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Classroom Assessment Practices of Practice Teachers and Mentoring Support of Cooperating Teachers: Inputs for a School-Based Enhancement Program in the Philippines

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Abstract. This mixed-methods descriptive-developmental study examined the classroom assessment practices of mathematics practice teachers and the mentoring approaches of cooperating teachers at Ifugao State University–Potia Campus, Ifugao, Philippines, during the academic year 2024–2025. The quantitative phase determined the practice teachers' perceived level of competence in assessment literacy and the modes and activities they implemented, while the qualitative phase analyzed assessment activities reflected in detailed lesson plans and classroom demonstrations, as well as explored mentoring strategies of cooperating teachers. Data were gathered from nineteen (19) mathematics practice teachers through survey questionnaires, observation checklists, and semi-structured interviews, with the observation checklist data provided by their respective cooperating teachers. All research instruments were validated and tested for reliability to ensure accuracy and consistency. Findings revealed that mathematics practice teachers demonstrate a strong foundation in classroom assessment literacy and competency. However, ongoing guidance and targeted training are necessary to enhance their skills in feedback delivery, validity, inclusivity, and technology integration. Cognitive assessment tasks were dominant, emphasizing knowledge acquisition and problem-solving, while affective and psychomotor activities—such as recitation, group reporting, labeling, and graph construction—were also utilized. Mentoring practices of cooperating teachers involved modeling, feedback provision, encouragement of varied assessment modes, resource sharing, and fostering progressive independence. The study highlights the importance of sustained mentorship and professional development to strengthen assessment practices. Consequently, a cyclical and holistic program was proposed to enhance assessment literacy, mentoring, inclusivity, research engagement, and collaboration, ensuring well-prepared practice teachers and stronger partnerships between cooperating schools and universities.

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1. Introduction

In accordance with the pertinent provisions of Republic Act (RA) No. 7722, otherwise known as the "Higher Education Act of 1994" and RA 9155, otherwise known as the "Governance of Basic Education Act 2001", the catch up plan for on-the Job Training (OJT) for the new normal are hereby adopted by the Ifugao State University-Potia Campus, College of Education. One among the goals for the face-to-face teaching internship of the practice teachers is to assess by the supervising instructors their classroom assessment practices.

The Philippine Government provides initiatives and implement frameworks to uplift professional standards such as strengthen the teacher preparation and updating curriculum. As reiterated in UNESCO (2022), that the government through educators should ensure that learners are equipped with the right knowledge and skills. The policy framework have guided these study namely Philippine Professional Standards for Teachers (PPST) and National Competency-Based Teacher Standards (NCBTS).

One among the seven domains organized in PPST was assessment and reporting. Through careful planning and proper implementation of assessments, it directly affects the other domains such as Learning Environment, Content Knowledge and Pedagogy, Curriculum and Planning, Diversity of Learners, Personal Growth and Professional Development, and Community Linkages and Professional Engagement (DepEd, 2017). These domains aligned to the knowledge, skills and values expected to every Filipino teacher.

Assessment is a fundamental component of the teaching and learning process, serving as a means to measure student progress, inform instructional decisions, and enhance overall educational quality (Meng, 2023). For mathematics practice teachers, developing assessment literacy and competence during their teaching internship is crucial, as it directly influences how they evaluate learning outcomes and provide feedback to students. However, classroom realities often reveal inconsistencies in the use of varied and authentic assessment practices. Many practice teachers still rely heavily on traditional assessment forms, with limited exposure to performance-based and formative assessments that promote critical thinking and problem-solving.

Classroom assessment serves as a bridge between instruction and student learning outcomes. Effective assessment practices ensure that teachers are not only evaluating student performance but also using assessment data to enhance instructional strategies and promote equitable learning experiences (Meng, 2023). The quality of classroom assessment depends on several interrelated dimensions that determine its effectiveness, fairness, and instructional relevance (Baniasadi et al., 2023). These dimensions include alignment and planning, formative practices and feedback, assessment design and validity, use of results and records, and inclusivity and variety.

Alignment and planning refer to how assessment activities are systematically connected to learning objectives, curriculum standards, and instructional delivery. Effective assessment begins with clear learning targets and a well-structured plan that ensures consistency between what is taught and what is assessed. When assessments are aligned with intended outcomes, teachers can accurately measure student achievement and ensure coherence in instruction. Careful planning also allows teachers to select appropriate assessment tools and schedules that support continuous monitoring of student progress (Zana et al., 2024).

Formative assessment practices are ongoing processes used to gather evidence of student learning during instruction. They enable teachers to provide timely, specific, and constructive feedback that guides learners toward improvement. Feedback, as a key element of formative assessment, promotes self-reflection and motivates students to take ownership of their learning. Effective formative practices involve questioning strategies, performance tasks, peer assessments, and teacher-student conferences that help identify learning gaps and inform instructional adjustments (Ndlovu, 2025).

The design and validity of assessment tools determine the accuracy and fairness of the information gathered. A valid assessment accurately measures what it intends to measure and reflects the learning outcomes specified in the curriculum. Sound assessment design requires teachers to create well-structured instruments—such as rubrics, test items, and performance tasks—that are free from bias and aligned with learners' cognitive and skill levels. Ensuring reliability and validity in assessment enhances the credibility of the results and strengthens the integrity of grading and evaluation systems (Ambon et al., 2024).

Assessment data become meaningful only when used effectively to improve instruction and learning outcomes. The use of results and records involves analyzing assessment outcomes to inform teaching decisions, track student progress, and provide evidence of achievement. Teachers utilize assessment results to identify strengths and weaknesses, design remedial or enrichment activities, and communicate student performance to stakeholders such as parents and administrators. Proper record-keeping also ensures transparency, accountability, and continuity in monitoring learning over time (Rasooli et al., 2023).

Inclusive assessment practices recognize and accommodate the diverse needs, abilities, and backgrounds of learners. Teachers must ensure that assessment tasks are fair, accessible, and representative of multiple learning modalities. Variety in assessment methods—such as written tests, projects, portfolios, oral presentations, and performance-based tasks—allows learners to demonstrate understanding in different ways. Promoting inclusivity and variety supports equity in education by giving all students an equal opportunity to succeed regardless of their individual differences (Ampo, et al., 2025; Sachar, 2025).

Classroom assessment practices grounded in alignment, feedback, validity, meaningful use, and inclusivity create a holistic framework for improving teaching and learning. These dimensions work together to ensure that assessment is not merely a measure of learning, but a process that actively supports and enhances it. When teachers thoughtfully integrate these principles into their practice, assessment becomes a tool for empowerment—helping both teachers and students achieve educational excellence.

The Practice teachers of Ifugao State University- Potia Campus specifically the mathematics practice teachers were deployed for teaching internship every during the second semester of the school year. They were deployed to the cooperating schools where the university had a memorandum of agreement. Prior to the deployment, the college prepares them with Knowledge, Skills and Attitudes (KSA) seminars ready for deployment and this serves as one among the best practices of teaching internship in the university. Furthermore, the college dean and program chairpersons had a courtesy call to the school heads and principals for better linkage among cooperating schools.

Moreover, for the past years of deployment and observations to the demonstration teaching of mathematics practice teachers, despite the training provided by the university and their cooperating schools it is observed that their assessment task and methodologies were not aligned to the learning outcomes being made to measure their knowledge, skills and attitudes. Moreover, comments arise regarding the assessment procedures used during their demonstration teaching in post-conferences.

Hence, to put this in record and to make as reference for instructional planning, the researcher wholeheartedly conducts this study. It is necessary then, to firstly determine the practice teacher's level of perception on the classroom assessment practices as to: alignment and planning; formative practices and feedback; assessment design and validity; use of results and records; and inclusivity and variety. These dimensions adheres to the evaluation tool use during demonstration teaching to assess their assessment tasks.

The study was purposively conducted to investigate the prevailing assessment practices of mathematics practice teachers during their teaching internship. Understanding how these mathematics practice teachers design, implement, and reflect on assessment activities is vital, as assessment constitutes an essential element in promoting effective learning and in developing future educators' pedagogical competence. The findings from this investigation serve as a basis for identifying gaps in assessment literacy and for determining the need for targeted training and exposure to underutilized or unpracticed assessment approaches among both practice teachers and cooperating teachers.

Observing the classroom assessment modalities further provides insights into the diversity, alignment, and feedback mechanisms employed in actual teaching contexts. Ultimately, this study supports the development and implementation of the Teaching Internship Enhancement Program (TIEP) utilizing the SPATRASS

Model proposed by Ormilla (2025), which emphasizes the integration of triangulated assessment practices to strengthen practice teachers' assessment proficiency.

