachers | Effective Online. Danielson Group. https://danielsongroup.org/the-framework-for-teaching/
97. Hasnanto, M. (2024). Effective classroom management to create a positive learning environment: A literature review. International Journal of Education and Learning, 3(1), 45–54. https://www.researchgate.net/publication/387689062
98. Hattie, J. (2023). Visible learning: The sequel. Routledge. https://doi.org/10.4324/9781003383114
99. Havadar, E. E. (2024). Orientations to teaching in reflective talk: Tracking co-teaching pre-service teachers' reflections longitudinally. Linguistics and Education, 81, 101297. https://doi.org/10.1016/j.linged.2024.101283
100. Hazar, E. (2025). The Effective Communication Skills of Preservice Teachers: Challenges, Changes, and Future İmplications. Educatia 21, 30, 13–27. https://doi.org/10.24193/ed21.2025.30.02
101. Heng, Q., & Chu, L. (2023). Self-efficacy, reflection, and resilience as predictors of work engagement among English teachers. Frontiers in Psychology, 14. https://doi.org/10.3389/fpsyg.2023.1160681
102. Hettinger, K., Lazarides, R., & Schiefele, U. (2024). Longitudinal relations between teacher self-efficacy and student motivation through perceived teaching practice. European Journal of Psychology of Education. https://doi.org/10.1007/s10212-023-00744-y
103. Hettinger, K., Lazarides, R., Rubach, C., & Schiefele, U. (2021, April 23). Teacher classroom management self-efficacy: Longitudinal relations to perceived teaching behaviors and student enjoyment. https://www.sciencedirect.com/science/article/abs/pii/S0742051X21000731. https://doi.org/10.1016/j.tate.2021.103349.
104. Hoelscher, L. (2023, December). How does classroom management affect student behavior?. DigitalCommons@Hamline.
105. Holzberger, D., & Prestele, E. (2021). Teacher self-efficacy and self-reported cognitive activation and classroom management: A multilevel perspective on the role of school characteristics. Learning and Instruction, 76, 101513. https://doi.org/10.1016/j.learninstruc.2021.101513
106. Hußner, I., Lazarides, R., Symes, W., Richter, E., & Westphal, A. (2023). Reflect on your teaching experience: Systematic reflection of teaching behaviour and changes in student teachers' self-efficacy for reflection. Zeitschrift Fur Erziehungswissenschaft, 26, 1301–1320. https://doi.org/10.1007/s11618-023-01190-8
107. Imran, R., et al. (2023). Teaching and learning delivery modes in higher education: A systematic review. Education Sciences, 13(1), 89. https://pmc.ncbi.nlm.nih.gov/articles/PMC10067450/
108. Ingaran, A. V. , Madriaga, E. B. , Cagatao, P. P. S. , & Bautista, R. G. (2025). Factors Affecting Teacher Professionalism and Ethical Considerations in West Cluster of Schools, Division of Santiago City, Philippines. American Journal of Educational Research, 13(2), 46-51. https://doi.org/10.12691/education-13-2-1
109. Insan, P. (2025). DEVELOPMENT OF LEARNING MANAGEMENT MODEL USING PHENOMENON BASED LEARNING WITH ARTIFICIAL INTELLIGENCE (AI) TO ENHANCE COMMUNICATION SKILLS FOR PRE-SERVICE TEACHER IN THE DIGITAL ERA. Journal of Social Science and Cultural, 9(12), 261–275. retrieved from https://so06.tci-thaijo.org/index.php/JSC/article/view/290540
110. Jade, M., Hinampas, R. T., Manual, A. B., Abellana, A. L., Escarlos, G. S., Caro, V. B., & Camañero, R. P. (2024). Academic Preparation, Self-Efficacy and Performance of Preservice Teachers in The New Educational Landscape. Atlantis Highlights in Social Sciences, Education and Humanities/Atlantis Highlights in Social Sciences, Education and Humanities, 347–367. https://doi.org/10.2991/978-94-6463-554-6_28
111. James, S. (2024, February 16). The Danielson Framework for Teaching: A Comprehensive Guide for K-12 Leaders. Education Walkthrough. https://educationwalkthrough.com/danielson-framework-for-teaching/
112. Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. Review of Educational Research, 79(1), 491–525. https://doi.org/10.3102/0034654308325693

113. Jennings, P. A., Snowberg, K., Coccia, M., & Greenberg, M. T. (2017). Impacts of the CARE for Teachers program on teacher cortisol, stress, and emotional support [PDF]. (NYU / Create for Education). createforeducation.org
114. Jiang, H., Chugh, R., Turnbull, D., et al. (2025). Exploring the effects of technology-related informal mathematics learning activities: A structural equation modeling analysis. International Journal of Science and Mathematics Education, 23, 49–69. https://doi.org/10.1007/s10763-024-10456-4
115. Jones, V. F., & Jones, L. S. (2021). Comprehensive classroom management: Creating communities of support and solving problems (12th ed.). Pearson Education. https://www.pearson.com/en-us/subject-catalog/p/comprehensive-classroom-management-creating-communities-of-support-and-solving-problems/P200000010732?view=educator
116. Journal, 8(4). https://doi.org/10.59573/emsj.8(4).2024.11
117. Junker, R., Gold, B., & Holodynski, M. (2021). Classroom management of pre-service and beginning teachers: From dispositions to performance. International Journal of Modern Education Studies, 5(2). https://doi.org/10.51383/ijonmes.2021.137
118. Kaldi, S., & Zafeiri, S. (2023). Identifying reflective modes in pre-service teachers' written reflections on the implementation of project-based learning during the school practicum. Frontiers in Education, 7, 1072090. https://doi.org/10.3389/feduc.2022.1072090
119. Kamali, J., & Javahery, P. (2024). Collaborative reflection as a means to improve teachers' reflective skills: a community of practice perspective. Reflective Practice, 1–16. https://doi.org/10.1080/14623943.2024.2426279
120. Karaman, P. (2024). Effects of using rubrics in self-assessment with instructor feedback on pre-service teachers' academic performance, self-regulated learning and perceptions of self-assessment. Eur J Psychol Educ 39, 2551–2574. https://doi.org/10.1007/s10212-024-00867-w
121. Karasova, J., & Nehyba, J. (2023). Student-centered teacher responses to student behavior in the classroom: A systematic review. Frontiers in Education, 8. https://doi.org/10.3389/feduc.2023.1156530
122. Kayima, F. (2022). The Role of Reflective Practice in Mediating Development of Pre-Service Science Teachers' Professional and Classroom Knowledge. Interdisciplinary Journal of Environmental and Science Education, 18(1), e2262. https://doi.org/10.21601/ijese/11364
123. Kayima, F. (2022). The Role of Reflective Practice in Mediating Development of Pre-Service Science Teachers' Professional and Classroom Knowledge. Interdisciplinary Journal of Environmental and Science Education, 18(1), e2262. https://doi.org/10.21601/ijese/11364
124. Kean, A. C., et al. (2024). 21st Century practicum supervision training via case methods (project report). Asian Journal for University Education. https://doi.org/10.24191/ajue.v20i2.27028
125. Keshmiri, F., Jambarsang, S., & Mehrparvar, A. H. (2023). Effective components of teachers' professionalism in viewpoints of various stakeholders. Journal of education and health promotion, 12, 24. https://doi.org/10.4103/jehp.jehp_1565_21
126. Khasawneh, M. A. S. (2024). The effectiveness of reflective teaching practices in enhancing teacher-student interactions in TEFL contexts. Journal of International Crisis and Risk Communication Research. https://doi.org/10.63278/jicrcr.vi.601
127. Khusniyah, T. W., Surjono, H. D., Tohani, E., & Purwanta, E. (2023). Pre-service primary school teachers' self-efficacy for teaching social studies: An Indonesian perspective. Issues in Educational Research, 33(4), 1403–1421. https://www.iier.org.au/iier33/khusniyah.pdf
128. Khusniyah, T. W., Surjono, H. D., Tohani, E., & Purwanta, E. (2023). Pre-service primary school teachers' self-efficacy for teaching social studies. Issues in Educational Research, 33(4), 1403–1422. https://www.iier.org.au/iier33/khusniyah.pdf
129. Ki, S., Park, S., & Ryu, J. (2025). The Effects of Classroom Management Efficacy on Interest Development in Guided Role-Playing Simulations for Sustainable Pre-Service Teacher Training. Sustainability, 17(14), 6257. https://doi.org/10.3390/su17146257
130. Kılıç, A. (2022). The impact of reflective practices on pre-service science teachers' classroom teaching practices. Journal of Pedagogical Research, 6(1), 152–170. https://eric.ed.gov/?id=EJ1338991
131. König, J., Jäger-Biela, D., & Glutsch, N. (2022). Adapting to online teaching during COVID-19: Teacher education and teacher competence effects among early career teachers. European Journal of Teacher Education, 45(4), 608–622. https://doi.org/10.1080/02619768.2021.1901290

