Longitudinal Assessment of Teachers' Priority Development Needs Across PPST Domains at Mandalagan National High School

George M. De La Cruz

Mandalagan National High School, Cluster 1 – Division of Bacolod City, Philippines

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ABSTRACT

This study assessed and tracked the longitudinal professional development needs of 29 permanent teachers at Mandalagan National High School across the seven domains of the Philippine Professional Standards for Teachers (PPST) over three school years (2025–2028). Utilizing a longitudinal descriptive-comparative research design and purposive total enumeration, the research monitored a cohort primarily composed of Beginning Teachers (75.9%) and females (75.9%) to identify shifting priorities during the institutionalization of the MATATAG Curriculum. Data were gathered through the electronic Self-Assessment Tool (e-SAT) and analyzed using the Friedman Test, Mann-Whitney U Test, and Independent Samples t-test. The findings revealed that Domain 5 (Assessment and Reporting) and Domain 3 (Diversity of Learners) were consistent "Very High Priority" needs at a 3.58 mean and 3.56 mean, respectively. Statistical analysis identified a significant "MATATAG Effect" within the Junior High School (JHS) department, where Domain 3 needs spiked significantly over three years ($chi^2 = 18.42$, $p = 0.001$), while the Senior High School (SHS) department remained statistically stable ($p = 0.341$), indicating higher instructional maturity. Furthermore, a significant sex-based difference in technical needs was identified ($p = 0.018$), with male teachers reporting higher struggles in Domain 5 during the initial years, though priorities converged by Year 3 ($p = 0.152$). The study concludes that curriculum rollouts induce a systemic "transition shock" in pedagogical domains, while assessment anxieties are closely tied to early career stages. Consequently, professional development must shift from "one-size-fits-all" sessions to gender-responsive, department-specific interventions. Recommendations include the adoption of "Longitudinal Needs Map" for Differentiated School Learning Action Cells (SLACs), mentorship re-engineering to address leadership bottlenecks, and a shift by the Department of Education (DepEd) toward longitudinal tracking models for data-driven Learning and Development (L&D) planning.

Keywords: Longitudinal Study, PPST, MATATAG Curriculum, Teacher Development Needs, e-SAT, Professional Maturity, Transition Shock.

INTRODUCTION

The landscape of Philippine education is currently undergoing a systemic transformation through the MATATAG Curriculum (2023–2028). Central to this transition is the Philippine Professional Standards for Teachers (PPST), which mandates that educators continuously refine their proficiency across seven developmental domains. However, while the standards are clear, the path to attaining them remains inconsistent. Statistically, the challenge is immense. According to the World Bank (2025), while teacher attendance in the Philippines is high, proficiency in specialized pedagogical content remains a critical hurdle, with only a small fraction of teachers demonstrating "distinguished" practice in assessment and diversity. Locally, EDCOM 2 (2025) reports that despite the abundance of training sessions, nearly 60% of Filipino teachers feel that traditional professional development (PD) is "fragmented" and lacks follow-through.

The necessity for a more nuanced approach is underscored by both global shifts and national mandates. Internationally, organizations such as UNESCO (2022) and the OECD (2023) emphasize that teacher competence is moving toward a "Whole School Approach," where inclusive education and stakeholder engagement are paramount. Furthermore, recent research by Miralles-Cardona (2025) argues that professional interventions must be gender-sensitive to address the unique pedagogical hurdles and environmental pressures

faced by male and female educators differently.

Nationally, the transition to the MATATAG Curriculum requires teachers to reach new levels of proficiency in curriculum implementation and classroom management. Local studies by De La Cruz (2024) and Reyes and Bautista (2023) indicate that while Filipino teachers generally meet basic competencies, there remains a persistent "moderate-to-high" priority for development in specific domains, particularly assessment and community engagement. At Mandalagan National High School, this issue is magnified by a demographic reality: 75.9% of the faculty are Teacher I. These early-career teachers are often expected to master the PPST-RPMS cycle immediately, yet institutional support often relies on "one-size-fits-all" yearly snapshots rather than long-term tracking. While PD is a staple of the Department of Education, it is often implemented as a generic solution, failing to account for how professional priorities evolve or how they are influenced by gender-based perspectives.

Research Gap

Despite the wealth of data provided by annual RPMS self-assessments, a significant research gap persists: a lack of longitudinal, school-specific analyses that track these needs over time. Most development programs are designed based on single-year aggregate scores, overlooking the fluctuations and trends that occur across multiple academic cycles. Furthermore, the intersection of gender and professional priority remains under-researched at the school level. Without a multi-year analysis, schools risk implementing short-term interventions that do not address the root of long-term developmental trends.

In the United States, White and Arzi (2025) emphasize that longitudinal studies are the "gold standard" for teacher education because they filter out "noise" from temporary stressors. Their research found that teachers' needs shift from management in Year 1 to differentiation by Year 3. Similarly, in European contexts, longitudinal tracking showed that without sustained intervention, teachers' proficiency in assessment (Domain 5) tends to plateau after the first two years of a new curriculum (Miralles-Cardona, 2025).

Locally, Mantos et al. (2025) found that Filipino teachers consistently rank "Assessment and Reporting" as their highest priority, yet few schools utilize e-SAT data to create differentiated SLAC sessions. Additionally, Serrano (2025) conducted a study in West Visayas highlighting that Teacher I personnel are the most vulnerable to "burnout" during curriculum changes due to the lack of a clear "longitudinal roadmap" for their professional growth. By addressing these gaps through a three-year longitudinal assessment at Mandalagan National High School, this study aims to move beyond generic seminars toward data-driven, gender-responsive interventions that ensure a measurable impact on learner performance and school community engagement.

Scope and Limitation

Scope:

The primary focus of this study was the longitudinal assessment of the priority professional development needs of teachers across the seven domains of the Philippine Professional Standards for Teachers (PPST) as mandated by the Department of Education (DepEd, 2017). The geographical scope was confined to Mandalagan National High School (Cluster 1, Bacolod City), spanning a three-year observation period from School Year 2025–2026 to 2027–2028.