Generally, the researcher would want to investigate the current assessment practices of mathematics practice teachers adopted from their cooperating schools, to determine guides for assessment procedures intended among cooperating schools and to come up with initiated mechanisms and programs to better classroom assessment practices. Specifically, the study sought to answer the following research questions:
a. What is the level of perceived classroom assessment practices of the mathematics practice teachers during their teaching internship as to: alignment and planning; formative practices and feedback; assessment design and validity; use of results and records; and inclusivity and variety?
b. What are the assessment activities employed by the practice teachers during their teaching demonstrations?
c. How does the cooperating teachers mentor their practice teachers regarding assessment modes and activities employed in the classroom?
d. What program(s) can be employed to the practice teachers and cooperating schools based on the result of the study?

This study can catalyze meaningful improvements across multiple levels such as classroom practice, mentoring quality, and school policy. When findings are translated into a well-designed, resourced, and monitored School-Based Enhancement Program (SBEP), the likely outcomes are higher teacher assessment competence, stronger mentoring, more inclusive assessments, and ultimately improved and more equitable student learning.

2. Literature Review

Classroom assessment methods have received a huge of attention globally and in the Philippines in recent years since it cannot do away in the teaching and learning process. There is a great concern on the product and quality of the mathematics practice teachers' assessment methods because of a mandate for assessing instructions and students learning during their internship program. Teachers should provide varied assessment modes and activities to explore learner's understanding and to measure how much learners learns to the content of the lesson (Dunlosky et al., 2013). This indicates that mathematics practice teachers assess learners to determine their learning potentials during the teaching internship. Moreover, practice teachers assess learners understanding to identify their weaknesses and strengths and to obtain feedback about learners' understanding of the knowledge, skills and content taught to them.

In the Philippines, it is mandated that teachers should practice what is stated in DeEd Order no. 8, s. 2025 on the policy guidelines on classroom assessment for the k to 12 basic education program. One of the focuses is assessment for learning (AfL) to be able to uplift learners ability. Filipino Students came from different learning backgrounds with diverse cultures. Samad et al. (2012) affirms that learners have different needs based on their individual abilities and considerably

come from diverse cultural backgrounds. Assessing academic performance of students were not based on a singleton assessment activity and modality. This would mean teaching styles and pedagogies as well as looking at the students' background is paramount. Hence, the result supports the study of Singh et al. (2017), which posits that learners' genuine capabilities and diverse intelligences cannot be captured by one form of assessment alone.

Central to the implementation of teaching internship course, cooperating schools with their cooperating teachers are a great source for mathematics practice teachers to adopt and learn assessment experiences. These defines the mentorship skills provided by their cooperating teachers on assessment practices. Andres et al. (2021) proves that cooperating teachers provided mentoring along with role modelling, instructional process, personal, career and professional knowledge to a very great extent.

Moreover, Calamlam et al. (2019) emphasized effective mentoring through the developed framework that will serve as a guide of cooperating teachers' capability development. However, there is a great challenged on mentorship among teachers when online teaching happens. Mhlongo et al. (2024) discloses that teachers positively experienced efficacy of online instruction materials for their professional development in terms of cognitive, social, teaching and learning. This connotes mentorship of cooperating teachers about online assessment materials for students development.

Several studies highlight the importance of varied assessment employed by teachers in a classroom setting. Talib et al. (2014) emphasized that Assessment for Learning (AfL) such as students participated well in every assessment activities for them to develop, however, with proper guidance and feedback. Granberg et al. (2021) explains that feedback strengthens students' capacity to self-regulate their own performance, thus, formative assessment is specifically intended to provide feedback to improve and accelerate learning. Cajigal and Mantuano (2014) and Biason (2022) said that feedback on the effectiveness of teaching and learning process as observed from the student learning as resulted from formative assessment can create effective teaching and learning plans.

The three main components of the teaching and learning process; content, pedagogy and assessment should be elevated through continuous professional development for a better classroom assessment implementation (Talib et al., 2014). Teachers' lesson plans should be flexible so that learners can adapt to new information. Teachers need to include strategies to check students' understanding on the learning outcomes being pursued and the criteria being applied in assessing their work in the planning. Talib et al. (2014), points out that learners should be informed a head of time on what they learn, as well as how or why they are being evaluated. Hence, learning outcomes, teaching strategies and assessments should be designed carefully. Also, Reyes (2023) affirm that to evaluate and record details of learners' performance and learning, there a need that cooperating teachers should teach practice teachers how to observe students,

ask students questions, conduct formative assessment, and use authentic assessment.

The study scientifically defined a School-Based Enhancement Program (SBEP) which is a locally designed, school-level initiative that targets specific improvement needs (teacher practice, student learning, leadership capacity, assessment systems, etc.). It is co-designed with school stakeholders, aligned with the school's improvement plan (SIP), and emphasizes ongoing coaching, teacher collaboration, and evidence-based professional development embedded in daily practice rather than one-off workshops (D.O. #. 44, s. 2015). While doing the research on assessment practices of practice teachers during teaching internship and mentorship skills of cooperating teachers, it is notable that there is limited studies pertaining to assessment practices particularly within the universities and college or even in the basic education in the northern Philippines setting.

Understanding this study, it will contribute to the mathematics education both scholarly discourse and policy development ensuring better partnerships between the university and the cooperating school. With that, reinforces the national agenda to improve educational outcomes in the Philippine basic education system through visioning quality teachers.

3. Methodology

3.1 Research Design

Mixed-Methods Descriptive-Developmental research design was employed in this study. This approach is appropriate because it integrates both quantitative and qualitative methods to determine the existing assessment modes and activities utilized by practice teachers. Through the analysis of classroom observation results, lesson plans, and interview data, the study gained deeper insights into the mentoring practices of cooperating teachers and the contextual challenges associated with classroom assessment during actual teaching.These concludes a proposed appropriate program and intervention intended for both cooperating teacher and practice teacher.

3.2 Participants and Research Environment

This study consisted of nineteen (19) mathematics practice teachers of the Bachelor of Secondary Education from Ifugao State University–Potia Campus, Ifugao, Philippines, who are enrolled teaching internships during the academic year 2024–2025. The participants had underwent series of demonstration teaching including midterm and final demonstration teaching. The participants also originally submitted their compilation of detailed lesson plans as one of the requirements for the Teaching Internship course.

Moreover, the nineteen (19) mathematics cooperating teachers serves as second participants since they have provided comments during every post conference on the teaching demonstrations of practice teachers. The research study was initiated during the midterm demonstration teaching until the completion of the internship program, and the compilation of corrected and edited lesson plans were accessed for analysis only with the informed consent of the participants. A total population

sampling was employed since all nineteen mathematics practice teachers assigned in the cooperating schools during the internship period were included as participants. This approach was deemed appropriate to capture the complete range of assessment practices and experiences of the target group. Participants who consented were also invited to participate in follow-up interviews. Measures were implemented to ensure voluntary participation, emphasizing that their decision to participate or not in the research would have no impact on their academic standing.

3.3 Data Gathering Tool

Three primary instruments were utilized in the study namely: Survey questionnaire, observation checklist, and semi-structured interview guide. The Survey questionnaire which was validated by five expert and conduct as well as run its reliability with $\alpha = 0.91$ was a self- evaluation on the assessment practices employed by the practice teachers. The survey questionnaire generated primarily quantitative data, as it contained five point Likert-scale items measuring the frequency and extent of assessment practices among mathematics practice teachers. The observation checklists which was also validated by the five expert as well as run its reliability with $\alpha = 0.87$ were used as classroom evaluation tool for the lesson plans and its implementation in the classroom. The observation checklist produced both quantitative and qualitative data, capturing the frequency of observed assessment practices and descriptive notes on how these practices were implemented.

Moreover, the semi-structured interview guide, which was validated by three experts in teacher education, captured additional perspectives not fully reflected in the written documents and to reveal mentorship skills provided by their cooperating teachers as well. The semi-structured interview questions generated qualitative data that provided in-depth insights into the mentoring experiences and assessment challenges encountered by practice teachers and cooperating teachers.