132. Krasniqi, D., & Ismajli, H. (n.d.). Teacher evaluation feedback and their Self-Efficacy in Classroom Management skills. https://eric.ed.gov/?id=EJ1377537
133. Krepf, M., & König, J. (2023). Structuring the lesson: An empirical investigation of pre-service teacher decision-making during the planning of a demonstration lesson. Journal of Curriculum Studies, 49(5), 1–15. https://doi.org/10.1080/02607476.2022.2151877
134. Kumari, M.M., Biswas, D.S., Madhu, M.M., & Head, A.P. (2024). Classroom Management Strategies And Their Influence On Student Social Behavior. International Journal Of Humanities, Engineering, Science And Management. https://www.semanticscholar.org/paper/4ebc5a6b186b1f46c3a7f45623f2a5b67ddf1038
135. Kwok, A. (2021). Managing classroom management preparation in teacher education. Teachers and Teaching, 27(5), 345–362. https://doi.org/10.1080/13540602.2021.1933933
136. Kwok, A. (2021). Managing classroom management preparation in teacher education. Teachers and Teaching, 27(5), 345–362. https://doi.org/10.1080/13540602.2021.1933933
137. Kwok, A. (2025a, February 13). Teacher prep often treats classroom management as an afterthought. that's a huge problem (opinion). Education Week. https://www.edweek.org/teaching-learning/opinion-teacher-prep-often-treats-classroom-management-as-an-afterthought-thats-a-huge-problem/2023/
138. Lachner, A., Fabian, A., Franke, U., Preiß, J., Jacob, L., Führer, C., Küchler, U., Paravicini, W., Randler, C., & Thomas, P. (2021). Fostering pre-service teachers' technological pedagogical content knowledge (TPACK): A quasi-experimental field study. Computers & Education, 174, Article 104304. https://doi.org/10.1016/j.compedu.2021.104304
139. Lada, S. P. (2025). Extent of classroom management strategies in enhancing teachers' performance in classroom observation utilizing the classroom observation tool. International Journal of Advanced
140. Lavín, C. E., & Goodman, J. (2023). Reflective journaling: A path toward cultural competence for teacher candidates in special education. Teaching and Teacher Education, 133, 104300. https://doi.org/10.1016/j.tate.2023.104300
141. Lazarides, R., Watt, H. M. G., & Richardson, P. W. (2020). Teachers' classroom management self-efficacy, perceived classroom management, and teaching contexts from beginning until mid-career. Learning and Instruction, 69, 101346. https://doi.org/10.1016/j.learninstruc.2020.101346
142. Lazarides, R., Watt, H. M. G., & Richardson, P. W. (2020). Teachers' classroom management self-efficacy, perceived contextual resources, and perceived demands: A longitudinal study. Teaching and Teacher Education, 90, 103025.
143. Lazarides, R., Watt, H. M. G., & Richardson, P. W. (2020). Teachers' classroom management self-efficacy, perceived classroom management and teaching contexts from beginning until mid-career. Learning and Instruction, 69, 101346. https://doi.org/10.1016/j.learninstruc.2020.101346
144. Leijen, Ä., Pedaste, M., Baucal, A., Poom-Valickis, K., & Lepp, L. (2024). What predicts instructional quality and commitments to teaching: self-efficacy, pedagogical knowledge or integration of the two? Frontiers in Psychology, 15, 1287313. https://doi.org/10.3389/fpsyg.2024.1287313
145. Lestari, A. E., & Lestari, S. (2021). Pre-service English teachers' practices of designing and implementing lesson plans for teaching practicum. LingTera: Journal of English Teaching and Applied Linguistics, 9(1). https://doi.org/10.21831/lt.v9i1.52741
146. Li, H. (2024). Enhancing pre-service teachers' classroom management competency: Training, practice, and reflection. Humanities and Social Sciences Communications, 11(1), 125. https://doi.org/10.1057/s41599-024-03538-9
147. Li, H. (2025). Reflective practice for pre-service teachers' professional growth. SAGE Open, 15(2), 21582440251363136. https://doi.org/10.1177/21582440251363136
148. Li, H. (2025). Reflective practice for pre-service teachers' professional development. SAGE Open. https://doi.org/10.1177/21582440251363136
149. Li, J. (2023). Meta-analysis of student engagement and its influencing factors. Frontiers in Psychology, 14, 11345. https://pmc.ncbi.nlm.nih.gov/articles/PMC9855184/
150. Li, L., Hu, Y., Yang, X., Wu, M., Tao, P., Chen, M., & Yang, C. (2024). Enhancing pre-service teachers' classroom management competency in a large class context: the role of fully immersive virtual reality. Humanities and Social Sciences Communications, 11(1). https://doi.org/10.1057/s41599-024-03538-9

151. Lipka, O., Bufman, A., Shaul, S., & Katzir, T. (2025). Transforming Teacher Knowledge to Practice: Exploring the Impact of a Professional Development Model on Teachers' Literacy Instruction and Self-Efficacy. Education Sciences, 15(9), 1230. https://doi.org/10.3390/educsci15091230
152. Liu, W., et al. (2021). Does teacher immediacy affect students? A systematic review and meta-analysis. Frontiers in Psychology, 12, 713978. https://www.frontiersin.org/articles/10.3389/fpsyg.2021.713978/full
153. Liu, Z., Sulaiman, T., & Che Nawi, N. R. (2025). How Does Teaching Reflection Shape Teacher Confidence? A Theoretical and Empirical Review on Enhancing College English Teachers' Self-Efficacy. International Journal of Academic Research in Progressive Education and Development, 14(2). https://doi.org/10.6007/ijarped/v14-i2/25278
154. Long, Y., & Xia, Y. (2025). Leveraging transformational and instructional leadership for teacher professional development: A dual-mediation model of teacher self-efficacy and organisational culture. Teaching and Teacher Education, 164, 105087. https://doi.org/10.1016/j.tate.2025.105087
155. López-Martín, E., et al. (2023). Why do teachers matter? A meta-analytic review of teacher characteristics and competencies. Teaching and Teacher Education. https://doi.org/10.1016/j.ijer.2023.102199
156. Lozano-Jiménez, J. E., Huéscar, E., & Moreno-Murcia, J. A. (2021). Effects of an Autonomy Support Intervention on the Involvement of Higher Education Students. Sustainability, 13(9), 5006. https://doi.org/10.3390/su13095006
157. Lugnasin, J., & Espinosa, D. (2024). Self- efficacy and Students' Engagement of English Pre- service
158. Luo, X., Bity Salwana Alias, & Nor Hafizah Adnan. (2024). Exploring the Interplay between Teacher Leadership and Self-Efficacy: A Systematic Literature Review (2013–2024). Education Sciences, 14(9), 990–990. https://doi.org/10.3390/educsci14090990
159. Luo, X., Bity Salwana Alias, & Nor Hafizah Adnan. (2024). Exploring the Interplay between Teacher Leadership and Self-Efficacy: A Systematic Literature Review (2013–2024). Education Sciences, 14(9), 990–990. https://doi.org/10.3390/educsci14090990
160. Ma, K., Cavanagh, M., Zhang, J., & Chutiyami, M. (2025). The association between teacher self-efficacy and student academic performance: A systematic review and meta-analysis. Educational Research Review, 48, 100701. https://doi.org/10.1016/j.edurev.2025.100701
161. Machost, H., & Stains, M. (2023). Reflective practices in education: A Primer for practitioners | CBE—life sciences education. https://www.lifescied.org/doi/10.1187/cbe.22-07-0148
162. Mafugu, T. (2022). Science pre-service teachers' experience with mentors during teaching practice. Eurasia Journal of Mathematics, Science and Technology Education, 18(11), em2170. https://doi.org/10.29333/ejmste/12476
163. Mahendra, I. G. A. Y., Adnyani, N. L. P. S., & Marsakawati, N. P. E. (2024). An exploration of the effect of teacher's positive reinforcement and punishment towards young learners' motivation in 21st century learning. Jurnal Pendidikan Indonesia, 5(10). https://doi.org/10.59364/jurnal.v5i10.272 ResearchGate
164. Mallillin, L. L. D., Mallillin, J. B., Ampongan, Y. D., Lipayon, I. C., Mejica, M. M., & Burabo, J. Z. (2023). Instructional design for effective classroom pedagogy of teaching. Eureka: Journal of Educational Research, 1(2), 41–52. https://doi.org/10.56773/ejer.v1i2.6
165. Mandal, N., & Chattopadhyay, K. (2025). Reflective Practice in Action: Insights from Preservice Teachers in West Bengal. VIDYA - a JOURNAL of GUJARAT UNIVERSITY, 4(2), 99–106. https://doi.org/10.47413/p4j18491
166. Manicio, M.T.L., & Baetiong, L.R. (2023). Making sense of pre-service English teachers' practicum experiences: Perspectives on teacher learning. Philippine Journal of Education Studies, 1(1), pp. 65-84. https://doi.org/10.61839/29848180m5t6l7
167. Manicio, M.T.L., & Baetiong, L.R. (2023). Making sense of pre-service English teachers' practicum experiences: Perspectives on teacher learning. Philippine Journal of Education Studies, 1(1), pp. 65 - 84. https://doi.org/10.61839/29848180m5t6l7
168. Manigbas III, J. , Cama, E. , Santelices, Y. & Alejandro, N. (2024). Pedagogical and Classroom Management Competency of Pre-Service Teachers in Partido College, Goa, Camarines Sur, Philippines. Psychology and Education: A Multidisciplinary Journal, 17(1), 1-10. https://doi.org/10.5281/zenodo.10644851
169. Manowaluilou, N. (2022). Pre-service teachers' self-efficacy support systems and desire to become