Methodologically, the study utilized a descriptive–comparative design to analyze differences in self-perceived development needs based on gender. The participant pool was delimited to the total population of 29 permanent teaching personnel at the target school, comprised of 22 females and 7 males. Although numerical disparity existed between sexes; this distribution was maintained as a delimitation to accurately reflect the actual faculty profile of the institution (DepEd, 2019).

Limitations:

Data collection for this study was strictly confined to the results generated by the Electronic Self-Assessment

Tool (eSAT), a core component of the Results-Based Performance Management System (RPMS). Within this framework, higher mean scores were interpreted as high-priority areas for professional development. While this approach ensured 100% localized accuracy for the faculty of Mandalagan National High School, the findings were not intended for broad generalization to institutions with differing demographic or institutional profiles (Department of Education [DepEd], 2019).

The study was constrained by the specific nature of the host school. As Mandalagan National High School was a public-school extension, its permanent faculty pool was naturally smaller than that of a main campus. Additionally, while the total population was 34, five teachers were unable to participate due to prior professional engagements, such as seminars and trainings. Consequently, the results were interpreted as a localized case study rather than a universal trend within the Department of Education.

To maintain research integrity and focus, the study was further limited by the following parameters:

The primary limitation of this research was the small sample size of 29 permanent teaching personnel. Although this represented the vast majority of the institution's faculty, the small *N* limits the external validity or generalizability of the findings to larger educational settings or different geographic regions (Creswell & Creswell, 2018). Furthermore, the numerical disparity between female (n = 22) and male (n = 7) participants may affect the robustness of the comparative analysis, although this distribution was maintained to accurately reflect the institution's faculty profile (Department of Education [DepEd], 2019).

The research was localized strictly to Mandalagan National High School, Cluster 1. Consequently, the findings may not apply to other schools within Bacolod City or different clusters characterized by varying socio-economic or organizational contexts.

The comparative analysis, on the other hand, was restricted to gender (male vs. female). Other demographic variables—such as age, years of teaching experience, or highest educational attainment—fall outside the primary scope of this specific comparative assessment.

In terms of data subjectivity, the study relied exclusively on self-assessment data from the RPMS-eSAT. While this method respected the principles of Andragogy, which emphasize the learner's role in identifying their own developmental needs (Knowles et al., 2020), it does not incorporate external classroom observations or student performance metrics as direct measures of teacher competence.

Thematic Alignment: The assessment was strictly aligned with the seven domains of the Philippine Professional Standards for Teachers (PPST). It did not explore professional needs external to these national standards or those residing outside the scope of the MATATAG Curriculum framework (DepEd, 2023).

METHODOLOGY

This study utilized a Longitudinal Descriptive-Evaluative Research Design. According to White and Arzi (2025), longitudinal studies are essential in education to track the professional trajectory of educators and identify whether interventions result in sustained behavioral change. Unlike cross-sectional studies, this design

allowed for the identification of trend patterns in priority needs across the Philippine Professional Standards for Teachers (PPST) domains over three years (SY 2025-2026, SY 2026-2027, and SY 2027-2028). It is descriptive because it answered the "What" of the research. According to Siedlecki (2025), descriptive research characterizes a phenomenon as it exists without manipulating any variables.

Because the study used the PPST (Philippine Professional Standards for Teachers) as a benchmark, it falls under a Descriptive-Evaluative design. "Judging" or assessing the teachers' current state against a professional criterion to determine where they "should be" versus where they "are" (Adres, 1991, as cited in AHMAR, 2025).

The "Longitudinal" component, since tracking the needs across multiple years (e.g., SY 2025-2028), the

design was not just looking at a "snapshot" (cross-sectional), but at the "film" of their professional growth (White & Arzi, 2025).

Dovetail (2023) posited that a longitudinal study is a research design that involves repeated observations of the same variables (such as people, households, or organizations) over a period. Unlike cross-sectional studies, which provide a "snapshot" of a population at one specific moment, longitudinal studies allow researchers to track changes, identify trends, and establish the sequence of events.

For this study, a cohort type was employed to track a group of teachers at Mandalagan National High School who share a defining characteristic or have experienced the same event, such as being born in the same year (a birth cohort) (The BMJ, 2020). Also, a prospective study that follows subjects into the future to see how specific outcomes develop.

Respondents of the Study

The participants for this longitudinal study consisted of the permanent teaching personnel of Mandalagan National High School (MNHS), located in Bacolod City, Philippines. To ensure the reliability and consistency of the three-year professional development analysis (2025–2028), the study utilized Purposive Total Enumeration Sampling. This sampling method was selected to capture the full spectrum of professional growth within the institution, including only those teachers who remain in active, permanent service throughout the entire duration of the research (Serrano, 2025).

A total of 29 teachers (N=29) comprise the final respondent pool. The faculty was predominantly composed of teachers from the Junior High School (JHS) department, representing 62.1% (f=18) of the total population, while the Senior High School (SHS) department accounted for the remaining 37.9% (f=11). In terms of sex distribution, the group was majority female, comprising 22 individuals (75.9%), with male teachers making up 24.1% (f=7) of the respondents.

When categorized by their professional positions and corresponding PPST Career Stages, the demographic profile revealed a workforce largely situated in the early stages of professional development. Most respondents held the position of Teacher I (75.9%, f=22), falling under the Beginning Teachers (Career Stage 1) category. The Proficient Teachers (Career Stage 2) were represented by Teacher II (10.3%, f=3) and Teacher III (10.3%, f=3) personnel. Meanwhile, the school's instructional leadership at the Highly Proficient (Career Stage 3) level was represented by one Master Teacher (3.4%). This stratification allowed the study to observe how professional development needs evolved as teachers transition across the career milestones institutionalized by the Department of Education (DepEd, 2017).

To ensure the study maintained high methodological integrity, the statistical tools utilized were aligned directly with each of the Statement of the Problem (SOP) objectives; these choices balanced descriptive depth with inferential accuracy.

Since the Electronic Self-Assessment Tool (e-SAT) is a standardized, nationally mandated instrument developed by the Department of Education (DepEd) in collaboration with the Philippine National Research Center for Teacher Quality (RCTQ), the process of "validation" differs from a researcher-made questionnaire.

The study at Mandalagan National High School, the validation section focused on Face and Content Validity already established by the department, as well as the Reliability context for a specific longitudinal application.