3.4 Data Gathering Procedure

Before the conduct of the research study, the researcher secured approval from the Campus Executive Director. Inform consent was secured from the practice teachers and the cooperating school for data gathering and classroom observations during the teaching internship course. Besides these, lesson plans were observed through a checklist. For the classroom observation, minimum of three observers are required for each session (midterm and final demonstration). The observers are supervising instructor (Researcher), cooperating teachers and school principal (school head). Moreover, to supplement the perceived self-evaluation of assessment practices among practice teachers, semi-structured interviews were conducted with consenting participants to provide deeper insights. All interview responses were transcribed and, along with the observation checklist, prepared for thematic analysis.

3.5 Ethical Consideration

The welfare of the practice teachers (participants) was prioritized throughout the research process to ensure no harm or discomfort occurred. A formal letter was sent to the Office of the Campus Executive Director requesting approval to conduct the study. Since midterm and final demonstration teaching as well as preparation of detailed lesson plans is a requirement solely for academic evaluation during the Teaching Internship course, this study accessed and used these documents through informed consent from the participants. A letter for demonstration teaching approval was also secured from their cooperating school. Participants were assured that involvement in the study was voluntary, and that confidentiality was strictly maintained by anonymizing all data and would be used solely for academic purposes.

3.6 Data Analysis

The quantitative data from the perceived assessment practices among mathematics practice teachers were analyzed using a measure of central tendency- mean following the prescribed scales and interpretation. Moreover, the qualitative data from classroom observations and interviews were analyzed using Braun and Clarke's (2006) six-phase thematic analysis: (1) familiarization with the data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. Coding was done manually, with peer checking to ensure dependability, and trustworthiness was established through data triangulation and member checking.

4. Results and Discussion

4.1 Classroom Assessment Practices of the Mathematics Practice Teachers During their Teaching Internship

These were the classroom assessment practices as perceived by the mathematics practice teachers during their teaching internship. The indicators were categorized as alignment and planning, formative practices and feedback, assessment design and validity, use of results and records, and Inclusivity and variety.

4.1.1 Assessment Practices Among Mathematics Practice Teachers as to Alignment and Planning

Indicators of assessment practices in terms of alignment and planning was presented in Table 1. The average mean of 4.32 with the qualitative description "Always" as perceived by the practice teachers suggests that they consistently apply sound assessment practices that are anchored on proper planning and alignment with instructional goals. Specifically, the highest-rated indicator was *"I plan assessment activities in my lesson plans before teaching"* (M = 4.51, *Always*). This highlights that practice teachers recognize the importance of preparing assessment tasks in advance, ensuring that their strategies are well-integrated into the teaching process rather than being treated as afterthoughts.

Moreover, the indicator *"I align my assessment tasks with the stated learning outcomes/objectives"* had the lowest rating, (M = 4.10, *Often*), although still high, indicates that some practice teachers may occasionally overlook a direct connection between assessment tools and learning objectives. This suggests room

for improvement in strengthening outcomes-based assessment practices to ensure validity and relevance.

Furthermore, the findings assert that practice teachers demonstrate strong alignment and planning in assessment, reflecting their preparedness and commitment to quality instruction. However, mentoring can further emphasize the need to consistently align all assessment tasks with learning objectives to fully adhere to outcomes-based education principles. This finding highlights a significant gap between curriculum goals and the practical implementation of Higher Order Thinking Skills (HOTS) in assessment (Zana et al., 2024).

Table 1: Level of perceived assessment practices among mathematics practice teachers as to alignment and planning

Indicators of Assessment Practices as to Alignment and Planning	Mean	Qualitative Description
I align my assessment tasks with the stated learning outcomes/objectives.	4.10	Often
I plan assessment activities in my lesson plans before teaching.	4.51	Always
I ensure assessments cover the full range of the curriculum taught.	4.23	Always
I follow school/internship program policies on assessment and grading.	4.42	Always
I use summative assessments to measure mastery of learning outcomes.	4.32	Always
Average Mean	**4.32**	**Always**

**Legend: 1.00-1.80 = Never; 1.81-2.60 = Rarely, 2.61-3.40 = Sometimes; 3.41- 4.20 = Often, 4.21-5.00 = Always*

4.1.2 Assessment Practices Among Mathematics Practice Teachers as to Formative Practices and Feedback

Table 2 presents the indicators of assessment practices in terms of formative practices and feedback. It indicates that practice teachers generally exhibit strong application of formative assessment strategies and feedback mechanisms in their classroom practices with an average mean of 4.29 and qualitatively described as 'Always'.

The indicator "*I use formative assessment techniques during lessons (e.g., exit tickets, think-pair-share)*" was observed as the highest mean score (M = 4.45, *Always*), closely followed by "*I reflect on my assessment practices at the end of each lesson/unit*" (M = 4.43, *Always*) and "*I time assessments appropriately (not too long/short) for student level*" (M = 4.42, *Always*). These means that practice teachers are consistent in employing varied formative tools, evaluating their own practices for improvement, and designing assessment tasks that are suitable for learners' capabilities. Such practices suggest a strong awareness of the role of formative assessment in monitoring student progress and enhancing instructional decision-making (Ndlovu, 2025).

Likewise, the relatively lower mean scores were recorded in "*I provide opportunities for students to revise work after feedback*" (M = 4.08, *Often*) and "*I provide timely feedback to students after formative assessments*" (M = 4.12, *Often*). While both

still indicate positive practices, they imply that not all practice teachers maximize feedback as a learning tool. This could mean feedback is sometimes delayed or limited to evaluative comments rather than being fully utilized to support student growth through revision and improvement opportunities.

Also, the findings support that practice teachers demonstrate a strong foundation in formative assessment and feedback practices, though enhancement is needed in providing timely, actionable feedback and offering chances for learners to improve work after feedback (Prastikawati et al., 2024; Morris et al., 2021). Strengthening these areas would further align their practices with the principles of formative assessment as a continuous process of supporting student learning.

Table 2: Level of perceived assessment practices among mathematics practice teachers as to formative practices and feedback

Indicators of Assessment Practices as to Formative Practices and Feedback	Mean	Qualitative Description
I use formative assessment techniques during lessons (e.g., exit tickets, think-pair-share).	4.45	Always
I provide timely feedback to students after formative assessments.	4.12	Often
I provide constructive feedback that guides student improvement.	4.21	Always
I provide opportunities for students to revise work after feedback.	4.08	Often
I reflect on my assessment practices at the end of each lesson/unit.	4.43	Always
I time assessments appropriately (not too long/short) for student level.	4.42	Always
Average Mean	**4.29**	**Always**

**Legend: 1.00-1.80 = Never; 1.81-2.60 = Rarely, 2.61-3.40 = Sometimes; 3.41- 4.20 = Often, 4.21-5.00 = Always*

4.1.3 Assessment Practices Among Mathematics Practice Teachers as to Assessment Design and Validity

Table 3 shows the indicators of assessment practices in terms of assessment design and validity. The computed average mean of 4.19, qualitatively described as *Often*, suggests that practice teachers consistently apply essential principles of assessment design, but not with the same strength and regularity as in the areas of alignment, planning, and formative practices.

The highest-rated indicators were "*I share assessment criteria/rubrics with students before they begin tasks*" (M = 4.60, *Always*) and "*I use rubrics or scoring guides when assessing performance tasks*" (M = 4.52, *Always*). These findings reveal that practice teachers place strong emphasis on transparency and fairness in their assessment, ensuring that learners are informed of expectations and guided by clear criteria. This is a commendable practice aligned with outcomes-based education (OBE) principles and fosters student accountability (IFSU, 2023).

However, several indicators were rated only as *Often*, particularly "*I conduct item analysis or reflection to improve my assessment tasks*" (M = 3.93), "*I validate the reliability of my tests*" (M = 4.02), and "*I ensure classroom assessment conditions are*

standardized when necessary" (M = 4.02). These results indicate that while practice teachers recognize the importance of validity and reliability, they may lack the full expertise or systematic training to consistently apply technical processes such as test validation, pilot testing, and item analysis. Similarly, the indicator *"I design assessment items that measure higher-order thinking"* (M = 4.05, *Often*) reflects a need to strengthen the integration of critical thinking and problem-solving in assessments, moving beyond recall and basic understanding.

Furthermore, the findings implies that practice teachers demonstrate strong competency in using and communicating rubrics, but there is still room for growth in the more technical aspects of assessment design and validation (Ling, 2024; Olson et al., 2021). Continuous mentoring and professional development are recommended, particularly in developing assessments that foster higher-order thinking and in applying systematic validation techniques to ensure fairness, reliability, and accuracy (Ambon et al., 2024).