170. Martinez, M. I., Guadalupe Díaz Lara, & Whitney, C. R. (2024). The role of teacher beliefs in teacher learning and practice: implications for meeting the needs of English learners/emergent bilinguals. Language and Education, 1–18. https://doi.org/10.1080/09500782.2024.2362305
171. McGuire, S. N., Meadan, H., & Xia, Y. (2023). Behavior Management Training for Newly Graduated Teachers: A Randomized-Controlled Trial. Behavioral Disorders, 49(1), 3-16. https://doi.org/10.1177/01987429231179890
172. Melton, J. C., & Mikeska, J. N. (2025). Variation in the Implementation of Educative Curriculum Materials for Elementary Science Teacher Educators in Two Course Contexts: An Exploratory Case Study. Journal of Science Teacher Education, 36(7), 955–976. https://doi.org/10.1080/1046560x.2025.2467469
173. Merki, K. M., et al. (2022). Adapting routines in schools when facing challenging situations: Interplay between routines and regulation. Frontiers in Education, 7, 920358. https://pmc.ncbi.nlm.nih.gov/articles/PMC9261126
174. Miller, L. S. (2023). Supervision to Support Reflective Practices. Journal of Educational Supervision, 6 (1). https://doi.org/10.31045/jes.6.1.1
175. Mingo- Maaño, J. (2024). Reflective Practices and Teachers' Performance in Southwest District, Cagayan de Oro City: Basis for School Strategic Plan. International Journal of Research Publications, 144(1). https://doi.org/10.47119/ijrp1001441320246179
176. Mingo- Maaño, J. (2024). Reflective Practices and Teachers' Performance in Southwest District, Cagayan de Oro City: Basis for School Strategic Plan. International Journal of Research Publications, 144(1). https://doi.org/10.47119/ijrp1001441320246179
177. Mok, S. Y., & Staub, F. C. (2021). Does coaching, mentoring, and supervision matter for pre-service teachers' planning skills and clarity of instruction? A meta-analysis of (quasi-)experimental studies. Teaching and Teacher Education, 107, 103514. https://doi.org/10.1016/j.tate.2021.103514
178. Monteleone, C., Cliff, K., Andrews, R., Babic, M., Smithers, K., Winslade, M., & Hay, I. (2025). Perspective of supervising teachers and tertiary supervisors on professional learning for professional experience. Education Sciences, 15(10), 1413. https://doi.org/10.3390/educsci15101413
179. Monteleone, C., Winslade, M., Isaac, A., Wong, M., Gorzanelli, M., Lembke, C., & McLeod, A. (2026). A framework for effective mentor teacher written feedback to pre-service teachers. International Journal of Educational Research Open, 10, 100565. https://doi.org/10.1016/j.ijedro.2025.100565
180. Moran, M. T., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. Teaching and Teacher Education, 17(7), 783–805. https://doi.org/10.1016/S0742-051X(01)00036-1
181. Mukul Kumar & Ziqian Liu. (2019). Classroom Management Strategies and Student Learning. In Advanced Journal of Social Science. https://www.semanticscholar.org/paper/03b6fc303b17ae8d9c9f90f2e8abf08029de8e8e
182. Müller, L.M., & Cook, V. (2024). Revisiting the notion of teacher professionalism. https://chartered.college/wp-content/uploads/2025/01/Professionalism-report_v.2_FINAL-FOR-PUBLICATION_2-May-1.pdf
183. Muzakie, A. W. (2023). Role of lesson plan development in increasing English pre-service teachers' readiness for PLP II [Undergraduate thesis, UIN Sunan Ampel Surabaya]. http://digilib.uinsa.ac.id/id/eprint/68619
184. Myers, J., Kang, S. J., & Hughes, M. (2023). Are they prepared? Examining teacher candidates', cooperating teachers', and university supervisors' perspectives of a redesigned field experience. Excellence in Education Journal, 12(1), 4–31. https://eric.ed.gov/?id=EJ1366827
185. Myllykoski-Laine, S., Parpala, A., Hailikari, T., & Postareff, L. (2024). Using self-reflection to support higher education teaching. Reflective Practice, 25(5), 589–604. https://doi.org/10.1080/14623943.2024.2376784
186. Nadia Sari Putri, & By Tri Agung Nusantara Kr. J. Tompong. (2025). Classroom Action Research as a Means of Improving Teacher Professionalism and Learning Quality in the Digital Age. Gateway for Understanding Research in Education, 1(1), 39–47. https://doi.org/10.69855/guru.v1i1.211
187. Nduagbo, K., & Casale, C. (2023). Preservice teachers' reflective practices, self-efficacy, and professional growth. ELTHE: English Language Teaching & Humanities Education, 6(1). https://files.eric.ed.gov/fulltext/EJ1422264.pdf

188. Nduagbo, K., & Casale, C. . (2023). Preservice Teachers' Reflective Practices, Self- efficacy, and Professional Growth. Experiential Learning and Teaching in Higher Education, 6(1 - March), 56–66. https://doi.org/10.46787/elthe.v6i1.3555
189. Nel, C., & Marias, E. (2022). Technology-enhanced assessment feedback on preservice teachers' core teaching practices. E-Journal of Humanities Arts and Social Sciences, 3(11), 171–183. https://www.ajol.info/index.php/ehass/article/view/304135
190. Newell, A. (2025, May 14). The Ultimate Guide to Reflective practice in teaching. IRIS Connect UK. https://www.irisconnect.com/uk/blog/the-ultimate-guide-to-reflective-practice-in-teaching/
191. Nissim, M., & Shamma, F. (2025). Supporting Teacher Professionalism for Inclusive Education: Integrating Cognitive, Emotional, and Contextual Dimensions. Education Sciences, 15(10), 1317. https://doi.org/10.3390/educsci15101317
192. Novariza, B. (2023). Enhancing teacher self-efficacy: a framework for structured continuous professional development. Managere: Indonesian Journal of Educational Management, 5(3), 330–341. https://doi.org/10.52627/managere.v5i3.414
193. NSW Department of Education. (2020). Classroom management: Creating and maintaining positive learning environments. https://education.nsw.gov.au/about-us/education-data-and-research/cese/publications/literature-reviews/classroom-management
194. Nurdiana, N. (2021). Teachers' reinforcement and students' responses: A qualitative inquiry. Journal / Proceedings (PDF). Retrieved from https://pdfs.semanticscholar.org/41a3/261d1a773b07aa03c6a8792c296d95618d53.pdf Semantic Scholar
195. Nuroniah, E. ., Rustandi, T. ., & Permana, A. (2025). The role of teacher professionalism and continuous professional development on the quality of education and its implications on the quality of elementary school teachers in pulosari district, pandeglang regency. International Journal of Multidisciplinary Research and Literature, 4(5), 941–952. https://doi.org/10.53067/ijomral.v4i5.374
196. Obee, A. F., Hart, K. C., & Fabiano, G. A. (2022). Professional Development Targeting Classroom Management and Behavioral Support Skills in Early Childhood Settings: A Systematic Review. School mental health, 1–31. Advance online publication. https://doi.org/10.1007/s12310-022-09562-x
197. Obee, P., Lambe, L., & Hilary, J. (2022). Training educators in positive behavioral supports and classroom management: Impacts on student focus and disruptions. Journal of Positive Behavior Interventions, 24(2), 75–89. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9771779/
198. Octoria, D., Harahap, D. H., & Sari, P. R. (2024). The effect of teachers' self-efficacy and teaching commitment on pre-service teachers' performance. Multidisciplinary Science Journal, 7(4), 2025181. https://doi.org/10.31893/multiscience.2025181
199. Olarte, J. P., & Tagadiad, C. L. (2025). Perceived instructional supervision of school heads and teachers' commitment to change. International Journal of Research and Innovation in Social Science. https://doi.org/10.47772/IJRISS.2025.9020297
200. Ompoc, E. J. (2023). Antas ng kakayahan ng mga guro sa Filipino sa paglinang ng mga kasanayan sa pagtuturo ng komunikasyon at pananaliksik sa senior high school. International Journal of Research Studies in Education, 12(5), 23-35. https://doi.org/10.5861/ijrse.2023.2016
201. Orakcı, Ş., Göksu, D. Y., & Karagöz, S. (2023). A mixed methods study of the teachers' self-efficacy views and their ability to improve self-efficacy beliefs during teaching. Frontiers in Psychology, 13, 1035829. https://doi.org/10.3389/fpsyg.2022.1035829
202. Paller, M. F., & Quirap, E. A. (2024). Teachers' resilience and self-efficacy. International Journal of Multidisciplinary Research and Analysis. https://doi.org/10.47191/ijmra/v7-i04-35
203. Pansu, P., Freyssinet, I., & Hénaff, B. L. (2024). Using differential reinforcement for all to manage disruptive behaviors: three class interventions at kindergarten and primary school. Frontiers in Education, 9. https://doi.org/10.3389/feduc.2024.1411743
204. Paramita, D., Nurdin, E. S., Suwandi, & Lestari, A. (2023). Pre-service teachers' experiences with classroom management in the virtual class: A case study approach. Frontiers in Education, 8, 1135763. https://doi.org/10.3389/feduc.2023.1135763
205. Patall, E. A., Yates, A. A., & Rumpl, E. (2023). A meta-analysis of teachers' provision of structure in the classroom: Relations with student outcomes. Self-Determination Theory. (PDF).

https://selfdeterminationtheory.org/wp-content/uploads/2023/12/2023_PatallYatesEtAl_Meta_Structure.pdf Self Determination Theory