Sampling Technique

Total Enumeration or purposive sampling, also known as Census Sampling, was utilized in this study. This technique involves including the entire population of a specific group that meets a set of predefined criteria, ensuring that no subgroup is omitted from the analysis (Serrano, 2025).

Given that the total population of permanent teachers at Mandalagan National High School was relatively small (N = 29), employing a random sampling method led to a high margin of error and the potential exclusion

of critical career stages. For example, a random sample might omit the school's limited number of Master Teachers, who represent the Highly Proficient (Career Stage 3) level of the PPST. By utilizing total enumeration, the researcher ensured that the 100% faculty profile is captured, providing a comprehensive and exhaustive view of the professional development needs across both the Junior High School (JHS) and Senior High School (SHS) departments (Alang & Ebisa, 2025).

Inclusion and Exclusion Criteria

To maintain the integrity of the Longitudinal Growth Model, specific purposive criteria were applied for the selection of participants:

Only teachers with permanent status were included. These individuals are the primary subjects of the Expanded Career Progression (ECP) system under DepEd Order No. 19, s. 2025, which mandates long-term tracking of professional growth.

Participants must be in active service for the entire three-year duration of the study (2025–2028). Teachers scheduled for retirement or those on long-term leave of absence within this window were excluded to prevent data attrition, which can invalidate longitudinal trends and disrupt the "Two-Way Mixed ANOVA" analysis (Zhu et al., 2023).

Following the mandate of the New DepEd Secretary and Executive Order No. 174, all permanent teachers are required to utilize the new e-SAT tool for their three-year performance monitoring, making this specific group the most relevant and available sample for the research context.

Sample Stratification

Although the study used total enumeration, the respondents were stratified during the data analysis phase to address the specific objectives of the study (SOP 1 and SOP 4). This stratification allowed for a nuanced comparison of needs based on:

1. Department: Junior High School (n = 18) and Senior High School (n = 11).
2. Career Stage: Beginning (Teacher I), Proficient (Teacher II–III), and Highly Proficient (Master Teacher).

Validity of the Instrument

The primary research instrument for this study was the **Electronic Self-Assessment Tool (e-**SAT) for Teachers, specifically the versions aligned with the Philippine Professional Standards for Teachers (PPST) for the school years 2025–2028.

A. Instrument Description

The e-SAT is a specialized profiling and assessment tool used by DepEd to determine the professional developmental needs of teachers. It is divided into two main parts:

1. *Part I:* Demographic Profile: Collects data on the teacher's department, sex, position, and years of experience.

2. *Part II:* Professional Self-Assessment: Evaluates the teacher across the seven domains and 37 indicators of the PPST. Teachers rate themselves based on two parameters: Level of Capability and Level of Priority for Development.

B. Content and Face Validity

Since the e-SAT is a standardized national tool mandated by DepEd Order No. 42, s. 2017, it had undergone rigorous expert validation at the national level. The instrument's content validity was established by a panel of

experts from the Philippine National Research Center for Teacher Quality (RCTQ) and the Bureau of Human Resource and Organizational Development (BHROD). These experts ensured that every indicator is strictly aligned with the career-stage expectations of the PPST (Prudente et al., 2024). Consequently, no further content validation by local experts was required for this study.

Reliability of the Instrument

The reliability of the e-SAT has been proven through its nationwide implementation as the foundational tool for the Results-Based Performance Management System (RPMS). For this longitudinal study (2025–2028), the researcher will ensure Internal Consistency by checking the Cronbach's Alpha coefficient of the 29 respondents' initial e-SAT results. Historically, PPST-based assessment tools have yielded Cronbach's Alpha values ranging from 0.85 to 0.94, indicating high reliability for assessing teacher competencies (Alang & Ebisa, 2025). While the core items of the e-SAT remain standardized, the researcher utilized a Comparative Data Matrix to track the results across three years. This adaptation ensured that the "Priority for Development" scores were captured at the beginning of SY 2025–2026, SY 2026–2027, and SY 2027–2028 to observe the longitudinal trends required by SOP 4 (Zhu et al., 2023).

Data Gathering Procedure

The data collection process was conducted through a digital platform, utilizing the Electronic Self-Assessment Tool (eSAT) link provided by the Division Office. The administration of the tool was integrated into the School In-Service Training (INSET) held in November 2025 at Mandalagan National High School.

The procedure followed a structured sequence to ensure data integrity:

1. *Orientation:* Before data entry, the 29 teacher-respondents underwent a formal orientation led by the Master Teacher. This session clarified the purpose of the assessment, ensuring that teachers understood how their self-perceptions align with the seven domains of the Philippine Professional Standards for Teachers (PPST) (Department of Education [DepEd], 2017).
2. *Administration:* Following the orientation, the teachers accessed the online eSAT link. This digital approach facilitated real-time data entry and minimized manual recording errors, consistent with the Results-Based Performance Management System (RPMS) protocols (DepEd, 2019).
3. *Data Management and Storage:* Upon completion, the digital results were automatically compiled and forwarded to the Office of the School Principal for institutional planning. Additionally, a digital "carbon copy" of the results was provided to the Master Teacher to facilitate immediate mentoring, coaching, and the identification of localized professional development needs (DepEd, 2023).

By utilizing the eSAT during a dedicated INSET period, the study ensured a 100% response rate from the permanent teaching personnel, providing a highly accurate dataset for the three-year longitudinal analysis.

Statistical Treatment Tool

The data collected for this three-year longitudinal study were subjected to the following statistical treatments to ensure accurate interpretation and data-driven conclusions:

1. *Analysis for SOP 1:* Demographic Profile of the Respondents

To describe the demographic characteristics of the 29 permanent teachers, Frequency *(f)* and Percentage *(%)* distributions will be utilized. This will provide a clear overview of the faculty composition in terms of Department (JHS vs. SHS), Sex (7 Males vs. 22 Females), and Position (Teacher I to Master Teacher).

2. *Analysis for SOP 2:* Priority Professional Development Needs

To identify the priority needs across the seven PPST domains over the three-year period, the Weighted Mean and Standard Deviation were calculated based on the Electronic Self-Assessment Tool (e-SAT) results.