Table 3: Level of perceived assessment practices among mathematics practice teachers as to assessment design and validity

Indicators of Assessment Practices as to Assessment Design and Validity	Mean	Qualitative Description
I use rubrics or scoring guides when assessing performance tasks.	4.52	Always
I share assessment criteria/rubrics with students before they begin tasks.	4.60	Always
I design assessment items that measure higher-order thinking (analysis, synthesis, evaluation).	4.05	Often
I validate the reliability of my tests (e.g., item review, pilot testing).	4.02	Often
I conduct item analysis or reflection to improve my assessment tasks.	3.93	Often
I consult mentor teacher or supervisor when designing assessments.	4.16	Often
I ensure classroom assessment conditions are standardized when necessary.	4.02	Often
Average Mean	**4.19**	**Often**

**Legend: 1.00-1.80 = Never; 1.81-2.60 = Rarely, 2.61-3.40 = Sometimes; 3.41- 4.20 = Often, 4.21-5.00 = Always*

4.1.4 Assessment Practices Among Mathematics Practice Teachers as to Use of Results and Records

The indicators of assessment practices in terms of use of results and records were presented in Table 4. The computed average mean of 4.50, qualitatively described as *Always*, indicates that practice teachers demonstrate a very high level of consistency in managing, utilizing, and safeguarding assessment outcomes. This result also reflects the highest overall average among the different assessment domains, highlighting the practice teachers' strong sense of responsibility and professionalism in handling assessment data.

The highest-rated indicator was *"I record and keep accurate assessment records of student progress"* (M = 4.61, *Always*), suggesting that practice teachers highly prioritize systematic documentation of learners' performance. This aligns with the

crucial role of record-keeping in tracking progress, ensuring transparency, and supporting both formative and summative decision-making (Ozan et al., 2018). Closely related high ratings were observed in *"I explain students' assessment results and progress to parents/guardians when necessary"* (M = 4.56, *Always*) and *"I feel confident in my ability to design valid assessments"*(M = 4.56, *Always*), indicating that practice teachers not only keep records but also actively communicate results when appropriate, while building confidence in their assessment literacy.

Similarly, high scores were recorded for *"I use assessment results to give grades that reflect actual performance"* (M = 4.52, *Always*) and *"I maintain confidentiality and ethical handling of student assessment data"* (M = 4.45, *Always*). These results affirm that practice teachers value both fairness and ethics in the use of assessment results—ensuring that grades are evidence-based while upholding student privacy (Rasooli et al., 2023). Finally, the indicator *"I adjust my instruction based on assessment results"* (M = 4.32, *Always*) also received a strong rating, though slightly lower compared to others. This suggests that while practice teachers are adept at recording and communicating results, there is still room to more consistently use assessment evidence for instructional improvement and differentiation.

Overall, the findings show that practice teachers demonstrate very high competency in managing assessment results and records, particularly in accurate documentation, ethical practices, and effective communication. These strengths highlight their readiness for professional teaching responsibilities, though continued mentoring may further enhance their ability to use assessment data as a driver for adaptive instruction (Isaeva et al., 2025; Rasooli et al., 2023; Ozan et al., 2018).

Table 4: Level of perceived assessment practices among mathematics practice teachers as to use of results and records

Indicators of Assessment Practices as to Use of Results and Records	Mean	Qualitative Description
I adjust my instruction based on assessment results.	4.32	Always
I record and keep accurate assessment records of student progress.	4.61	Always
I use assessment results to give grades that reflect actual performance.	4.52	Always
I explain students' assessment results and progress to parents/guardians when necessary.	4.56	Always
I maintain confidentiality and ethical handling of student assessment data.	4.45	Always
I feel confident in my ability to design valid assessments.	4.56	Always
Average Mean	**4.50**	**Always**

**Legend: 1.00-1.80 = Never; 1.81-2.60 = Rarely, 2.61-3.40 = Sometimes; 3.41- 4.20 = Often, 4.21-5.00 = Always*

4.1.5 Assessment Practices Among Mathematics Practice Teachers as to Inclusivity and Variety

Table 5 presents the indicators of assessment practices in terms of inclusivity and variety**.** The computed average mean of 4.39, qualitatively described as *Always*, indicates that practice teachers frequently implement diverse and inclusive

assessment practices, ensuring fairness, relevance, and adaptability to students' needs.

The highest-rated indicator was "*I use a variety of assessment methods (e.g., quizzes, projects, performance tasks, oral questioning)*" (M = 4.78, *Always*), showing that practice teachers are highly flexible in their approaches and recognize that learners demonstrate knowledge and skills in multiple ways. This is further reinforced by the high score on "*I ensure assessment tasks are fair and free from bias*" (M = 4.65, *Always*), suggesting a strong commitment to equity in evaluation. Similarly, "*I use alternative assessments when appropriate*" (M = 4.57, *Always*) and "*I use culturally relevant assessment tasks*" (M = 4.46, *Always*) reflect practice teachers' responsiveness to learner diversity and contextual needs.

Meanwhile, the indicator "*I adapt assessments for students with special needs or learning accommodations*" (M = 4.23, *Always*) indicates that while practice teachers strive for inclusivity, the practice is not yet as consistently applied compared to other areas. This may be due to limited training or fewer opportunities to directly handle learners requiring accommodations during internship. Similarly, "*I involve students in setting assessment goals or criteria*" (M = 4.23, *Always*) suggests that student participation in assessment design is practiced, but not fully maximized.

The lowest-rated indicators, both described as *Often*, were "*I use peer and/or self-assessment strategies with students*"(M = 4.16) and "*I use technology/tools (e.g., online quizzes, digital portfolios) for assessment*" (M = 4.05). This suggests that while practice teachers recognize the value of peer/self-assessment and technology-enhanced assessment, these practices are not consistently applied (Ndoye, 2017). Limited resources, training, or time constraints may explain this result. The findings reveal that practice teachers demonstrate a strong commitment to inclusivity and variety in assessment practices, with clear strengths in using multiple methods, ensuring fairness, and employing culturally relevant and alternative assessments (Sachar, 2025).

However, there is room for growth in expanding technology integration, promoting peer/self-assessment, and strengthening accommodations for learners with special needs**.** These areas may be addressed through further training and mentorship, aligning practice teachers more closely with principles of inclusive and learner-centered assessment (Ormilla, 2025).

Table 5: Level of perceived assessment practices among mathematics practice teachers as to inclusivity and variety

No.	Indicators of Assessment Practices as to Inclusivity and Variety	Mean	Qualitative Description
1	I use a variety of assessment methods (e.g., quizzes, projects, performance tasks, oral questioning).	4.78	Always
2	I ensure assessment tasks are fair and free from bias.	4.65	Always
3	I adapt assessments for students with special needs or learning accommodations.	4.23	Always
4	I use peer and/or self-assessment strategies with students.	4.16	Often
5	I use alternative assessments (projects, portfolios, demonstrations) when appropriate.	4.57	Always
6	I use assessment tasks that are culturally relevant for my students.	4.46	Always
7	I use technology/tools (e.g., online quizzes, digital portfolios) for assessment.	4.05	Often
8	I involve students in setting assessment goals or criteria.	4.23	Always
Average Mean		**4.39**	**Always**

**Legend: 1.00-1.80 = Never; 1.81-2.60 = Rarely, 2.61-3.40 = Sometimes; 3.41- 4.20 = Often, 4.21-5.00 = Always*

4.2 Assessment activities employed by the mathematics practice teachers during their teaching demonstrations

Table 6 presents the results of the classroom observations conducted during the midterm and final demonstration teaching of the mathematics practice teachers. As reflected in the table, all the indicators of classroom assessment practices were *fully observed*. This finding signifies that the mathematics practice teachers consistently demonstrated appropriate assessment behaviors aligned with the learning outcomes and objectives of their lessons.

The full observation of indicators such as the '*clear articulation and visibility of learning outcomes'* and the '*alignment of assessment tasks with stated outcomes'* implies that the practice teachers applied sound principles of outcomes-based education. This demonstrates their ability to plan assessments that directly measure the competencies they intended students to achieve. The use of '*varied assessment methods (oral, written, and performance-based)*' further indicates their awareness of the need to cater to diverse learning preferences and to capture multiple dimensions of student understanding.

Moreover, the '*consistent use of formative assessment techniques'*, such as questioning and checking for understanding, and the provision of '*immediate feedback'* reflect effective pedagogical practices that support continuous learning. The observation that rubrics or scoring guides were utilized and that students understood the assessment criteria underscores the transparency and fairness of their evaluation processes, which are essential elements of authentic assessment.