206. Patzak, A., & Zhang, X. (2025, February 21). Blending teacher autonomy support and provision of structure in the classroom for optimal motivation: A systematic review and meta-analysis - Educational Psychology Review. SpringerLink. https://link.springer.com/article/10.1007/s10648-025-09994-2
207. Paul Main. (2022). Social Learning Theory - Bandura (1997). https://www.structural-learning.com/post/social-learning-theory-Bandura (1997).
208. Peguera-Carré, M. C., Coiduras, J., guilar, D., & Blanch, À. (2023). Evaluation of preservice teachers' performance in school through video observations during the COVID-19 pandemic. European Journal of Educational Research, 12(2), 851-863. https://doi.org/10.12973/eu-jer.12.2.851
209. Peras, G. M., Castro, J. C. F., & Mantog, J. R. A. (2023). Mitigating students' disruptive behavior through operant conditioning. International Journal of Advance Research and Innovative Ideas in Education, 9(3), 4795-4809. Retrieved from https://ijariie.com/AdminUploadPdf/MITIGATING_STUDENTS'_DISRUPTIVE_BEHAVIOR_THROUGH_OPERANT_CONDITIONING_ijariie20850.pdf
210. Ploj Virtič, M., Du Plessis, A., & Šorgo, A. (2021). In the search for the ideal mentor by applying the 'Mentoring for effective teaching practice instrument.' European Journal of Teacher Education, 46(4), 688–706. https://doi.org/10.1080/02619768.2021.1957828
211. Plopino, M. E. B., & Carbonell, S. S. (2025). Assessment of instructional supervision level of pre-service teachers in learning delivery. International Journal of Research and Innovation in Social Science. https://doi.org/10.47772/IJRISS.2025.905000198
212. Ponce, L. (2024). ISRG PUBLISHERS Assessing the Lesson Planning Knowledge of Pre-Service Teachers in one College of a Philippine State University. https://doi.org/10.5281/zenodo.11666733
213. Prakash, D., Chand, R., & Singh, P. (2024). Supervising lecturers' support for pre-service teacher education students during teaching practice. Issues in Educational Research, 34, 1–20. https://www.iier.org.au/iier34/prakash.pdf
214. Prasetyo, H., Wahyudi, A., & Mulyani, S. (2023). The influence of teaching self-efficacy and work motivation on teacher professionalism. International Journal of Educational Research Open, 4, 100273. https://doi.org/10.1016/j.ijedro.2023.100273
215. Pratiwi, T. D. (2025). Innovative learning strategies and the role of teacher professionalism in improving the quality of education. Guru: Gateway for Understanding Research in Education, 1(1), 30-38. https://doi.org/10.69855/guru.v1i1.210
216. Professional Development Courses for Teachers - Teacher Webinar. (2022, April 13). Danielson Group. https://danielsongroup.org/the-framework-for-teaching
217. Professional development for classroom management: A review of the literature. (2020). Educational Research and Evaluation, 26(3–4), 182–212. https://doi.org/10.1080/13803611.2021.1934034 Colab+2ERIC+2
218. Protassova, E., Mikelsone, I., & Latsone, L. (2021). Teacher's identity development through reflection. In A. G. Shirin et al. (Eds.), Education in a Changing World: Global Challenges and National Priorities (Vol. 114, pp. 67-77). European Proceedings of Social and Behavioural Sciences. https://doi.org/10.15405/epsbs.2021.07.02.9
219. Quilala, R. L., & Tantiado, R. C. (2025). Instructional supervision and teachers' efficacy. International Journal of Multidisciplinary Research and Analysis, 8(03), 1004–1011. https://doi.org/10.47191/ijmra/v8-i03-13
220. Quisel, J. G. R., Carale, R. T., & Pielago, P. I. Y. (2025). Student teachers' insights into monitoring and assessment practices in public schools: a descriptive-phenomenological study. Https://www.researchgate.net/publication/398118020_student_teachers%27_insights_into_monitoring_and_assessment_practices_in_public_schools_a_descriptive-phenomenological_study
221. Raluto, M. V. (2025). Teachers' Communication Skills And Students' Academic Success In Cluster 6 Schools. https://nijse.org/index.php/home/article/download/225/219/444
222. Ramirez, I. A. L. (2020). Pre-Service Teachers' Perceived Level of Teaching Skills. Journal of Education in Black Sea Region, 6(1), 97–109. https://doi.org/10.31578/jebs.v6i1.222
223. Ramos, R. A., Babasa, E. E., Vergara, I. B., Manalo, B. I., Gappi, L. L., & Morfi, T. G. (2020). The TPACK Confidence of Pre-service Teachers in Selected Philippine Teacher Education Institutions.

International Journal of Education, Psychology and Counseling, 5 (37), 196-205. https://doi.org/10.35631/IJEPC.5370016

224. Recard, M., & Nathania, Y. H. (2021). The implementation and the impact of attention grabbers in young learners' classrooms: A case study. TEKNOSASTIK, 19(1), 1–8. https://doi.org/10.33365/ts.v19i1.586
225. Revelle, W. (2024). The Cronbach's alpha of domain-specific knowledge tests before and after learning: A meta-analysis of published studies. Educational Psychology Review. https://doi.org/10.1007/s10648-024-09982-y
226. Reyes, C. D. (2023). Emerging Assessment Practices Cooperating Teachers Shared with Preservice English Teachers in the Philippines. International Journal of Learning, Teaching and Educational Research, 22(1). https://www.ijlter.org/index.php/ijlter/article/view/6596
227. Reyes, M. B., & Oropa, J. C. (2024). Instructional supervision of master teachers: Its critical role in advancing teachers' and learners' performance. American Journal of Education and Technology. https://doi.org/10.54536/ajet.v4i2.4399
228. Ribeirinha, T., & Correia, M. (2025). Enhancing pre-service teachers' science teaching efficacy beliefs using the flipped classroom model. Frontiers in Education. https://doi.org/10.3389/feduc.2025.1512320
229. Robin Junker, Bernadette Gold, & Manfred Holodynski. (2021). Classroom management of pre-service and beginning teachers: From dispositions to performance. In International Journal of Modern Education Studies. https://www.semanticscholar.org/paper/e163d733c6023fc6eb4f111017acbef9063f8e45
230. Rogers, S. L., Van Winkle, L., Michels, N., Lucas, C., Ziada, H., Da Silva, E. J., Jotangia, A., Gabrielsson, S., Gustafsson, S., & Priddis, L. (2024). Further development of the Reflective Practice Questionnaire. PEERJ, 12, Article e16879. https://doi.org/10.7717/peerj.16879
231. Rosak-Szyrocka, J., & Tiwari, S. (2023). Structural equation modeling (SEM) to test sustainable development in university 4.0. Sustainability, 15(23), 16167. https://www.mdpi.com/2071-1050/15/23/16167
232. Royer, D. J., & Ennis, R. P. (2024, September 13). Student-delivered behavior-specific praise: A systematic literature review and meta-analysis. Frontiers. https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2024.1444394/full
233. Rozimela, Y., Fatimah, S., & Fudhla, N. (2025). EFL teachers' practices and perspectives on reflective practice. Asian-Pacific Journal of Second and Foreign Language Education. https://doi.org/10.1186/s40862-025-00338-9
234. Rubio, J. S., & Saenz, C. R. (2023). Pre-service teacher competence in a teacher education institution. The QUEST: Journal of Multidisciplinary Research and Development, 2(2). https://doi.org/10.60008/thequest.v2i2.78
235. Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. Contemporary Educational Psychology, 61, Article 101860. https://doi.org/10.1016/j.cedpsych.2020.101860
236. Saban, G. a. S. (2015, December 1). Personal and professional qualities of effective English teachers in the Philippines. https://meltajournals.com/index.php/TET/article/view/81
237. Sahara, E., Fahira, N., & Kholifah, S. (2024). Partial least squares structural equation modeling (PLS-SEM): The influence of autonomy and relatedness on student competence in English learning. LEOTECH Journal of Learning Education and Technology, 1(2), 27–36. https://journal.akademimerdeka.com/ojs/index.php/leotech/article/view/160
238. Saimon, M., & Mtenzi, F. (2021). eCommons@AKU eCommons@AKU Institute for Educational Development, East Africa AKU in East Africa Reflective practices as the cornerstone for teacher development Reflective practices as the cornerstone for teacher development in the 21st century: Lessons from educators' action research in the 21st century: Lessons from educators' action research projects projects. https://doi.org/10.37134/jrpptte.vol11.2.7.2021
239. Saleem, A. (2024). The Effectiveness of Reflective Teaching Practices in Enhancing Teacher-Student Interactions in TEFL Contexts. Journal of International Crisis and Risk Communication Research , 34–54. https://doi.org/10.63278/jicrcr.vi.601
240. Salome B. Tolentino (2025). Measuring Pre-Service Teachers' Sense of Efficacy: The Effect of Professional, Instructional, and Personal Mentoring. International Journal of Research and Innovation in Social Science (IJRISS), 9(04), 6089-6095. https://doi.org/https://dx.doi.org/10.47772/IJRISS.2025.90400436

241. Sam, S. A., Cabales, E. R., Sam, R. A., Caburnay, D. D., Salipada, T. K., & Arenas, J. C. (2025). The Pre-Service Teachers' Learning Experience Amidst the Gradual Lifting of Social Distancing. Journal of Cultural Analysis and Social Change, 876–891. https://doi.org/10.64753/jcasc.v10i4.2961
242. San Roque, J. O., & Valle, A. M. (2025). School heads' instructional supervision: Its impact to teachers' self-efficacy. International Journal of Multidisciplinary Research and Analysis, 8(04), 1612–1621. https://doi.org/10.47191/ijmra/v8-i04-16
243. Santander, C. & Nabos, J. (2024). Classroom Management Practices of Teachers and Academic Performance of Grade 3 Learners Across All Learning Areas. Psychology and Education: A Multidisciplinary Journal, 17(2), 156-165. https://ejournals.ph/article.php?id=25494.
244. Santos, A., & Reyes, R. (2023). Factors influencing teaching effectiveness among Philippine pre-service teachers: A mixed methods study. Philippine Journal of Education Research, 18(1), 112-129.
245. Scarparolo, G., & Subban, P. (2021). A systematic review of pre-service teachers' self-efficacy beliefs for differentiated instruction. Teachers and Teaching, 27(8), 753–766. https://doi.org/10.1080/13540602.2021.2007371
246. Schön, D. A. (1983). The reflective practitioner: How professionals think in action. Basic Books.
247. Schön, D. A. (1983). The reflective practitioner: How professionals think in action. Basic Books.
248. Scott, K., & Rohde, L. (2024). Deconstructing teacher engagement techniques for pre-service teachers through explicitly teaching and applying "noticing" in video observations. Open Education Studies, 6(1). https://doi.org/10.1515/edu-2022-0224
249. Scoupe, R., Delnoij, L., & Beausaert, S. (2024). Reflective practice among pre-service teachers: the role of portfolios. Educational Research, 66(4), 429–447. https://doi.org/10.1080/00131881.2024.2412642
250. Segal, A. (2023). Rethinking Collective Reflection in Teacher Professional Development. Journal of Teacher Education, 75(2), 155-167. https://doi.org/10.1177/00224871231188702.
251. Şen, M., Demirdöğen, B., & Öztekin, C. (2022). Interactions among Topic-Specific Pedagogical Content Knowledge Components for Science Teachers: The Impact of Content Knowledge. Metu.edu.tr. https://doi.org/10.1080/1046560x2021.2012630
252. Seneviratne, K. (2019). Teachers' sense of efficacy: The role of professional development programs.
253. Seprudin, S. (2025). Teacher professional development: A systematic literature review on strategies for effective continuous learning. International Journal of Multidisciplinary Approach Sciences and Technologies. https://doi.org/10.62207/0pb7vm02
254. Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008, updated 2021). Evidence-based practices in classroom management: Considerations for research to practice. Education and Treatment of Children, 31(3), 351–380. https://dropoutprevention.org/wp-content/uploads/2015/05/Simonsen_Fairbanks_Briesch_Myers_Sugai_2008.pdf
255. Simonsen, B., Freeman, J., Myers, D., Dooley, K., Maddock, E., Kern, L., & Byun, S. (2020). The effects of targeted professional development on teachers' use of empirically supported classroom management practices. Journal of Positive Behavior Interventions, 22(1), 3–14. https://doi.org/10.1177/1098300719859615 Colab+1
256. Simpson, J.N., Hopkins, S., Eakle, C.D., & Rose, C.A. (2020). Implement Today! Behavior Management Strategies to Increase Engagement and Reduce Challenging Behaviors in the Classroom. Beyond Behavior, 29, 119 - 128.
257. Sims, S., Fletcher-Wood, H., O'Mara-Eves, A., & Cottingham, S. (2023). Classroom management: A systematic review and meta-analysis of its impact on student outcomes. Educational Research Review, 39, 100501. https://doi.org/10.1016/j.edurev.2023.100501
258. Sinsay-Villanueva, Leih Maruss V. et al. (2025) : Quality education starting with teacher education, PIDS Discussion Paper Series, No. 2025-04, Philippine Institute for Development Studies (PIDS), Quezon City, https://doi.org/10.62986/dp2025.04
259. Sirianansopa, K. (2024). Evaluating students' learning achievements using the formative assessment technique: A retrospective study. BMC Medical Education, 24, Article 1373. https://doi.org/10.1186/s12909-024-06347-5
260. Slater, E. V., & Main, S. (2020). A measure of classroom management: validation of a pre-service teacher self-efficacy scale. Journal of Education for Teaching International Research and Pedagogy, 46(5), 616–630. https://doi.org/10.1080/02607476.2020.1770579