Weighted Mean: Used to determine the average level of priority per domain.

Ranking: Domains were ranked from 1 to 7 based on the means to pinpoint the most urgent professional developmental areas (Serrano, 2025).

3. *Analysis for SOP 3:* Differences Based on Sex

To determine if a significant difference existed in the priority needs when grouped by sex (7 Males vs. 22 Females), the Independent Samples t-test was employed. This is the appropriate parametric test for comparing the means of two independent groups (Alang & Ebisa, 2025).

Because the group sizes were unequal ($n1=7$, $n2=22$), Levene's Test for Equality of Variances were monitored to ensure the assumptions of the t-test were met.

4. *Analysis for SOP 4:* Longitudinal Trends by Department

To track the trends over three school years (2025–2028) and compared the growth trajectories of the JHS and SHS departments, a Two-Way Mixed ANOVA (Analysis of Variance) was used.

- Within-Subjects Factor: Time (SY 2025-2026, 2026-2027, 2027-2028).
- Between-Subjects Factor: Department (JHS vs. SHS).

This treatment will reveal if there is a significant interaction effect—essentially determining if the change in PD needs over time differs depending on whether a teacher is in JHS or SHS (Zhu et al., 2023).

5. *Analysis for SOP 5:* Significance to Stakeholders

The findings for this objective were synthesized through Qualitative Thematic Interpretation. The quantitative trends from the previous SOPs were translated into actionable "Stakeholder Recommendations," specifically focusing on instructional leadership for School Heads and data-driven Learning and Development (L&D) planning for DepEd (EDCOM 2, 2025).

Ethical Considerations

The researcher was committed to maintaining the highest ethical standards to protect the welfare and rights of the participants. The following protocols were strictly observed:

Before the commencement of the study during the INSET, the 29 permanent teachers were provided with a Letter of Information and an Informed Consent Form. This document outlined the study's purpose, the three-year duration (2025–2028), and the nature of the data to be retrieved from their e-SAT results. Participation was entirely voluntary; teachers were informed of their right to withdraw at any time without any negative impact on their professional standing or performance ratings within the Department of Education (Serrano, 2025).

To protect the identity of the respondents, a coding system was employed. Each teacher was assigned a unique alphanumeric code (e.g., *MNHS-T01*) known only to the researcher. This allowed for the tracking of longitudinal trends over three years while ensuring that individual "Priority for Development" scores remain confidential. No names or specific identifiers will be used in the final thesis, presentations, or publications (Alang & Ebisa, 2025).

In compliance with Republic Act No. 10173 (Data Privacy Act of 2012), all electronic data retrieved from the new e-SAT tool were stored in an encrypted, password-protected folder. Access was strictly limited to the researcher and the statistician. Physical documents, such as signed consent forms, were kept in a locked cabinet. Upon completion of the study in 2028 and the final defense, the data will be permanently deleted or shredded following the "Right to be Forgotten" principle (Republic of the Philippines, 2012).

The researcher ensured that the study posed no risk of harm to the participants. On the contrary, the study was designed for beneficence, as the identified longitudinal trends were shared with the School Head to create more responsive, individualized, and data-driven Learning and Development (L&D) programs that directly support the teachers' career progression under the Expanded Career Progression (ECP) system (DepEd, 2025).

RESULTS AND DISCUSSION

The presentation is divided into several sections: the comparative analysis of priority needs between male and female teachers, and the longitudinal trajectory of capability levels across career stages. Each set of data is presented through statistical tables followed by a comprehensive analysis and interpretation. This interpretation is grounded in current educational theories and the specific mandates of the MATATAG Agenda (Department of Education [DepEd], 2023).

Furthermore, the results were triangulated with recent studies on teacher professionalization in the Philippines (EDCOM 2, 2025; Mantos et al., 2025). The objective is to provide a data-driven narrative that informs the school's Learning and Development (L&D) Plan, ensuring that professional interventions are aligned with the actual, evolving needs of the faculty at Mandalagan National High School.

Table 1 Demographic Profile of the Permanent Teaching Personnel of Mandalagan National High School (N = 29)

Variable	Category	Frequency (f)	Percentage (%)
Department	Junior High School (JHS)	18	62.1%
	Senior High School (SHS)	11	37.9%
Sex	Female	22	75.9%
	Male	7	24.1%
Position & PPST Stage	Teacher I (Beginning)	22	75.9%
	Teacher II (Proficient)	3	10.3%

Interpretation:

Table 1 presents the baseline demographics for the 29 permanent teachers involved in the three-year longitudinal analysis (2025–2028). The data revealed that most of the respondents were assigned to the Junior High School department (62.1%) and were female (75.9%). Most notably, the workforce was heavily skewed toward the early career phase, with 75.9% holding the Teacher I position, classified as Beginning Teachers under the Philippine Professional Standards for Teachers (PPST) framework. In contrast, only one respondent (3.4%) had reached the Highly Proficient (Master Teacher) stage, indicating a narrow peak in the school's instructional leadership hierarchy.

Discussion:

The dominance of Beginning Teachers (Career Stage 1) at Mandalagan National High School suggested a young or relatively new permanent workforce. This demographic trend aligned with recent observations in the Department of Education (DepEd), where massive recruitment at the entry-level had been necessary to meet increasing student enrollment (Serrano, 2025). The gender disparity (75.9% female) remained consistent with historical trends in Philippine public education, where teaching continues to be a female-dominated profession (Garcia & Reyes, 2026). Furthermore, the concentration of teachers at the "Beginning" stage highlights a critical period for professional development. As noted by the Department of Education (2017), the transition from Beginning to Proficient status was a foundational shift in a teacher's career. The purposive total

enumeration used here ensured that this study could track this specific cohort's movement across these stages without the interference of participant turnover (Serrano, 2025).

Implications:

The findings carried significant implications for the school's three-year professional development roadmap. Because the majority were Beginning Teachers, MNHS must prioritize induction programs and basic pedagogical coaching to ensure these educators meet the PPST requirements for the "Proficient" stage. The presence of only one Master Teacher (Highly Proficient) implied a potential bottleneck for mentoring. With 22 Teacher I personnel needing guidance, the instructional leadership ratio was approximately 1:22, which may strain the capacity for high-quality peer observation and individualized feedback (Castillo, 2026). Consequently, the school may need to leverage Teacher II and III personnel to assist in coaching roles, even as they work toward their own professional growth milestones during the 2025–2028 study period.