In addition, the full observance of indicators related to '*assessment appropriateness, differentiation, and inclusivity'* implies that the practice teachers designed tasks that were both level-appropriate and considerate of learners' individual needs. The '*integration of higher-order thinking tasks'* reveals an effort to promote analytical

and critical reasoning among students—an important goal in mathematics instruction.

Furthermore, the evidence of '*recording assessment results'* and '*using assessment evidence for planning subsequent lessons'* shows that practice teachers effectively employed assessment data to inform instructional decisions, aligning with the feedback and reflection cycle advocated in formative assessment theory. The inclusion of '*post-assessment reflection'* signifies the practice teachers' engagement in professional self-evaluation, which is crucial for continuous improvement.

Overall, the findings indicate that the mathematics practice teachers demonstrated a high level of proficiency in classroom assessment practices. The consistent "Fully Observed" remarks implies that both their cooperating teachers and mentors effectively guided them in translating assessment principles into practice. This also reflects the effectiveness of the teacher education program's emphasis on assessment literacy and mentoring support during the internship period (Costache, 2024).

Table 6: Classroom Observation Checklist of the Observers (Midterm and Final Demonstration Teaching)

No	Indicators	M	Remarks
1	Learning outcomes stated and visible (verbally or on board).	2.00	Fully Observed
2	Assessment tasks clearly aligned to stated outcomes.	2.00	Fully Observed
3	Variety of assessment methods used during lesson (oral, written, performance).	2.00	Fully Observed
4	Use of formative techniques during instruction (e.g., questioning, checks for understanding).	2.00	Fully Observed
5	Immediate feedback provided to students during class.	2.00	Fully Observed
6	Rubrics/scoring guides used or referenced for tasks.	2.00	Fully Observed
7	Students understand the assessment criteria.	2.00	Fully Observed
8	Students given opportunities for self or peer assessment.	2.00	Fully Observed
9	Assessment tasks appropriate to students' level (difficulty, time).	2.00	Fully Observed
10	Tasks demonstrate higher-order thinking where appropriate.	2.00	Fully Observed
11	Differentiation or accommodations observed for learners with special needs.	2.00	Fully Observed
12	Assessment Administration is fair and non-biased (language, examples appropriate).	2.00	Fully Observed
13	Clear instructions for assessment tasks were given.	2.00	Fully Observed
14	Evidence of recording/keeping assessment results during/after lesson.	2.00	Fully Observed

15	Teacher uses assessment evidence to plan next steps.	2.00	Fully Observed
16	Use of technology for assessment (if applicable).	1.90	Fully Observed
17	Students engaged and motivated by assessment tasks.	2.00	Fully Observed
18	Classroom environment supports honest demonstration of learning (low anxiety).	2.00	Fully Observed
19	Post-assessment teacher reflection (notes, brief discussion, or debrief) observed.	2.00	Fully Observed
20	Overall rating of assessment practice observed.	2.00	Fully Observed

**Legend: 0-0.66= Not Observed; 0.67-1.33= Partially Observed; 1.34-2:00=Fully Observed*

Based on the classroom observations among mathematics practice teachers as well as documenting their assessment activities employed in their detailed lesson plans, the following are the assessment activities practiced during the study which was thematized into cognitive, affective and psychomotor domain.

4.2.1 Dominance of Cognitive Assessments

Practice teachers primarily relied on assessment activities that measured knowledge, understanding, and thinking skills. Activities such as multiple choice, identification, true or false, problem solving, word problems, essays, and mathematical investigations were consistently used. These assessments were observed to evaluate both lower-order thinking (recall and comprehension) and higher-order thinking (analysis, reasoning, and application). One notable pattern was the heavy use of problem-solving tasks, which is consistent with the nature of mathematics instruction. This finding suggests that practice teachers prioritize accuracy, reasoning, and logical processes in evaluating student performance (Oco et al., 2023).

4.2.2 Integration of Affective Assessments

Apart from written tests, practice teachers also utilized assessments that addressed students' values, attitudes, and participation. Recitation emerged as one of the most common affective assessment activities, as it allowed students to demonstrate confidence and willingness to participate. Similarly, group reporting encouraged collaboration, teamwork, and communication among learners. These activities reveal that practice teachers recognize the importance of nurturing students' engagement, motivation, and interpersonal skills, which are essential for holistic learning (Johnson, 2017).

4.2.3 Presence of Psychomotor-Oriented Assessments

The inclusion of labelling diagrams, graph construction, and group presentations highlights the practice teachers' use of performance-based tasks. These activities required students to demonstrate skills in visualization, accuracy, and effective presentation of mathematical ideas. For example, constructing graphs demanded both technical skills and conceptual understanding, while group reporting required students to blend communication with content mastery. These findings suggest that practice teachers also value the practical and demonstrative side of mathematics learning (Kasa et al., 2024).

4.2.4 Move Toward Holistic Assessment

Although cognitive assessments remain dominant, the integration of affective and psychomotor activities shows that practice teachers are beginning to embrace holistic approaches to assessment. By including a variety of tasks, they provide opportunities for learners with different strengths to succeed, thus making assessment more inclusive (Cuseo, 2015). This balance also reflects the principles of outcomes-based education, where learning is not only measured by what students know but also by how they perform and interact in real-life contexts (Saha et al., 2023).

Table 7: Assessment Activities of Mathematics Practice Teachers Observed During Teaching Internship

Common Assessment Activities	Observed Focus/ Skills measured	Interpretation/ Thematics Insight	Learning Domain
Multiple choice, Identification, True or False, Problem Solving, Word Problems, Essays, Mathematical Investigations	Knowledge recall, comprehension, reasoning, analysis, and application	Cognitive assessments were dominant, emphasizing accuracy, logical reasoning, and problem-solving skills aligned with mathematics learning.	Cognitive
Recitation, Group Reporting	Participation, motivation, confidence, collaboration, and communication	Practice teachers integrated affective assessments to foster engagement, teamwork, and positive learning attitudes, supporting holistic development.	Affective
Labelling Diagrams, Graph Construction, Group Presentations (use of technology assessments were included)	Visualization, precision, technical skills, and performance-based demonstration	The inclusion of psychomotor tasks showed emphasis on students' practical and demonstrative abilities in presenting mathematical concepts.	Psychomotor
Combination of cognitive, affective, and psychomotor tasks	Integration of knowledge, skills, and attitudes	Reflects a move toward inclusive and outcomes-based assessment practices where learners' diverse abilities are valued.	Holistic Approach

4.3 How do cooperating teachers mentor their practice teachers regarding the assessment modes and activities employed in the classroom?

The responses from practice teachers revealed several recurring themes about how mentoring is carried out in relation to classroom assessments. The findings highlight the roles of cooperating teachers as models, feedback providers, resource sharers, and facilitators of reflective practice**.**

4.3.1 Guidance Through Modeling and Demonstration

Cooperating teachers often begin the mentoring process by allowing math practice teachers to observe how assessments are administered in actual classroom settings. These was caried during their Field Study Courses before teaching internship. Through this modeling approach, math practice teachers are able to see concrete examples of how quizzes, performance tasks, and oral questioning are carried out. One participant shared:

> *"I usually observed my cooperating teacher during his class first so that I can see how he conducts quizzes, performance tasks, and oral recitations…Through modelling by him, I truly learn practical ways of implementing assessments."*

This finding suggests that demonstration and observation are key mentoring strategies, enabling mathematics practice teachers to acquire not only technical knowledge but also confidence in handling assessments (Wang et al., 2025; Lee et al., 2023).

4.3.2 Providing Feedback and Reflection

Mentorship also takes place through post-lesson conferences where cooperating teachers provide feedback on the assessment tools and strategies used by mathematics practice teachers. These feedback sessions focus on clarity, appropriateness, and effectiveness. As one mathematics practice teacher expressed:

> *"After my teaching demonstration, my cooperating teacher gave me detailed feedback on the assessments I used—what worked, what didn't, and what I can improve."*

The findings align with those of Nesbitt et al. (2024) and Asregid et al. (2023), indicating that an emphasis on feedback embodies a reflective mentoring approach that promotes continuous improvement of practice teachers' assessment practices through constructive feedback.