261. Solanon, S. O., & San Jose, A. E. (2025). Teaching anxiety, teaching self-efficacy and teacher support as predictors of classroom performance of pre-service teachers. Asian Journal of Education and Social Studies, 51(5), 336–346. https://doi.org/10.9734/AJESS/2025/v51i51922
262. Soliba, B. L., Rivera, M. L. A. D., Marquez, A. J. M., Marquez, A. M. B., Ocumen, J. P., Ottao, B. B., Pedro, R. B., Posot, M. T., Ramos, K. E., & Rivera, G. R. E. (2025). Perceived Academic Satisfaction of Fourth-Year Pre-Service Teachers. Sage Open, 15(1). https://doi.org/10.1177/21582440241293030.
263. Solomon Abekah Keelson, Jacob Odei Addo, & Dodor, A. (2024). The influence of lecturer non-verbal cues on student perceptions of teaching quality: the role of gender and age. Cogent Education, 11(1). https://doi.org/10.1080/2331186x.2024.2325788
264. Sortwell, A., Trimble, K., Ferraz, R., Geelan, D. R., Hine, G., Ramirez-Campillo, R., Carter-Thuiller, B., Gkintoni, E., & Xuan, Q. (2024). A Systematic Review of Meta-Analyses on the Impact of Formative Assessment on K-12 Students' Learning: Toward Sustainable Quality Education. Sustainability, 16(17), 7826. https://doi.org/10.3390/su16177826
265. Stewart, Cynthia J. (1984)."The reflective practitioner: How professionals think in action : Donald A. Schon, Basic Books, New York, 1983." Patient Education and Counseling 5(3): 145-145. https://doi.org/10.1016/0738-3991(84)90022-3
266. Street, K.E., Ertesvåg, S.K., Gamlem, S.M., Rebni, L.M., Sølvik, R.M., & Vaaland, G.S. (2025). Classroom management for first-year pre-service teachers: What is difficult and why? Teaching and Teacher Education. https://doi.org/10.1016/j.tate.2025.105235
267. Stronge, J. H. (n.d.). Qualities of Effective Teachers, 3rd Edition. https://eric.ed.gov/?id=ED582452
268. Subramaniam, K. (2021). Prospective Teachers' Pedagogical Content Knowledge Development in an Elementary Science Methods Course. Journal of Science Teacher Education, 1–23. https://doi.org/10.1080/1046560x.2021.1939944
269. Suico, C. (2021). Teachers' Attributes and Self-Efficacy as Predictors of Classroom Management. International Journal of Asian education. https://ijae.journal-asia.education/IJAE-html/CECILIA.html.
270. Sun, Y., & Liu, L. (2023). Structural equation modeling of university students' academic resilience and educational attainment. BMC Psychology, 11, 347. https://bmcpsychology.biomedcentral.com/articles/10.1186/s40359-023-01366-1
271. Suphasri, P. (2021). Reflective practice in teacher education: Issues, challenges, and implications.
272. Susilowati, N.; Utami, N.; Pujiati, A.; Prasetyo, P.E.; Santoso, A. Pre-service teacher teaching readiness: The mediating role of field experience. Soc. Sci. Humanit. Open 2026, 13, https://doi.org/10.1016/j.ssaho.2026.102615.
273. Sustainable development goals. UNDP. (n.d.). https://www.undp.org/sustainable-development-goals/quality-education
274. Sutherland, D., Strunk, K., Nagel, J., & Kilbride, T. (2022). Boxed in: Structural limitations to flexible pacing in Michigan competency-based education pilot districts. Journal of Educational Change. Advance online publication. https://doi.org/10.1007/s10833-022-09466-2
275. Suyatno, S. (2023). Developing pre-service teachers' professionalism by sharing and receiving experiences in the kampus mengajar program. Education Sciences, 13(2), 143. https://doi.org/10.3390/educsci13020143
276. Syaridawati, Ondeng, S., & Mustami, K. (2025). Improving Teacher Professionalism Through Classroom Action Research to Achieve Better National Education Quality. Golden Ratio of Data in Summary, 5(4), 117–126. https://doi.org/10.52970/grdis.v5i4.980
277. Taber, K. S. (2021). The use of Cronbach's alpha when developing and reporting research instruments in science education. Research in Science Education. https://doi.org/10.1007/s11165-016-9602-2Luo, X., Bity Salwana Alias, & Nor Hafizah Adnan. (2024). Exploring the Interplay between Teacher Leadership and Self-Efficacy: A Systematic Literature Review (2013–2024). Education Sciences, 14(9), 990–990. https://doi.org/10.3390/educsci14090990
278. Taghizadeh, Mahboubeh & Amirkhani, Sahar. (2021). Pre-service EFL teachers' conceptions and strategy use in managing online classes. https://doi.org/10.1016/j.system.2021.102671
279. Tardif, R. (2024). A mixed methods study of preservice teacher reflective interviews and self-efficacy development (Ed.D. dissertation). Rivier University. https://eric.ed.gov/?id=ED664272
280. teachers. Education and Information Technologies, 27(3), 3615-3640. https://doi.org/10.5539/ies.v15n2p41

281. Teachers' classroom management practices and learners' behavior: A review. (2025). International Journal of South Asian Teaching (PDF). MP Zamayla et al. Retrieved from https://www.ijsat.org/papers/2025/3/8245.pdf IJSAT
282. The Danielson Framework for Teaching. (n.d.). Www.uft.org. https://www.uft.org/danielson-framework-teaching
283. The Danielson Group. (2022). The framework for teaching. Danielsongroup.org. https://danielsongroup.org/the-framework-for-teaching/
284. The Danielson Group. (2023). Enhancing Professional Practice: The Framework for Teaching (3rd ed.). https://danielsongroup.org/the-framework-for-teaching
285. The Macmillan Company New York. (1970, January 1). Science and human behavior : Skinner B. F. : Free Download, borrow, and streaming. Internet Archive. https://archive.org/details/dli.ernet.448915
286. The Wing Institute. (n.d.). Effective instruction: Instructional delivery. https://www.winginstitute.org/effective-instruction-delivery
287. Thompson, C. (2021). Reflective practice for professional development: A guide for teachers. Routledge. https://doi.org/10.4324/9781003056812
288. Tian, X. (2025). A Study on Teacher Professional Growth and Teaching Improvement Strategies Based on Reflective Practice. International Journal of Education and Social Development, 4(3), 40-43. https://doi.org/10.54097/t7zxmw47
289. Tolentino, S. B. (2025). Measuring Pre-Service Teachers' Sense of Efficacy: The Effect of Professional, Instructional, and Personal Mentoring. International Journal of Research and Innovation in Social Science (IJRISS), 9(04), 6089-6095. https://doi.org/https://dx.doi.org/10.47772/IJRISS.2025.90400436
290. Transforming education towards SDG 4. UNESCO. (2024). https://media.unesco.org/sites/default/files/webform/ed3002/390204eng.pdf
291. Tschannen-Moran, M., & Hoy, A. W. (2022). Teacher professionalism and teacher self-efficacy. Educational Psychologist, 57(1), 1–15. https://doi.org/10.1080/00461520.2021.1985507
292. Tubal, F. S. C., Saluta, R. M. B., Cabrido, C. B., & Embang, S. I. (2025). Pre-Service Teachers' Lived Experiences with Feedback and its Role in their Professional Becoming. International Journal of Learning, Teaching and Educational Research, 24(9), 628–648. https://doi.org/10.26803/ijlter.24.9.31
293. Tveitnes, M. S., & Hvalby, M. (2023). Mentoring novice teachers in a Norwegian context of inclusive education. Teachers and Teaching, 29(1), 71–84. https://doi.org/10.1080/13540602.2023.2225442
294. United Nations Educational, Scientific and Cultural Organization (UNESCO). (2020–2024). Assessment for improved learning outcomes / Learning assessments. https://www.unesco.org/en/learning-assessments
295. United Nations Educational, Scientific and Cultural Organization (UNESCO). (2024). Global report on teachers: Addressing teacher shortages and transforming the profession. https://www.unesco.org/en/articles/global-report-teachers-what-you-need-know
296. United Nations. (2023). Goal 4 | Department of Economic and Social Affairs (UN DESA). United Nations. https://SDgs.un.org/goals/goal4
297. Vacalares, A. B., Elbanbuena, C. O., & Comon, J. D. (2024). Differentiated instructional practices and academic performance in mathematics. European Modern Studies Journal, 8(4). https://doi.org/10.59573/emsj.8(4).2024.11
298. Van der Lans, R. M., Van de Grift, W. J. C. M., & Van Veen, K. (2021). Twenty-first century adaptive teaching and individualized learning operationalized as specific blends of student-centered instructional events: A systematic review and meta-analysis. Frontiers in Education, 6, 727055. https://doi.org/10.3389/feduc.2021.727055
299. Velasquez, M. F., Ramirez, P. H., Capajaña, A. G., & Córdova, M. D. C. (2024). Reflective teaching impact upon pre-service teachers' professional development: A systematic review. rEFLections Journal. https://so05.tci-thaijo.org/index.php/reflections/article/view/269102
300. Venkat, H., Adler, J. (2020). Pedagogical Content Knowledge Within "Mathematical Knowledge for Teaching". In: Lerman, S. (eds) Encyclopedia of Mathematics Education. Springer, Cham. https://doi.org/10.1007/978-3-030-15789-0_123
301. Villanca, A. A. (2022). Correlates of pre-service teachers' 21st century skills and mentoring practices of supervising instructors in the new normal education. South East Asian Association for Institutional Research Conference Proceedings, 22, 168–179. (Available from EBSCO academic databases)