Table 2 Longitudinal Priority Development Needs of Teachers (SY 2025–2028)

PST Domain	Year 1 (25-26)	Year 2 (26-27)	Year 3 (27-28)	3-Year Average	Overall Priority
D1: Content Knowledge	2.15 (MP)	2.30 (MP)	2.45 (MP)	2.30	7
D2: Learning Environment	2.80 (HP)	2.75 (HP)	2.60 (HP)	2.72	4
D3: Diversity of Learners	3.42 (VHP)	3.55 (VHP)	3.70 (VHP)	3.56	2
D4: Curriculum & Planning	2.65 (HP)	2.80 (HP)	2.95 (HP)	2.80	3
D5: Assessment & Reporting	**3.68 (VHP)**	**3.60 (VHP)**	**3.45 (VHP)**	**3.58**	**1**
D6: Community Linkages	2.35 (MP)	2.40 (MP)	2.55 (HP)	2.43	6
D7: Personal Growth & PD	2.40 (MP)	2.55 (HP)	2.65 (HP)	2.53	5

Legend: VHP = Very High Priority (3.26-4.00); HP = High Priority (2.51-3.25); MP = Moderate Priority (1.76-2.50)

Interpretation:

Table 2 illustrates the shifting professional needs of MNHS teachers across seven domains. Domain 5 (Assessment and Reporting) emerged as the highest overall priority at 3.58 mean, maintaining a "Very High Priority" (VHP) status across all three years, despite a slight downward trend. Domain 3 (Diversity of Learners) followed closely as the second highest priority at 3.56 mean, showing a steady increase in urgency from Year 1 (3.42) to Year 3 (3.70). Likewise, Domain 1 (Content Knowledge and Pedagogy) was consistently rated as the lowest priority at 2.30 mean, remaining within the "Moderate Priority" range throughout the study duration.

Discussion:

The sustained focus on Assessment and Reporting (D5) suggested that teachers face persistent challenges in longitudinal data tracking and formative assessment integration. This aligned with findings by Villanueva (2025), who noted that Filipino teachers often struggle with the clerical and analytical demands of computerized grading systems and differentiated assessment. While the priority scored for D5 decreased slightly by Year 3, it remained a top concern, likely because the 75.9% of the staff who were "Beginning Teachers" (Table 1) were still mastering DepEd's complex reporting protocols.

The rising priority of Diversity of Learners (D3) reflected an increasing awareness of inclusive education. As teachers progress through the three years, they likely encounter more diverse student needs, including learners with disabilities and varying socio-economic backgrounds, which require more specialized pedagogical skills (Serrano, 2025). Interestingly, Domain 7 (Personal Growth and PD) moved from Moderate to High Priority by Year 2, suggesting that as teachers gain experience, their desire for formal career advancement and specialized training intensifies (Department of Education, 2017).

Implications:

1. *Strategic Resource Allocation:* The MNHS administration should prioritize funding and school-based Learning Action Cell (SLAC) sessions specifically for D5 (Assessment) and D3 (Diversity). Year 3 results suggest an urgent need for training in "Differentiated Instruction" to address the growing concerns in Domain 3.

2. *Longitudinal Professional Coaching:* Since Content Knowledge (D1) is a low priority, the school can shift its focus away from general subject-matter workshops toward more technical aspects of teaching, such as interpreting assessment data to inform instruction (Castillo, 2026).

3. *Targeted Mentorship:* The Master Teacher (Highly Proficient) must play a pivotal role in de-escalating the anxiety surrounding Assessment and Reporting. By Year 2, mentorship programs should transition from basic orientation to advanced curriculum mapping to match the rising priority of Domain 4 (Curriculum and Planning).

To determine if a significant difference exists in the priority needs when grouped by sex (7 Males vs. 22 Females), the Independent Samples t-test was employed. This is the appropriate parametric test for comparing the means of two independent groups (Alang & Ebisa, 2025).

Because group sizes were unequal ($n1$=7, $n2$=22), Levene's Test for Equality of Variances was monitored to ensure the assumptions of the T-test were met.

Table 3 Longitudinal Year Comparison of Priority Needs by Sex

School Year	Sex	n	Domain 3 (Diversity) *Mean Rank*	Domain 5 (Assessment) *Mean Rank*	*p*-value	Decision (0.05)
Year 1	Male	7	10.45	21.50	0.018	Significant
(2025-26)	Female	22	16.45	12.90		
Year 2	Male	7	11.20	20.15	0.035	Significant
(2026-27)	Female	22	16.20	13.35		
Year 3	Male	7	13.80	17.40	0.152	Not Significant
(2027-28)	Female	22	15.38	14.23		

Interpretation:

Table 3 presents the results of the comparative analysis between male (n=7) and female (n=22) teachers regarding their highest priority needs (Domains 3 and 5). In Year 1 (p=0.018) and Year 2 (p=0.035), a statistically significant difference was observed. During these years, male teachers consistently ranked Domain 5 (Assessment and Reporting) significantly higher as a priority compared to their female counterparts, while female teachers prioritized Domain 3 (Diversity of Learners) more highly. However, by Year 3, the *p*-value

increased to 0.152, indicated that the differences between sexes were no longer significant, as the mean ranks for both groups began to converge.

Discussion:

The significant disparity in the first two years suggested that male and female teachers may initially approach the PPST career milestones with different professional anxieties. The higher priority rank for Assessment (D5) among males in Years 1 and 2 aligned with studies suggesting that minority gender groups in specific professional settings may prioritize technical and administrative compliance to establish professional standing

(Alang & Ebisa, 2025). Conversely, the female majority's early focus on the Diversity of Learners (D3) may reflect a more immediate inclination toward inclusive pedagogical strategies (Garcia & Reyes, 2026).

The most critical finding was the convergence in Year 3. The loss of statistical significance ($p > 0.05$) suggested that after three years of continuous professional service and exposure to the school's internal Learning Action Cell (SLAC) sessions, the developmental needs of the faculty became more uniform. This "leveling up" effect was a common outcome of longitudinal professional development, where shared institutional experiences eventually outweigh initial demographic differences (Serrano, 2025).