4.3.3 Encouraging Variety and Inclusivity in Assessment

Cooperating teachers also guide the mathematis practice teachers in diversifying their assessment strategies **t**o ensure inclusivity and engagement. They encourage the use of both traditional and performance-based tasks. One participant mentioned:

> *"My cooperating teacher encourages me to try different forms of assessment, not just written exams, but also group work, presentations, and performance tasks."*

This shows that cooperating teachers mentor mathematics practice teachers to move beyond recall-based tests and consider the needs of diverse learners by adopting more holistic and student-centered approaches (Matić et al., 2020; Anthony et al., 2009). Moreover, mathematics practice teachers may integrate technology assessment modes in their teaching (Elmahdi et al., 2028).

4.3.4 Sharing of Resources and Strategies

Another significant aspect of mentoring involves providing resources such as sample test items, rubrics, and Table of Specifications (TOS) as well as personal printing machines**.** Cooperating teachers also share practical strategies for aligning assessments with learning objectives. For example, one said:

> *"Sometimes, my cooperating teacher helped me designing the Table of Specifications so I can align my assessment activities with learning objectives. She always let… printer be used by me"*

By sharing these materials, cooperating teachers equip practice teachers with ready-to-use tools while also teaching them how to design and adapt assessment instruments independently (Reyes, 2023).

4.3.5 Monitoring and Gradual Independence

Finally, cooperating teachers emphasized the importance of monitoring practice teachers closely in the beginning and then gradually giving them independence**.** One teacher explained:

> *"At first, my cooperating teacher closely supervised my assessments, checking the test items and rubrics before I use them. As I gain confidence, my cooperating teacher gave me freedom to design my own assessment activities."*

This gradual release of responsibility highlights a developmental approach to mentoring, where practice teachers are scaffolded until they gain competence and autonomy in assessment design and implementation. The qualitative findings indicate that cooperating teachers mentor practice teachers through a combination of modeling, feedback, encouragement of varied assessment modes, resource sharing, and progressive independence**.**

These mentoring practices not only enhance the technical competence of practice teachers in assessment but also build their confidence, creativity, and reflective thinking (Reyes, 2023). Ultimately, mentoring fosters the professional growth of practice teachers by preparing them to design and implement effective, inclusive, and outcomes-based assessment activities in the classroom (Samundeeswari, 2024).

4.4 Program(s) that can be employed to the practice teachers and cooperating schools based on the result of the study

Based on the findings of this study, it is evident that although mathematics practice teachers possess a foundational awareness of classroom assessments, significant issues remain in the experiential learnings during teaching internships. To address these issues, the School-Based Enhancement Programs for PTs and CTs was essential. This proposed program provides a comprehensive

framework to enhance classroom assessment practices among practice teachers and cooperating teachers (Ormilla, 2025). Each component is designed to address a key aspect of assessment, mentoring, inclusivity, innovation, and collaboration—ensuring that both mathematics practice teachers and cooperating teachers are well-equipped to meet the demands of outcomes-based and inclusive education.

Table 8: School-Based Enhancement Programs for Practice Teachers and Cooperating Teachers in the Philippines

Program	Objectives	Key Activities	Expected Outcomes
1. Assessment Capacity-Building Program	Enhance the skills of practice teachers and cooperating teachers in developing valid, reliable, and inclusive assessment tools.	- Seminar-workshops on test construction and TOS - Training on rubric development - Demonstration of authentic assessment strategies	- Practice teachers design high-quality, outcomes-based assessments. - Cooperating teachers gain updated mentoring strategies.
2. Mentoring and Coaching Enhancement Program	Strengthen the mentoring relationship between cooperating teachers and practice teachers in classroom assessment practices.	- Orientation for cooperating teachers on mentoring - Regular pre- and post-conference sessions - Peer coaching and lesson study groups	- Consistent feedback mechanisms are established. - Practice teachers gain confidence and independence.
3. Inclusive Assessment and Differentiation Program	Promote assessment practices that cater to diverse learners' needs and abilities.	- Workshop on differentiated instruction and inclusive assessment - Development of modified assessments - Sharing of best practices on formative feedback	- Practice teachers are equipped to design inclusive assessments. - Cooperating schools strengthen inclusive education initiatives.
4. Research and Innovation in Assessment Program	Encourage classroom-based research and innovation on assessment practices.	- Training on action research - School-based research forums - Compilation of best practices into a resource guide	- Practice teachers adopt reflective, evidence-based practices. - Schools foster a culture of research and innovation.
5. Collaborative Professional	Establish continuous sharing and collaboration	- Monthly PLC meetings - Online discussion	- Stronger collaboration among schools and

Learning Community (PLC)	among practice teachers, cooperating teachers, and university supervisors.	groups - Joint evaluation of assessment tools	universities. - Sustained improvement in assessment practices.

4. Conclusions, recommendations, and limitations

4.1 Conclusions

Mathematics practice teachers exhibit a solid foundation in assessment literacy and competency, but continuous guidance from mentor teachers and targeted training are essential to refine their skills in feedback, validity, inclusivity, and technology integration. Strengthening these areas will not only improve their assessment practices but also prepare them to meet the demands of 21st-century, learner-centered education.

Mathematics practice teachers consistently demonstrated appropriate assessment behaviors aligned with the learning outcomes and objectives of their lessons. They employed a wide variety of assessment activities during their teaching internship. Cognitive tasks are the most prevalent, focusing on knowledge acquisition and problem-solving. However, affective and psychomotor assessments are also integrated, particularly through recitation, group reporting, labeling, and graph construction. Overall, the assessment practices point toward a growing awareness of the need for comprehensive and inclusive evaluation of students in mathematics.

Mathematics cooperating teachers mentor practice teachers through a combination of modeling, feedback, encouragement of varied assessment modes, resource sharing, and progressive independence**.** These mentoring practices not only enhance the technical competence of practice teachers in assessment but also build their confidence, creativity, and reflective thinking. Ultimately, mentoring fosters the professional growth of practice teachers by preparing them to design and implement effective, inclusive, and outcomes-based assessment activities in the classroom.

The proposed program is a holistic initiative that addresses the critical aspects of assessment literacy, mentoring, inclusivity, research, and collaboration. By integrating capacity-building workshops, mentoring support, inclusive practices, research engagement, and professional learning communities, the program ensures that practice teachers are well-prepared for the complexities of classroom assessment. Moreover, cooperating schools and universities benefit from stronger partnerships and a shared commitment to improving teaching and learning outcomes.

4.2 Recommendation

Cooperating teachers must sustain and strengthen mentoring practices that emphasize feedback, reflective dialogue, and co-assessment. Structured

mentoring sessions and post-observation conferences may be institutionalized to ensure consistent guidance for practice teachers throughout the internship period.

Teacher education institutions in the Philippines should conduct capacity-building workshops focused on *feedback mechanisms, assessment validity, inclusivity, and technology integration*. Such training will refine the assessment literacy of practice teachers and equip them to apply diverse and authentic assessment approaches in mathematics instruction. Mathematics practice teachers should be encouraged to balance cognitive, affective, and psychomotor assessments to ensure holistic evaluation of student learning. Lesson planning and classroom assessment designs must intentionally integrate multiple domains of learning to capture a broader spectrum of student achievement.

Closer coordination between cooperating schools and teacher education institutions is recommended to align mentoring strategies, assessment standards, and feedback systems. The establishment of a School-Based Enhancement Program can serve as a platform for joint training, observation sharing, and professional development activities. Practice teachers should be encouraged to engage in classroom-based research and reflective journaling on assessment experiences. This can promote self-awareness and evidence-based improvement in their teaching and assessment practices.

4.3 Limitations

The study involved only nineteen mathematics practice teachers from a specific institution, which may limit the generalizability of the results to other teacher education programs or subject areas. The study's focus on mathematics practice teachers may not capture unique assessment challenges and mentoring approaches present in other disciplines. Findings were drawn from classroom observations, lesson plans, and interviews conducted within a single semester and local context; thus, results may not fully represent variations in mentoring practices across different schools or academic years. Although triangulation was employed, observation data and interview responses may still be influenced by observer perception and participant self-reporting tendencies.

The proposed School-Based Enhancement Program was conceptualized based on current findings; its effectiveness would require further validation through implementation and evaluation in real classroom settings. Future studies may focus on the actual implementation of the proposed *School-Based Enhancement Program* to assess its effectiveness in improving practice teachers' assessment literacy and mentoring engagement. Evaluative research using pre-test and post-test designs, or longitudinal case studies, may provide empirical evidence of its impact.