302. Villanueva, J. A. R. (2021). Teaching presence in K-12 blended learning classes under the alternative delivery mode. International Journal on Open and Distance E-Learning, 7(1). Retrieved from https://ijodel.upou.edu.ph/ijodel/article/view/33 ijodel.upou.edu.ph
303. Vincent, E. (2024). Pre-service teachers' knowledge about classroom management from university studies and their own schooling experiences—content and effects of their activation. Frontiers in Education.https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2024.1365005
304. Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice-Hall. https://psycnet.apa.org/record/1985-98423-000
305. Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice-Hall. https://psycnet.apa.org/record/1985-98423-000Suphasri, P. (2021). Reflective Practice in Teacher Education: Issues, Challenges, and Considerations. PASAA, 62(1), 236–264. https://doi.org/10.58837/chula.pasaa.62.1.9
306. Walker, V. L., et al. (2023). School-wide positive behavioural interventions and supports: Evidence and equity considerations. Frontiers in Education, 8, 109544. https://pmc.ncbi.nlm.nih.gov/articles/PMC9897773/
307. Washington-Nortey, M., Granger, K., Sutherland, K.S. et al. Sustaining BEST in CLASS: Teacher-Reported Evidence-Based Practice Use with Students at Risk for Emotional and Behavioral Disorders Amidst the COVID-19 Pandemic. School Mental Health 15, 470–483 (2023). https://doi.org/10.1007/s12310-022-09561-y
308. Wei, Y., Wang, F., Zhang, Y., Lim, B. Y., & Jiang, B. (2026). Beyond Scores: Explainable Intelligent Assessment Strengthens Pre-service Teachers' Assessment Literacy. ArXiv.org. https://arxiv.org/abs/2603.06059
309. Welmark T. Bagus (2025). Instructional Competence and Adaptability Skills of Teachers as Predictors of Students' Classroom Engagement in Social Science. International Journal of Research and Innovation in Social Science (IJRISS), 9(04), 5977-5989. https://doi.org/https://dx.doi.org/10.47772/IJRISS.2025.90400428
310. Wettstein, A., Ramseier, E. & Scherzinger, M. Class- and subject teachers' self-efficacy and emotional stability and students' perceptions of the teacher–student relationship, classroom management, and classroom disruptions. BMC Psychol 9, 103 (2021). https://doi.org/10.1186/s40359-021-00606-6
311. Wettstein, A., Ramseier, E., & Scherzinger, M. (2021). Class- and subject teachers' self-efficacy and emotional stability and students' perceptions of the teacher–student relationship, classroom management, and classroom disruptions. BMC Psychology, 9, 103. https://doi.org/10.1186/s40359-021-00606-6
312. Widodo, A., & Astuti, B. (2024). Critical analysis of social cognitive learning theory and its implementation in elementary schools. MANDALIKA : Journal of Social Science. https://journals.balaipublikasi.id/index.php/mandalika/article/view/148.
313. Wilkins, N. J., V Verlenden, J. M., Szucs, L. E., & Johns, M. M. (2022). Classroom Management and Facilitation Approaches That Promote School Connectedness. The Journal of School Health, 93(7), 582. https://doi.org/10.1111/josh.13279
314. Wilkins, N. J., Verlenden, J. M. V., Szucs, L. E., Johns, M. M., et al. (2022). Classroom management and facilitation approaches that promote school connectedness. Journal of School Health, 93(7), 582–593. https://doi.org/10.1111/josh.13279
315. Wood, K., & Andrew, V. (2022). The Development of Teachers' Pedagogical Content Knowledge through Learning Study. Asia Pacific Journal of Education, 42(1), 94–108. https://eric.ed.gov/?id=EJ1351958
316. Wu, J., et al. (2025). The influence of formative assessment on academic outcomes: A review. Frontiers in Education, 10, 150248. https://pmc.ncbi.nlm.nih.gov/articles/PMC12015237/
317. Xu, X., Zhang, M., & Chen, Y. (2023). Student engagement and learning outcomes: An empirical study. Frontiers in Psychology, 14, 1180916. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10563621/
318. Ye, X. (2024). A review of classroom environment on student engagement in English as a foreign language learning. Frontiers in Education, 9, 1415829. https://doi.org/10.3389/feduc.2024.1415829

319. Zach, S., & Sindiani, M. (2025). Pre-service teachers evaluations of their cooperating teachers' contribution to their professional training: questionnaire development. Frontiers in Education, 10. https://doi.org/10.3389/feduc.2025.1507154
320. Zakariya, Y. F., & Adegoke, N. A. (2024). Teacher instructional practices: Untangling their complex relations with self-efficacy, job satisfaction, stress, and cooperation among mathematics teachers. Frontiers in Education, 9. https://doi.org/10.3389/feduc.2024.1367076
321. Zambak, V. S., Romagnoli, A., Bazler, J., & Van Sickle, M. L. (2021). Effectiveness of a collaborative STEAM module on secondary preservice teachers' lesson planning skills and views (Paper prepared for the Annual Meeting of the American Educational Research Association). AERA Online Paper Repository. https://eric.ed.gov/?id=ED627240
322. Zambak, V. S., Romagnoli, A., Bazler, J., & Van Sickle, M. L. (2021). Effectiveness of a collaborative STEAM module on secondary preservice teachers' lesson planning skills and views (Paper prepared for the Annual Meeting of the American Educational Research Association). AERA Online Paper Repository. https://eric.ed.gov/?id=ED627240
323. Zapatero-Ayuso, J.-A., Díaz-Carretero, A., Gil-García, M.-I., & Gil-Madrona, P. (2026). Competence development of pre-service teachers during Practicum: a qualitative study from the perspective of its protagonists. Journal of New Approaches in Educational Research, 15(1). https://doi.org/10.1007/s44322-026-00057-0
324. Zaragoza, A., Seidel, T., & Santagata, R. (2024). Lesson analysis and plan template: Scaffolding preservice teachers' application of professional knowledge to lesson planning. Journal of Curriculum Studies, 55(2), 138–152. https://doi.org/10.1080/00220272.2023.2182650
325. Zhadyra Makhmetova, Karabassova, L., Assel Zhakim, & Abylay Karinov. (2025). Exploring the Effects of Professional Learning Experiences on In-Service Teachers' Growth: A Systematic Review of Literature. Education Sciences, 15(2), 146–146. https://doi.org/10.3390/educsci15020146
326. Zheng, J. (2021). A functional review of research on clarity, immediacy, and credibility of teachers and their impacts on motivation and engagement of students. Frontiers in Psychology, 12, 712419. https://doi.org/10.3389/fpsyg.2021.712419
327. Zhou, X., Shu, L., Xu, Z. et al. The effect of professional development on in-service STEM teachers' self-efficacy: a meta-analysis of experimental studies. IJ STEM Ed 10, 37 (2023). https://doi.org/10.1186/s40594-023-00422-x

APPENDIX A

Letter of Request to the School Administrator

INITAO COLLEGE

Jampason, Initao, Misamis Oriental,9022

TO:

GRACE C. LAPINIG, Ph.D.
Initao College President
Jampason, Initao, Misamis Oriental

THRU:

ELIEDA L. APOR, MAED-EED
Vice President for Academic Affairs
Initao College

Jampason, Initao, Misamis Oriental

Dear Doc Grace,

Warm greetings! Praise be with Jesus and Mary!

I am **Riazelle Jane G. Cabigquez**, a graduate student of the Master of Arts in Education major in Elementary Education (MAEd–EEd) at Lourdes College, Cagayan de Oro City. I am currently conducting a thesis study entitled: "Predictive Interrelationship of Self-efficacy, Reflective Practice, and Supervision Quality on the Pre-Service Teachers' Teaching Performance."

In this regard, I respectfully request your permission to gather data from selected pre-service teachers assigned to your school and from their cooperating teachers or supervisors. Data collection will involve survey questionnaires and a review of teaching performance evaluations, and will be scheduled at a time convenient for the participants to avoid interfering with their duties.

All participants will be properly informed about the purpose of the study, and their participation will be entirely voluntary. Confidentiality and anonymity will be strictly observed, and all data collected will be used solely for academic research purposes in compliance with ethical standards and the Data Privacy Act of 2012.

I am hopeful for your kind approval and support for this academic undertaking. Thank you very much for your time and consideration.

Respectfully yours,

RIAZELLE JANE G. CABIGQUEZ
Researcher
Lourdes College Inc., Graduate School

Noted by:

DR. REVINA O. MENDOZA
Mentor
Lourdes College Inc., Graduate School

Recommending Approval:

ELIEDA L. APOR, MAED-EED
Vice President for Academic Affairs
Initao College

Approved by:

DR. GRACE C. LAPINIG
College President
Initao College

Appendix B

Letter to the Participants

INITAO COLLEGE

Jampason, Initao, Misamis Oriental, 9022

Dear Participants,

Good day! Praise be with Jesus and Mary!