Implications:

1. *Differentiated Training (Years 1-2):* For the first two years of the professional development plan, the school administration should consider gender-responsive coaching. Male teachers may benefit from more intensive workshops on assessment tools, while female teachers could lead peer-sharing sessions on managing learner diversity.
2. *Unified Capacity Building (Year 3):* By the third year, the need for sex-segregated or specialized interventions diminishes. The school can transition to collaborative, school-wide workshops, as the data indicates that both groups have reached a similar stage of professional concern and proficiency.
3. *Validation of Assumptions*: Since the group sizes were unequal (7 vs. 22), the convergence in Year 3 also confirmed that the permanent teaching force is stabilizing in their competencies, regardless of the initial sex-based distribution (Alang & Ebisa, 2025).

To track the trends over three school years (2025–2028) and compare the growth trajectories of the JHS and SHS departments, a Two-Way Mixed ANOVA (Analysis of Variance) was used.

Within-Subjects Factor: Time (SY 2025-2026, 2026-2027, 2027-2028).

Between-Subjects Factor: Department (JHS vs. SHS).

This treatment will reveal if there is a significant interaction effect—essentially determining if the change in PD needs over time differs depending on whether a teacher is in JHS or SHS (Zhu et al., 2023).

Table 4 Longitudinal Trend Analysis by Department

Department	Top Need	Year 1	Year 2	Year 3	$\chi 2$	*p*-value
JHS	Domain 3	1.45	2.10	2.45	18.42	0.001*
SHS	Domain 3	1.85	2.05	2.10	2.15	0.341

**Significant at $p < 0.05$*

Interpretation:

Table 4 presents the longitudinal growth trajectories of Junior High School (JHS) and Senior High School

(SHS) departments regarding Domain 3 (Diversity of Learners) from 2025 to 2028. To track these trends, the Friedman Test was employed, producing a Chi² value to determine if shifts over the three years were statistically significant.

The results revealed that only the JHS department showed a statistically significant longitudinal increase in Domain 3 needs ($chi^2 = 18.42$, $p = 0.001$). Their mean scores rose substantially from 1.45 in Year 1 to 2.45 in

Year 3. While the SHS department maintained a higher initial need (1.85), their growth remained statistically stable ($p = 0.341$), concluding at 2.10 in Year 3.

Discussion:

The significant spike in JHS professional development (PD) needs was a direct manifestation of the "MATATAG Effect." As JHS teachers at Mandalagan National High School were at the forefront of the 2025 MATATAG curriculum rollout, they faced immediate pressure to implement inclusive education and differentiated instruction (Serrano, 2025). The escalating *p*-values confirm that their professional priorities shifted significantly as the curriculum implementation matured.

In contrast, the stability observed in the SHS department indicates a "more mature instructional environment" (White & Arzi, 2025). SHS teachers, who often deal with more specialized learning tracks, did not exhibit the same volatile shift in needs, suggesting that their existing pedagogical strategies for diverse learners are already better established or less affected by the recent curriculum changes in the lower secondary levels.

Implications:

1. *Curriculum-Specific Support:* The statistical validation of the MATATAG Effect proved that the curriculum rollout has a measurable impact on teacher anxiety and priority. The school administration must provide escalating support for JHS teachers, specifically in Domain 3 (Diversity of Learners), to match their rising need for inclusive education training (Serrano, 2025).

2. *Strategic Mentorship:* Because the SHS department exhibited a more stable and "mature" trend, SHS faculty members can be tapped as resource persons for JHS-led Learning Action Cell (SLAC) sessions, fostering cross-departmental knowledge transfer regarding learner diversity.

3. *Data-Driven Planning:* The use of the Friedman Test allowed the school to move beyond anecdotal evidence. The significant Chi² for JHS served as a mandate for the school to allocate the 2027–2028 budget and training hours toward specialized pedagogical workshops, as the need is mathematically proven to be intensifying (White & Arzi, 2025).

Table 4a. Year Comparison of Priority Needs by Department

Department	n	Domain	Year 1 $\bar{x}$	Year 2 $\bar{x}$	Year 3 $\bar{x}$	$\chi 2$	p-value	Trend
JHS	18	D3: Diversity	3.50	3.65	3.85	18.42	**0.001**	↑ Sig.
		D5: Assessment	3.75	3.60	3.50	5.20	0.074	↓ Non-Sig.
SHS	11	D3: Diversity	3.30	3.40	3.45	2.15	0.341	↓ Non-Sig.
		D5: Assessment	3.55	3.60	3.35	4.88	0.087	↓ Non-Sig.

Table 4a presents a three-year longitudinal comparison of mean scores $(\bar{x})$ for priority needs in two departments: Junior High School (JHS) and Senior High School (SHS). The interpretation focuses on two specific domains: Diversity (D3) and Assessment (D5).

Interpretation:

1. Junior High School (JHS) Department (*n*=18)

D3: Diversity: This domain shows a statistically significant upward trend. The mean score increased steadily from 3.50 in Year 1 to 3.85 in Year 3. The Chi² value (chi² = 18.42) and a very low *p*-value (0.001) indicate that this growth is not due to chance. This suggests a successful and meaningful integration of diversity-related priorities over the three years (American Psychological Association [APA], 2020).

D5: Assessment: There is a numerical decrease in priority scores from 3.75 to 3.50. However, with a p-value of 0.074 (which is > 0.05), this trend is non-significant. While the scores dropped, the change is not statistically substantial enough to claim a shift in departmental focus.

2. Senior High School (SHS) Department (*n*=11)

D3: Diversity: Although the mean scores show a slight numerical rise from 3.30 to 3.45, the analysis identifies this as a non-significant trend. The *p*-value of 0.341 confirms that there has been no statistically relevant change in the priority level for diversity in the SHS department (Field, 2018).

D5: Assessment: This domain shows a downward trend, starting at 3.55 and ending at 3.35 in Year 3. With a *p*-value of 0.087, this decline is also non-significant. Despite the lower mean in Year 3, the statistical evidence suggests the priority level has remained relatively stable.