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6. References

Ambon, J., Alias, B. S., Komariah, A., & Mansor, A. N. (2024). The impact of continuous professional development on teaching quality: a systematic review. *Int J Eval & Res Educ ISSN*, *2252*(8822), 3839. http://doi.org/10.11591/ijere.v13i6.30427

Ampo,W,M. G., Rullen, M, S. M., Deguit, E, O.,Perocho,R, V.&Romero, P.J. B.(2025). From Traditional School to Virtual Classroom: Students' Lived Experiences on Blended Learning Implementation. International Journal of Education and Emerging Practices, 1(2), 1-15.https://doi.org/10.63236/injeep.1.2.1

Andres, A. D., Calanoga, M. C. M., Vecaldo, R. T., Caranguian, C. B., Julian, C. B., Pamittan, S. T., ... & Natividad, C. B. (2021). Mentoring Support of Cooperating Teachers: Insights from Filipino Practice Teachers. *Int J Edu Sci*, *34*(1-3), 24-33. https://doi.org/10.31901/24566322.2021/34.1-3.1193

Anthony, G., & Walshaw, M. (2009). Characteristics of effective teaching of mathematics: A view from the West. *Journal of Mathematics Education*, *2*(2), 147-164.

Asregid, D., Mihiretie, D. M., & Kassa, S. A. (2023). Teacher educators use of feedback to facilitate reflective practice among pre-service teachers during microteaching. *Cogent Education*, *10*(2), 2257121. http://doi.org/10.1080/2331186X.2023.2257121

Baniasadi, A., Salehi, K., Khodaie, E., Bagheri Noaparast, K., & Izanloo, B. (2023). Fairness in classroom assessment: A systematic review. *The Asia-Pacific Education Researcher*, *32*(1), 91-109. https://doi.org/10.1007/s40299-021-00636-z

Biason, J. (2022). Assessment of Learning Competencies in Mathematics: Basis for Contextualized Instructional Material Development. *Psychology and Education: A Multidisciplinary Journal*, *4*(7), 1-1. http://doi.org/10.5281/zenodo.7133956

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Cajigal, R. & Mantuano, M.L. (2014), *Assessment of Learning 2*. Adriana Publishing Co., Inc.

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

Costache, B. (2024). Rethinking the training of teaching staff through the development of internship and mentoring programs. In *ICERI2024 Proceedings* (pp. 5846-5852). IATED. https://doi.org/10.21125/iceri.2024.1419

Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. SAGE Publications.

Cuseo, J. (2015). *Effective culturally inclusive assessment of student learning and academic performance*. http://doi.org/10.13140/RG.2.1.4115.5281

Department of Education. (2015). *DepED Order No. 44, s. 2015: Guidelines on the Enhanced School Improvement Planning (SIP)*.

Department of Education. (2017). *Philippine Professional Standards for Teachers*. https://www.deped.gov.ph

Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology. *Psychological Science in the Public interest*, *14*(1), 4-58. https://doi.org/10.1177/1529100612453266

Elmahdi, I., Al-Hattami, A., & Fawzi, H. (2018). Using Technology for Formative Assessment to Improve Students' Learning. *Turkish Online Journal of Educational Technology-TOJET*, *17*(2), 182-188. https://www.deped.gov.ph

Granberg, C., Palm, T., & Palmberg, B. (2021). A case study of a formative assessment practice and the effects on students' self-regulated learning. *Studies in Educational Evaluation*, *68*, 100955. https://doi.org/10.1016/j.stueduc.2020.100955

Ifugao State University. (2023). *Outcomes-based education manual* [Internal document].

Isaeva, R., Karasartova, N., Dznunusnalieva, K., Mirzoeva, K., & Mokliuk, M. (2025). Enhancing learning effectiveness through adaptive learning platforms and emerging computer technologies in education. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*, *9*(1), 144-160. https://doi.org/10.22437/jiituj.v9i1.37967

Johnson, D. (2017). The role of teachers in motivating students to learn. *BU Journal of Graduate studies in education*, *9*(1), 46-49. http://files.eric.ed.gov/fulltext/EJ1230415.pdf

Kasa, Y., Areaya, S., & Woldemichael, M. (2024). Mathematics teachers' beliefs about mathematics, its teaching, and learning: The case of five teachers. Pedagogical Research, 9(2), em0191. https://doi.org/10.29333/pr/14172

Lee, H. J., & Vongkulluksn, V. W. (2023). Enhancing mathematics teacher professional learning through a contextualized professional development program. *Teacher Development*, *27*(1), 92-115. https://doi.org/10.1080/13664530.2022.2134195

Ling, J. H. (2024). A Review of Rubrics in Education: Potential and Challenges. *Pedagogy: Indonesian Journal of Teaching and Learning Research*, 2(1), 1-14. https://ejournal.aecindonesia.org/index.php/pedagogy/article/view/199

Matić, L. J., Bičvić, D. M., & Filipov, M. (2020). Characteristics of effective teaching of mathematics. *Pedagoška obzorja*, *35*(3-4), 19-37.

Meng, S. (2023). Enhancing teaching and learning: Aligning instructional practices with education quality standards. *Research and Advances in Education*, *2*(7), 17-31. https://doi.org/10.56397/RAE.2023.07.04

Mhlongo, S., Ndlovu, M., & Chirinda, B. (2024). Mathematics teachers' experiences of using online teaching resources for professional learning in a context of disadvantage. *International Journal of Learning, Teaching and Educational Research*, *23*(10), 27-44. https://doi.org/10.26803/ijlter.23.10.2

Morris, R., Perry, T., & Wardle, L. (2021). Formative assessment and feedback for learning in higher education: A systematic review. *Review of Education*, *9*(3), e3292. https://doi.org/10.1002/rev3.3292

Ndlovu, B. B. (2025). Exploring teachers' practices when using formative assessment in improving quality education. *Cogent Education*, *12*(1), 2451489. https://doi.org/10.1080/2331186X.2025.2451489

Ndoye, A. (2017). Peer/Self-Assessment and Student Learning. *International journal of teaching and learning in higher education*, *29*(2), 255-269. http://www.isetl.org/ijtlhe/

Nesbitt, H., & Barry, D. (2024). Does the Mentorship of Cooperating Teachers Meet the Needs of Their Student Teachers? A Mixed-Methods Exploration. *Journal of Agricultural Education*, 65(4). https://doi.org/10.5032/jae.v65i4.100

Oco, R., Jade, S., Sabasaje, N., & Oco, R. M. (2023). Students' mathematical skills and performance. *International Journal of Multidisciplinary Research and Publications (IJMRAP)*, *6*(2), 328-332. https://www.researchgate.net/publication/373110709

Olson, J. M., & Krysiak, R. (2021). Rubrics as tools for effective assessment of student learning and program quality. In *Curriculum development and online instruction for the 21st century* (pp. 173-200). IGI Global. http://doi.org/10.4018/978-1-7998-7653-3.ch010

OpenAI. (2023). *ChatGPT* (Mar 14 version) [Large language model]. https://chat.openai.com/chat (Accessed September 22, 2025)

Ormilla, R. C. G. (2025). Bridging the Gap: A Qualitative Analysis of the Philippine Professional Standards for Teachers and Teaching Internship Experiences of

Practice Teachers. *International Journal of Learning, Teaching and Educational Research*, 24(9), 509-522. https://doi.org/10.26803/ijlter.24.9.25

Ozan, C., & Kıncal, R. Y. (2018). The effects of formative assessment on academic achievement, attitudes toward the lesson, and self-regulation skills. *Educational Sciences: Theory & Practice, 18,* 85–118. http://doi.org/10.12738/estp.2018.1.0216

Prastikawati, E. F., Adeoye, M. A., & Ryan, J. C. (2024). Fostering effective teaching practices: Integrating formative assessment and mentorship in Indonesian preservice teacher education. *Indonesian Journal on Learning and Advanced Education (IJOLAE)*, 230-253. https://doi.org/10.23917/ijolae.v6i2.23431

Rasooli, A., Rasegh, A., Zandi, H., & Firoozi, T. (2023). Teachers' conceptions of fairness in classroom assessment: An empirical study. *Journal of Teacher Education*, *74*(3), 260-273. http://doi.org/10.1177/00224871221130742

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://doi.org/10.26803/ijlter.22.1.20

Sachar, S. (2025). Managing Assessment Challenges in Diverse Classrooms. https://www.eejournals.org/

Saha, G. C., Akber, S. M., & Roy, A. (2023). Impact of Outcome-Based Education (OBE) on Learners' Performance in Business Courses. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, *8*(8), 6. http://doi.org/10.26668/businessreview/2023.v8i8.2394