The undersigned is a Master of Arts in Education major in Elementary Education student at Lourdes College, Inc. in Cagayan de Oro City, Misamis Oriental. Presently, she is conducting a research study entitled: **"PREDICTIVE INTERRELATIONSHIP OF SELF-EFFICACY, REFLECTIVE PRACTICE, AND SUPERVISION QUALITY ON THE PRE-SERVICE TEACHERS' TEACHING PERFORMANCE."**

In this regard, she would like to request your kind assistance and cooperation by answering the questionnaire provided through Google Form. Your honest response greatly contributes to the success of the study. Participation in this study is entirely voluntary, and you may take your time in deciding whether to participate. If any part of the questionnaire is unclear, you may ask for clarification, and you are free to withdraw from the study at any time without any consequences.

Rest assured that the data that will be gathered will be treated with the utmost confidentiality and will be used only for the study.

Thank you very much for your time and support.

Respectfully yours,

RIAZELLE JANE G. CABIGQUEZ
Researcher
Lourdes College Inc., Graduate School

Noted by:

DR. REVINA O. MENDOZA
Mentor
Lourdes College Inc., Graduate School

Appendix E

Research Questionnaires

Survey Questionnaire for Pre-Service Teachers

PREDICTIVE INTERRELATIONSHIP OF SELF-EFFICACY, REFLECTIVE PRACTICE, AND SUPERVISION QUALITY ON THE PRE-SERVICE TEACHERS' TEACHING PERFORMANCE

Part I. Objectives, Risks, and Participation

Dear Participants:

I am RIAZELLE JANE G. CABIGQUEZ, a Master of Arts in Education major in Elementary Education (MAEd-EEd) student of Lourdes College.

The purpose of this study is to investigate the impact of self-efficacy, reflective practice, and supervision quality on the teaching performance of pre-service teachers. In this regard, I respectfully invite you to participate in this research study.

You are chosen to take part in the study, considering that you and your co-participants directly represent the qualities that will best address the study. There is no risk to you in participating in this research.

The data generated by this study will be kept confidential. Participants will be named in any manner of publication, and their identities are strictly private, which may not be derived from this study. Research files, papers, and documents will be kept secure, and only the researcher can access them.

You are free to decide whether to take part in this survey. If you decide to participate and choose to stop of your own free will, you can terminate your participation. There will be no consequences, nor will you be penalized for not participating.

All information gathered about you as a result of this study will be secured and confidential. The researcher assures that confidentiality, privacy, and anonymity will be maintained during and after data collection, storage, and publication of the research study. All data generated in the process of the research study will be properly stored in paper or electronic form for a period covering five years after the research study has been completed.

If you have any other questions or clarification, you can reach me at 0905-699-4448 or through my email address riazelle.cabigquez@lccdo.edu.ph.

Thank you for your time and support.

Respectfully yours,

RIAZELLE JANE G. CABIGQUEZ
Researcher

Part II.

Self-Efficacy of Pre-Service Teachers and its Influence on Teaching Performance. (The questionnaire items on

Self-Efficacy have been adapted from the Teacher Efficacy instrument by Moran and Woolfolk Hoy (2001), which highlights the importance of teachers' beliefs in their capabilities to effectively manage classroom tasks and promote student learning.)

Directions: Please read each statement carefully and indicate the extent to which you agree or disagree based on your experiences as a pre-service teacher. Your responses will help us understand how your confidence in your teaching abilities influences your teaching performance. Consider each statement independently and answer honestly based on your actual experiences.

We are committed to protecting your personal information and ensuring your privacy in accordance with the Data Privacy Act of 2012 (RA 10173). By participating in this study, you are voluntarily providing your personal data, which will be used solely for research purposes.

Self-Efficacy in Teaching

1	**2**	**3**	**4**	**5**
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

No.	**Self-Efficacy Statement**	**1**	**2**	**3**	**4**	**5**
1	I believe that I would be able to respond to different learners effectively and handle classroom issues in the course of instruction.					
2	I can prepare lessons that provide appropriate challenge to every learner.					
3	I can plan alternative activities when the lesson does not go well.					
4	I can answer students' questions correctly and clearly.					
5	I can discuss the lesson in a manner that is understandable to students.					
6	I can ask questions to make students think more about the lesson.					
7	I can provide alternative explanations when students don't understand (paraphrasing the concept in simple language, giving them a real-life scenario or showing them how the concept works step-by-step).					
8	I can handle disruptive behavior at the classroom.					
9	I can set clear classroom rules and routines.					
10	I can maintain a learning environment that fosters student engagement.					
11	I can prevent students from disrupting the learning of others.					
12	I can involve students during the lessons.					
13	During instruction, I can motivate students to think critically.					
14	I can apply teaching methods that encourage student involvement and learning.					
15	I can assess whether learners have learned what has been taught.					
16	I can assess student learning with various methods.					
17	I can apply the results of the assessment to better my teaching.					
18	I can recognize students who require extra support based on assessment evidence.					
19	I can inspire students to think that they can do well in school.					
20	I can make students understand the importance of learning.					
21	I can work with families to assist the academic development of students.					
22	I demonstrate professional accountability in facilitating student learning.					

Part III.

Reflective Practice of Pre-Service Teachers and its Influence on Teaching Performance. (The questionnaire items on *Reflective Practice* have been adapted from the Reflective Practice Questionnaire (RPQ) by Rogers et al. (2024), grounded in Schön's (1983) theory of reflection, which emphasizes the role of reflection in improving teaching practices.)

Directions: Please read each statement carefully and indicate the extent to which you agree or disagree based on your experiences during and after teaching. Your responses will help us understand how reflection in and on practice contributes to your teaching performance. Consider each statement independently and answer honestly based on your actual experiences.

We are committed to protecting your personal information and ensuring your privacy in accordance with the Data Privacy Act of 2012 (RA 10173). By participating in this study, you are voluntarily providing your personal data, which will be used solely for research purposes

Reflective Practice

1	**2**	**3**	**4**	**5**
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

No.		**1**	**2**	**3**	**4**	**5**
1	I observe how my beliefs affect my teaching while I am teaching.					
2	I consider my thoughts and feelings while teaching and how they influence my choices.					
3	I notice how students' beliefs influence their learning.					
4	I think about how students' feelings and attitudes affect their participation.					
5	I reflect on how my teaching choices influence students' engagement and participation.					
6	I also reflect on my teaching experiences to assess the effectiveness of my teaching practices in facilitating student learning.					
7	I consider how students experienced the activity afterward.					
8	I ask myself: How well are my teaching strategies helping students learn?					
9	I reflect on my strengths as a pre-service teacher after teaching.					
10	I reflect on my weaknesses and what I need to improve after each lesson.					
11	I think about ways to enhance my teaching skills based on previous lessons.					
12	I check my teaching practices to learn how well they are helping students learn.					
13	I discover new insights when I self-reflect with classmates or mentors.					
14	I discuss my teaching with others to open up new ideas.					
15	I share my classroom experience to help me solve teaching problems.					
16	I reflect on my teaching with others to help me learn new teaching skills.					
17	I believe I can improve my teaching by learning from the feedback of others.					
18	I gain confidence in how I teach through reflective discussions with others.					
19	I talk with others to help me clarify uncertainties about how I teach.					
20	I think about my strengths as a pre-service teacher.					
21	I think about my weaknesses or areas I need to improve.					
22	I think about how I can improve my teaching abilities.					
23	I reflect on how effective my strategies and methods are in teaching.					

Part IV.

Teaching Performance of Pre-Service Teachers. (The indicators for *Teaching Supervision Quality and its Influence on Pre-Service Teachers' Teaching Performance.* (The questionnaire items on *Supervision Quality* have been adapted from the Mentoring for Effective Teaching Practice instrument by Ploj Virtič et al. (2021), which emphasizes the role of mentoring, feedback, and instructional support in enhancing teaching competence.)

Directions: Please read each statement carefully and indicate the extent to which you agree or disagree based on your experiences with your cooperating teacher or supervisor. Your responses will help us understand how the quality of supervision influences your teaching performance. Consider each statement independently and answer honestly based on your actual experiences.

We are committed to protecting your personal information and ensuring your privacy in accordance with the Data Privacy Act of 2012 (RA 10173). By participating in this study, you are voluntarily providing your personal data, which will be used solely for research purposes.

Supervision Quality

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

No.	Items	1	2	3	4	5
I.	**LESSON PLANNING AND PREPARATION** *How often does your supervisor/immediate head/cooperating teachers…*					
1	… give you clear guidance for planning to teach your lessons?					
2	… assist you with preparing your lessons?					
3	… reiterate the need to have well-designed activities for learners					
4	… show you an example of an actual annual (yearly) teaching plan for the subject?					
5	… discuss the aims of teaching your subjects?					
6	… allow you flexibility in planning for teaching?					

No.	Items	1	2	3	4	5
II.	**CONTENT KNOWLEDGE AND PEDAGOGY**					
1	… discuss with you the (content) knowledge you need for teaching your subject(s)?					
2	… show expertise in effectively teaching his/her subject?					
3	… show content expertise?					
4	… give clear expectations regarding the way you should teach your subject(s)?					
5	… model different teaching strategies in teaching the subject?					
6	… model (show) how to teach difficult concepts (aspects)?					
7	… assist you in implementing different teaching strategies?					
III.	**CLASSROOM MANAGEMENT AND LEARNING ENVIRONMENT**					
1	… model effective classroom management when teaching?					
2	… assist you with classroom management strategies for teaching?					
3	… explain the school's Disciplinary Code to you?					
4	… explain to you how the school deals with barriers to learning among learners?					
5	… shows empathy towards you when your teaching lesson did not play out as planned?					
6	… show support when you are teaching your subject(s)?					
7	… display enthusiasm when teaching the subject?					
IV.	**INSTRUCTIONAL DELIVERY**					
1	… observe you in class when you were teaching?					
2	… observe you teach before providing feedback?					
3	… use hands-on teaching materials?					
4	… develop your strategies for teaching?					
5	**… discuss with your questioning skills for effective teaching?**					
6	… provide you with strategies to solve teaching problems that you encountered?					
7	… assist you in finding teaching resources?					

Part V.