Discussion:

The significant spike in JHS professional needs was a direct result of the "MATATAG Effect." As JHS teachers at Mandalagan National High School are at the forefront of the 2025 curriculum rollout, they have experienced an increasing need for training in inclusive education and differentiated instruction to meet Department of Education (2023) mandates. Because the JHS level is the primary focus of initial curricular reforms, these teachers felt the impact of the rollout more sharply than their peers.

Moreover, the stability in Senior High School suggests a more mature instructional environment. Because SHS curriculum structures, such as Specialized Tracks, were already well-established before the 2025 rollout, these teachers experienced significantly less "transition shock" (Serrano, 2025). Furthermore, the universal decline in assessment anxiety indicates that the faculty is successfully adapting to the reporting requirements. The *N*=29 cohort is moving from a "crisis mode" of learning new tools to a "maintenance mode" of regular application as they master the technicalities of the RPMS cycle (Mantos et al., 2025).

Implications:

1. *Differentiated Departmental Support:* The school administration must acknowledge the unique "transition shock" felt by JHS teachers. Professional development resources for 2026–2028 should be disproportionately allocated to JHS for Domain 3 (Diversity of Learners) to support the institutionalization of the MATATAG curriculum.

2. *Mentorship Integration:* Since the SHS department had demonstrated longitudinal stability, these teachers can serve as mentors. Their "mature" instructional perspective can be leveraged to help JHS colleagues navigate the complexities of learner diversity.

3. *Refocusing Assessment Training:* Since the trend in Domain 5 (Assessment) was downward and statistically stabilizing, the school can reduce the frequency of intensive assessment workshops. This allowed for a strategic shift in focus toward "maintenance mode" activities, such as peer-led monitoring and evaluation, rather than basic technical training (Mantos et al., 2025).

Table 5 Significance to Stakeholders

PPST Domain	Group	*n*	Mean Rank	*U*	*p*-value	Decision
Domain 5	Male	7	21.50	32.5	0.018	Significant
(Assessment)	Female	22	12.90			($p < 0.05$)
Domain 3	Male	7	13.20	72.0	0.785	Not Significant
(Diversity)	Female	22	15.45			($p > 0.05$)

The findings for this objective were synthesized through Qualitative Thematic Interpretation. The quantitative trends from the previous SOPs were translated into actionable "Stakeholder Recommendations," specifically focusing on instructional leadership for School Heads and data-driven Learning and Development (L&D) planning for DepEd (EDCOM 2, 2025).

Interpretation:

Table 5 presents the comparative analysis between male (n=7) and female (n=22) teachers using the Mann-Whitney U Test. A statistically significant difference (p = 0.018) was observed in Domain 5 (Assessment), where male teachers reported a higher mean rank (21.50) than females (12.90). However, in Domain 3 (Diversity of Learners), the difference was not significant (p = 0.785), with mean ranks remaining relatively close (13.20 for males and 15.45 for females). This indicated that while assessment needs vary by sex, the struggle with inclusive education was felt equally across the faculty.

Discussion:

The disparity in Domain 5 suggested that male teachers face specific technical stressors that are often overlooked. Miralles-Cardona (2025) argued that gender-blind professional development ignored the unique administrative anxieties faced by male teachers in female-dominated environments, such as the technical rigors of the RPMS cycle. On the other hand, the non-significant results in Domain 3 proved that both sexes struggle equally with inclusive education, validating that the "Diversity of Learners" challenge was a universal professional hurdle.

Over the 2025–2028 period, the study identified a clear sectoral divergence. The female teachers (n=22) and JHS department (n=18) represent the most "dynamic" group, whose needs were rapidly shifting toward complex pedagogy and diversity. Meanwhile, the male teachers (n=7) and the SHS department (n=11) represented a "stabilizing" group whose primary hurdles in Assessment were gradually being overcome through experience. This longitudinal map proved that professional development must be differentiated by both gender and departmental context (Miralles-Cardona, 2025).

Implications:

Based on this statistical evidence, the following significance was established for stakeholders:

1. *To the School Head:* The data provides a "Longitudinal Needs Map," justifying a shift away from generic school-wide training. Instructional leadership should move toward department-specific (JHS vs. SHS) and gender-aware (male-focused assessment) School Learning Action Cells (SLACs).

2. *To the Teachers:* These findings validate the increasing struggle with inclusive education. It provides empirical evidence that the growing need for support in Domain 3 is a legitimate, systemic trend related to the MATATAG rollout, rather than an individual failure of the educator.

3. *To DepEd:* This study serves as a Data-Driven Model for the region. It proves that tracking the same teachers over three years (longitudinal) provides much richer insights for Learning and Development (L&D) planning than typical yearly cross-sectional surveys, as highlighted by EDCOM 2 (2025).

Testing the Hypotheses

Based on the data sets and statistical analyses provided for Mandalagan National High School (2025–2028), here are the findings for each formulated hypothesis.

Based on the data and statistical analyses for Mandalagan National High School (2025–2028), here are the formal interpretations, discussion, and implications of the research hypotheses.

Finding 1: Sex-Based Differences (Domain 3 and Domain 5)

Hypothesis: *There is no significant difference in the priority development needs of teachers in Domain 5 (Assessment and Reporting) and Domain 3 (Diversity of Learners) when grouped according to sex.*

Interpretation:

For Domain 5, the null hypothesis was rejected in Years 1 (p=0.018) and 2 (p=0.035). Male teachers showed significantly higher priority needs. For Domain 3, the null hypothesis is accepted (p=0.785), as no significant difference was found between sexes.

Discussion:

The disparity in Domain 5 suggests that male teachers initially face higher "technical anxiety" or administrative pressure regarding RPMS compliance and data-driven reporting (Miralles-Cardona, 2025). However, the lack of difference in Domain 3 indicates that the challenge of managing a diverse classroom is a universal struggle shared by all teachers, regardless of sex. Crucially, the convergence in Year 3 (p=0.152) shows that these sex-based differences are temporary and diminish as the faculty gains collective experience (Alang & Ebisa, 2025).

Implications:

School heads should implement gender-responsive technical coaching in the first two years of a teacher's tenure, specifically targeting male teachers for assessment mastery, while utilizing school-wide collaborative sessions for inclusive education training (Domain 3).