Samad, A. A., Kaur, C., & Singh, S. (2012). The use of portfolio as an assessment tool in the Malaysian L2 classroom. *International Journal of English Language Education*, *1*(1), 94-108. http://dx.doi.org/10.5296/ijele.v1i1.2851

Samundeeswari, D., Angayarkanni, R., Raju, G., Rana, N., & Sharma, A. (2024). Teacher professional development: Effective strategies and evaluation methods. *Educational Administration: Theory and Practice*, *30*(6), 1726-1733. http://doi.org/10.53555/kuey.v30i6.5578

Singh, C. K. S., Lebar, O., Kepol, N., Abdul Rahman, R., & Muhammad Mukhtar, K. A. (2017). An observation of classroom assessment practices among lecturers in selected Malaysian higher learning institutions. *Malaysian Journal of Learning and Instruction (MJLI)*, *14*(1), 23-61. https://repo.uum.edu.my/id/eprint/29462

Talib, R., Kamsah, M. Z., Naim, H. A., Latif, A. A., Abu Naim, H., & Abdul Latif, A. (2014). From principle to practice: Assessment for learning in Malaysian school-based assessment classroom. *International Journal of Social Sciences and Education*, *4*(4), 850-857. http://ijsse.com/sites/default/files/issues/2014/v4-i4-2014-1/Paper-11.pdf

Wang, X., Husu, J., & Toom, A. (2025). What makes a good mentor of in-service teacher education? —A systematic review of mentoring competence from a transformative learning perspective. *Teaching and Teacher Education*, *153*, 104822. https://doi.org/10.1016/j.tate.2024.104822

Zana, F. M., Sa'dijah, C., Susiswo, Anwar, L., & Zulnaidi, H. (2024). Curriculum and teacher assessment practices in mathematics learning: Alignment with higher order thinking skills in Indonesian secondary schools. *Journal on Mathematics Education, 15*(4), 1311–1334. https://doi.org/10.22342/jme.v15i4.pp1311-1334

Appendix 1. Survey Questionnaire

Survey Questionnaire on Assessment Practices of Practice Teachers
Research Title: Classroom Assessment Practices of Practice Teachers and Mentoring Support of Cooperating Teachers: Inputs for a School-Based Enhancement Program in the Philippines

Instructions
Please answer all items honestly. Kindly choose the response that best describes your usual practice during the teaching internship. Rest assured that all responses will be kept with confidentiality

Part A: Survey Questionnaire (Self-Report by Practice Teachers)
Part I — Background / Demographics
1. Name (optional): _____ 2. Age: ____
3. Sex: ☐ Male ☐ Female ☐ Other 4. Degree program / Major: _____
5. Subject/s taught during internship: _____
6. School / Grade level of assignment: _____
7. Length of internship placement (weeks): ____

3.7 Part II — Assessment Practices
Use this scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always

Alignment and Planning	5	4	3	2	1
I align my assessment tasks with the stated learning outcomes/objectives.					
I plan assessment activities in my lesson plans before teaching.					
I ensure assessments cover the full range of the curriculum taught.					
I follow school/internship program policies on assessment and grading.					
I use summative assessments to measure mastery of learning outcomes.					

Formative Practices and Feedback	5	4	3	2	1
I use formative assessment techniques during lessons (e.g., exit tickets, think-pair-share).					
I provide timely feedback to students after formative assessments.					
I provide constructive feedback that guides student improvement.					
I provide opportunities for students to revise work after feedback.					
I reflect on my assessment practices at the end of each lesson/unit.					
I time assessments appropriately (not too long/short) for student level.					
Assessment Design and Validity	**5**	**4**	**3**	**2**	**1**

I use rubrics or scoring guides when assessing performance tasks.					
I share assessment criteria/rubrics with students before they begin tasks.					
I design assessment items that measure higher-order thinking (analysis, synthesis, evaluation).					
I validate the reliability of my tests (e.g., item review, pilot testing).					
I conduct item analysis or reflection to improve my assessment tasks.					
I consult mentor teacher or supervisor when designing assessments.					
I ensure classroom assessment conditions are standardized when necessary.					

Use of Results and Records	**5**	**4**	**3**	**2**	**1**
I adjust my instruction based on assessment results.					
I record and keep accurate assessment records of student progress.					
I use assessment results to give grades that reflect actual performance.					
I explain students' assessment results and progress to parents/guardians when necessary.					
I maintain confidentiality and ethical handling of student assessment data.					
I feel confident in my ability to design valid assessments.					

Inclusivity and Variety	**5**	**4**	**3**	**2**	**1**
I use a variety of assessment methods (e.g., quizzes, projects, performance tasks, oral questioning).					
I ensure assessment tasks are fair and free from bias.					
I adapt assessments for students with special needs or learning accommodations.					
I use peer and/or self-assessment strategies with students.					
I use alternative assessments (projects, portfolios, demonstrations) when appropriate.					
I use assessment tasks that are culturally relevant for my students.					
I use technology/tools (e.g., online quizzes, digital portfolios) for assessment.					
I involve students in setting assessment goals or criteria.					

Appendix 2. Observation Checklist

Checklist on Assessment Practices of Practice Teachers
Research Title: Classroom Assessment Practices of Practice Teachers and Mentoring Support of Cooperating Teachers: Inputs for a School-Based Enhancement Program in the Philippines

Instructions:
For the observation checklist, the observer (cooperating teacher, supervising instructor, and school principal/school head) should mark what is seen during a single lesson and add short comments when needed. Rest assures that all observation notes will be treated with confidentiality.

Part B: Classroom Observation Checklist (for Observer)
For each indicator, mark: 0 = Not observed, 1 = Partially observed, 2 = Fully observed. Add comments if necessary.

No	Indicators	2	1	0	Remarks
1	Learning outcomes stated and visible (verbally or on board).				
2	Assessment tasks clearly aligned to stated outcomes.				
3	Variety of assessment methods used during lesson (oral, written, performance).				
4	Use of formative techniques during instruction (e.g., questioning, checks for understanding).				
5	Immediate feedback provided to students during class.				
6	Rubrics/scoring guides used or referenced for tasks.				
7	Students understand the assessment criteria.				
8	Students given opportunities for self or peer assessment.				
9	Assessment tasks appropriate to students' level (difficulty, time).				
10	Tasks demonstrate higher-order thinking where appropriate.				
11	Differentiation or accommodations observed for learners with special needs.				
12	Assessment Administration is fair and non-biased (language, examples appropriate).				
13	Clear instructions for assessment tasks were given.				
14	Evidence of recording/keeping assessment results during/after lesson.				
15	Teacher uses assessment evidence to plan next steps.				
16	Use of technology for assessment (if applicable).				

17	Students engaged and motivated by assessment tasks.				
18	Classroom environment supports honest demonstration of learning (low anxiety).				
19	Post-assessment teacher reflection (notes, brief discussion, or debrief) observed.				
20	Overall rating of assessment practice observed.				

Appendix 3. Semi-structured Interview Questions

Semi- structured Interview Questions
(Randomly ask each sub-questions)
Research Title: Classroom Assessment Practices of Practice Teachers and Mentoring Support of Cooperating Teachers: Inputs for a School-Based Enhancement Program in the Philippines

Part C— Open-ended Questions

1. What assessment strategies have worked best for you during the internship?

a. Which strategies helped you measure student learning most effectively?
b. How do these strategies align with your lesson objectives?
c. In what ways did your students respond positively to these assessment strategies?
d. How do you ensure that these strategies are inclusive for diverse learners?

2. What is the biggest challenge you face when assessing students?

a. Is the challenge related to time, resources, or student engagement?
b. How do you handle students with different learning needs during assessment?
c. What difficulties do you encounter in preparing or administering assessments?
d. How do you address issues of fairness and reliability in assessment?

3. How does your cooperating teacher mentor you regarding assessment modes and activities employed in the classroom?

a. What specific guidance or feedback does your cooperating teacher provide?
b. How often do you discuss assessment strategies with your cooperating teacher?
c. In what ways does your cooperating teacher model effective assessment practices?
d. How does your cooperating teacher help you improve your own assessment skills?

4. What are your suggestions to improve assessment training in the internship program?

a. What topics should be included in future assessment workshops or seminars?
b. How can the internship program better prepare practice teachers for real classroom assessments?
c. What kind of support (e.g., materials, mentoring, practice sessions) would be most helpful?
d. How can cooperating schools and universities collaborate to improve assessment training?