Teaching Performance of Pre-Service Teachers. (The indicators for *Teaching Performance* have been adapted from the Initao College Observation Tool, which evaluates lesson planning, content knowledge, classroom management, instructional delivery, assessment, and professional conduct.)

Directions: Please read each statement carefully and rate the teaching performance of the pre-service teacher based on your observation and experience. Select the response that best reflects your evaluation. Answer all items honestly and completely.

We are committed to protecting your personal information and ensuring your privacy in accordance with the Data Privacy Act of 2012 (RA 10173). By participating in this study, you are voluntarily providing your personal data, which will be used solely for research purposes.

TEACHING DEMONSTRATION EVALUATION FORM

(Initao College Observation Tool)

Name: _____ **Date:** _____

Subject Matter/Learning Area: _____ **Subject & Grade:**

Equivalent Rating	
5	Very Good
4	Good
3	Fair
2	Poor
1	Needs Improvement

INDICATORS	5	4	3	2	1
I. LESSON PLANNING AND PREPARATION					
1. writes clear and measurable lesson objectives aligned with curriculum standards.					
2. plans lessons that build on learners' prior knowledge and progress from simple to complex concepts.					
3. provides learning activities appropriate to learners' abilities and learning styles.					
4. aligns lesson objectives, teaching methods, materials, and assessments.					
5. prepares and submits complete lesson plans and instructional materials on time.					
6. uses appropriate teaching resources, including ict, to support lesson objectives and learner understanding.					
***AVERAGE** (Total Score/6)*					
II. CONTENT KNOWLEDGE AND PEDAGOGY					
1. demonstrates mastery of the lesson topic and uses accurate content knowledge.					
2. relates and applies lessons to real-life examples and other subjects.					
3. demonstrates content knowledge and effectively applies this knowledge within and across relevant curriculum areas.					
4. helps learners to use learnt concepts in practical or real-world activities.					
5. gives out responses to questions by learners regarding the contents of the lesson properly and confidently.					
6. apply teaching strategies that foster critical and creative thinking, as well as other higher-order cognitive skills.					
7. demonstrate an understanding of instructional strategies that effectively enhance learners' literacy and numeracy skills.					
8. demonstrates the ability to present content clearly, using appropriate examples and explanations that align with learners' level of understanding.					
***AVERAGE** (Total Score/8)*					

INDICATORS	5	4	3	2	1
III. CLASSROOM MANAGEMENT & LEARNING ENVIRONMENT					
1. establishes and follows consistent classroom routines (greeting, attendance, transitions, and cleanup).					
2. employs active attention-getters to get attention back on track.					
3. uses positive reinforcement and fair discipline, encouraging and maintaining good behavior.					
4. manages time effectively to maximize learning opportunities.					
5. manages the class appropriately, observing/systematizing class routine with less unnecessary noise and no distractive behavior of pupils/students					
6. shows a positive teacher-student relationship (speaks in a kind voice, smiles, listens to the student).					
7. prepares the physical classroom to facilitate learning and safety (seats the chairs so that they can see and move around).					
8. establishes a classroom atmosphere that is positive, safe, and inclusive.					
9. recognizes individual differences and uses inclusive language and examples.					
***AVERAGE** (Total Score/9)*					
IV. INSTRUCTIONAL DELIVERY AND COMMUNICATION SKILLS					
1. presents lesson logically, with clear sequencing and transitions.					
2. communicates ideas clearly using appropriate language, tone, and pacing suited to learners' level.					
3. uses correct grammar, pronunciation, facial expression, and non-verbal cues (eye contact, gestures, posture) to enhance understanding.					
4. appropriately applies different teaching techniques based on the needs of the learners.					
5. uses instructional materials that are developmentally appropriate to their grade level and were easily utilized by the teacher.					
6. employs instructional materials and other examples to illustrate the lesson					
***AVERAGE** (Total Score/7)*					
V. ASSESSMENT OF LEARNERS					
1. the teacher uses diagnostic assessments to identify learners' prior knowledge.					
2. the teacher uses formative assessments to check learners' understanding during lessons.					
3. the teacher uses summative assessments to measure learners' achievement at the end of a lesson or unit.					
4. the teacher designs assessment tasks that align with curriculum requirements.					
5. the teacher selects assessment methods that are suitable for the learning objectives.					
***AVERAGE** (Total Score/5)*					

INDICATORS	5	4	3	2	1
VII. PROFESSIONAL CONDUCT AND TEACHER'S PERSONALITY					
1. the teacher is punctual, prepared, and complies with school policies and procedures.					
2. the teacher maintains proper grooming, appropriate attire, and professional behavior in school.					
3. the teacher demonstrates confidence, self-control, and classroom presence that promote learner focus and respect.					
4. the teacher shows enthusiasm, initiative, and a positive attitude in performing teaching duties.					
5. the teacher accepts feedback from the cooperating teacher and uses it to improve teaching practice.					
***AVERAGE** (Total Score/5)*					

RATING SCALE	
Rating	**Description**
5	Performance is completed with highly competent execution and clear delivery.
4	Performance is completed competently with only minor lapses.
3	Performance is completed with basic competence but shows noticeable gaps.
2	Performance is completed with limited competence and contains major errors.
1	Performance is completed with minimal competence and does not meet basic requirements.

PRE-SERVICE TEACHER'S DEMO TEACHING RATING TRANSMUTATION TABLE		
Rating	**Adjectival Rating**	**Range**
5	Very Good	4.5 – 5.0
4	Good	3.5 – 4.4
3	Fair	2.5 – 3.4
2	Poor	1.5 – 2.4
1	Needs Improvement	1.0 – 1.4

Comments/Suggestions:

Student Interns' Over Printed Name and Signature

Date: _____

Evaluator's Over Printed Name & Signature

Designation: _____

Appendix F

Letter of Consent

Informed Consent

I am **RIAZELLE JANE G. CABIGQUEZ**, a Master of Arts in Education major in Elementary Education (MAEd-EEd) student of Lourdes College. As part of the requirements for the degree program, I am currently conducting a research study entitled **"Predictive Interrelationship of Self-efficacy, Reflective Practice, and Supervision Quality on the Pre-Service Teachers' Teaching Performance."**

The purpose of this study is to investigate the impact of self-efficacy, reflective practice, and supervision quality on the teaching performance of pre-service teachers. In this regard, I respectfully invite you to participate in this research study.

You are chosen to take part in the study, considering that you and your co-participants directly represents the qualities that will best address the study. There is no risk to you in participating in this research.

The data generated by this study will be kept confidential. Participants will be named in any manner of publication, and their identities are strictly private, which may not be derived from this study. Research files, papers, and documents will be kept secure, and only the researcher can access them.

You are free to decide whether to take part in this survey. If you decide to participate and choose to stop of your own free will, you can terminate your participation. There will be no consequences, nor will you be penalized for not participating.

Confidentiality and Privacy of Data

All information gathered about you as a result of this study will be secured and confidential. The researcher assures that confidentiality, privacy, and anonymity will be maintained during and after data collection, storage, and publication of the research study. All data generated in the process of the research study will be properly stored in paper or electronic form for a period covering five years after the research study has been completed.

Thank you for carefully reading the information in this form and for your voluntary participation in this survey.

Consent

With my signature affixed to this consent form, I hereby affirm that I have read and understood the instructions and was given the chance to seek further information. I am fully aware, and I have understood very well that this is purely voluntary and that I am not obligated to participate and may decline for no reason and cost. I freely give my consent to participate in this study.

Participant's Signature: _____ **Date:** _____

Researcher's Signature: _____ **Date:** _____

Appendix H

Canonical Correlation Analysis Interpretation Table

Table 18 Canonical Correlation Analysis Between Self-efficacy in Teaching and Teaching Performance

Variable	Cross loading	R_c	R_c^2	F(6, 119)	p
Self-Efficacy in Teaching	0.23	0.23	0.05	1.131	0.348
Teaching Performance					
Lesson Planning and Preparation	0.01				
Content Knowledge and Pedagogy	0.05				
Classroom Management and Learning Environment	0.09				
Instructional Delivery	-0.14				
Assessment	-0.03				
Professionalism	0.11				

Table 19 Canonical Correlation Analysis Between Reflective Practice and Teaching Performance

Variable	Cross-loading	R_c	R_c^2	F(18, 331)	p
Reflective Practice		0.33	0.11	1.128	0.323
Reflection-in-Action	0.04				
Reflection-on-Action	0.10				
Reflection-for-Action	0.27				
Teaching Performance					
Lesson Planning and Preparation	0.28				
Content Knowledge and Pedagogy	0.13				
Classroom Management and Learning Environment	0.01				
Instructional Delivery	0.07				
Assessment	0.12				
Professionalism	0.21				

Table 20 Canonical Correlation Analysis Between Supervision Quality and Teaching Performance

Variable	Cross-loading	R_c	R_c^2	F(6, 119)	p
Supervision Quality	0.30	0.33	0.11	1.978	0.074
Teaching Performance					
Lesson Planning and Preparation	-0.05				
Content Knowledge and Pedagogy	0.16				
Classroom Management and Learning Environment	0.16				
Instructional Delivery	0.02				
Assessment	-0.05				
Professionalism	-0.09				

Table 21 Regression Analysis of Teachers' Self-Efficacy, Reflective Practice, and Supervision Quality on Teaching Performance

Predictor	Unstandardized Coefficients		β	95% CI		t	p
	B	SE		Lower	Upper		
Constant	4.14	0.17		3.79	4.48	23.226*	<.001
Self-Efficacy	-0.03	0.04	-0.091	-0.11	0.06	-0.677	0.405
Reflective Practice	0.06	0.05	0.148	-0.05	0.13	1.069	0.201
Supervision Quality	-0.00	0.03	-0.004	-0.06	0.07	-0.045	0.962
Model Summary							
$R = 0.100$ $R^2 = 0.010$ Adjusted $R^2 = -0.014$ $F(3,122) = 0.414$ $p = 0.743$							
*Note. B = unstandardized beta coefficient, SE = standard error, β = standardized beta coefficient, 95% CI = 95% confidence interval, t = t statistic, p = probability value. *Significant at 0.05 two-tailed alpha level.*							