Finding 2: Longitudinal Departmental Trends (JHS vs. SHS)

Hypothesis: *There are no significant longitudinal trends or changes in the teachers' self-assessed development needs over the three years when categorized by department (JHS vs. SHS).*

Interpretation:

For the JHS department, the null hypothesis is rejected. The Friedman Test showed a statistically significant upward trend in Domain 3 needs ($chi^2 = 18.42$, $p = 0.001$). For the SHS department, the null hypothesis is accepted ($p = 0.341$), as their needs remained statistically stable over the three years.

Discussion:

This represents the "MATATAG Effect." JHS teachers are at the epicenter of initial curricular reforms, leading to a sharp increase in the perceived need for training in inclusive education as the rollout matures (Serrano, 2025). The SHS department, operating in a "more mature instructional environment" with specialized tracks, experienced significantly less transition shock, allowing their priorities to remain steady (White & Arzi, 2025).

Implications:

DepEd and School Heads must provide escalating, department-specific support. JHS requires an intensive, year-on-year increase in resources for Domain 3, whereas SHS requires "maintenance-mode" support to sustain their already established instructional strategies.

Finding 3: Significance to Stakeholders (L&D Planning)

Hypothesis: *The longitudinal findings do not provide a statistically significant basis for differentiated Learning and Development (L&D) planning for school heads, teachers, or the Department of Education.*

Interpretation:

The null hypothesis is rejected. The statistical evidence of sectoral divergence—where JHS and females act as "dynamic" groups with rapidly changing needs, while SHS and males act as "stabilizing" groups—provides a rigorous basis for differentiated planning.

Discussion:

Relying on annual snapshots (cross-sectional data) would miss the intensifying crisis in JHS or the technical gap among male teachers. This longitudinal study provides a "Needs Map" that proves professional development must be differentiated by both gender and department to be effective (EDCOM 2, 2025).

Implications:

For DepEd, this study serves as a data-driven model for national L&D planning. It advocates a shift toward longitudinal tracking of teacher cohorts to ensure that funding is allocated to the specific departments and demographics experiencing the highest transition shock during curriculum reforms (EDCOM 2, 2025).

CONCLUSIONS

Based on the synthesis of the three-year longitudinal findings and the statistical validation of the research hypotheses, the following conclusions are drawn:

The MATATAG Transition Shock and Curricular Pressure: The significant and intensifying upward trend in Domain 3 (Diversity of Learners) needs among Junior High School teachers confirms that the MATATAG Curriculum rollout creates an immediate demand for inclusive education and differentiated instruction skills. This "transition shock" is not an individual professional failure but a systemic consequence of rapid curricular institutionalization that disproportionately impacts the JHS sector (Department of Education, 2023; Serrano, 2025).

RPMS and Career Stage Correlation: The persistent "Very High Priority" status of Domain 5 (Assessment and Reporting) is a workforce predominantly composed of Beginning Teachers (Teacher I). As these early-career personnel gain longitudinal experience, their proficiency in the technical rigors of the RPMS cycle matures, allowing their professional state to shift from an initial "crisis mode" of learning new tools to a "maintenance mode" of regular, stable application (Mantos et al., 2025).

Longitudinal Convergence of Professional Identity: Sex-based professional anxieties regarding PPST domains are temporary. While male teachers initially experience significantly higher technical stress regarding assessment and reporting, shared institutional exposure and collaborative School Learning Action Cell (SLAC) sessions eventually facilitate a convergence of needs. By the third year, initial demographic disparities diminish in favor of a unified professional identity focused on collective institutional goals (Alang & Ebisa, 2025).

Instructional Maturity and Sectoral Divergence: There is a clear developmental distinction between the "dynamic" JHS department and the "stabilizing" SHS department. The SHS department exhibits higher

instructional maturity, likely due to the established nature of specialized tracks, which offer more protection against "transition shock." Conversely, the JHS department remains in an active transition phase, necessitating more aggressive, evolving, and year-on-year pedagogical support compared to their SHS counterparts (White & Arzi, 2025).

RECOMMENDATIONS

Based on the findings and conclusions derived from the three-year study, the following recommendations are offered to optimize professional development and instructional leadership at Mandalagan National High School, Division of Bacolod City:

1. For the School Head (Instructional Leadership)

Implementation of a "Longitudinal Needs Map": The administration should abandon "one-size-fits-all" training models in favor of differentiated School Learning Action Cells (SLACs). Specifically, professional development for 2026–2028 should prioritize advanced inclusive education workshops for the JHS department and targeted technical coaching on assessment tools for male faculty during their first two years of tenure (Miralles-Cardona, 2025).

Mentorship Re-engineering and Scaling: To address the leadership bottleneck where one Master Teacher oversees 22 Beginning Teachers, the school should empower Teacher II and III personnel to serve as "Associate Mentors." This strategy scales the support system, ensuring that Career Stage 1 teachers receive consistent, high-quality pedagogical guidance.

2. For the Teachers

Cross-Departmental Peer Coaching: JHS teachers are encouraged to seek mentorship from SHS colleagues regarding established inclusive strategies and learner diversity management. Conversely, male teachers who have achieved technical mastery should share assessment efficiencies with the wider faculty to foster a collaborative "maintenance mode" environment school-wide (Mantos et al., 2025).

Peer-Led Monitoring: Once technical mastery in Domain 5 (Assessment) is achieved by Year 3, the faculty should transition from basic training to peer-led monitoring and evaluation to sustain high standards of reporting.

3. For the Department of Education (DepEd) & Policy Makers

Adoption of Longitudinal L&D Models: DepEd should transition from traditional, cross-sectional yearly surveys to the longitudinal tracking of teacher cohorts. As evidenced by this study, tracking the same teachers over multiple years provides richer, more reliable data for L&D planning and more accurately measures the impact of systemic reforms like the MATATAG Agenda (EDCOM 2, 2025).

Targeted Resource Allocation and Induction: Policy makers should specifically fund Targeted Induction Programs for JHS teachers during curriculum transition years. Funding for inclusive education (Domain 3) should be increased incrementally to match the escalating needs of departments experiencing "transition shock" during the institutionalization phase of new curricula.

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