



Adaptive Readiness of Pre-Service Teachers: A Study of PLP Students' Responses to Real-World School Dynamics

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Article Info	Abstract
Received: 2026-04-07 Revised: 2026-05-19 Accepted: 2026-08-09 Keywords: adaptive readiness; school-based teaching practicum; pre-service teachers; school dynamics; emotional resilience DOI: 10.24256/ideas.v14i1.12001 Corresponding Author: Heri Alfian herialfian7@gmail.com English Education Studi Program, Universitas Sembilanbelas November Kolaka	<i>Empirical research on pre-service teachers' adaptive readiness during practicum is still fragmented and dominated by qualitative accounts that are rarely operationalized into a measurable, multidimensional construct, especially in the Indonesian context, despite increased scholarly attention to teacher competence. Because it determines how well aspiring teachers convert university-based theory into successful, context-responsive practice under actual classroom uncertainty, adaptive readiness has emerged as a crucial concept in modern teacher education. A crucial transitional stage that often highlights a disconnect between academic theory and erratic classroom dynamics is the Classroom-Based Teaching Practicum (PLP). In order to successfully negotiate classroom management, learner variety, and institutional cultures, pre-service teachers must possess adaptive preparedness. The objectives of this study are to assess PLP students' levels of adaptive preparedness, pinpoint the key variables influencing their ability to adjust, and examine how they react to real-world academic difficulties. 87 pre-service teachers who finished their practicum assignments participated in a descriptive-quantitative study using an explanatory methodology. A validated five-dimensional questionnaire was used to gather the data, which were then examined using multiple linear regression and descriptive statistics. Overall, the results show a high degree of adaptive readiness. The best indicators were found to be behavioral and social interaction adaptability, which together accounted for 53% of the variation in overall readiness ($M = 3.82$, $SD = 0.47$).</i>

The best predictors were behavioral adaptability ($\beta = .39, p < .001$) and social interaction adaptability ($\beta = .31, p = .002$), with the full five-predictor regression model accounting for 53% of the variance in overall readiness, $R^2 = .53, F(5, 81) = 19.24, p < .001$. On the other hand, the most vulnerable dimension was found to be emotional readiness, which had the most variability and the lowest mean score, especially when it came to controlling student discipline and frustration. The findings show that the development of adaptive preparedness varies by dimension. This study provides a fresh empirical approach that has not yet been created in national teacher education research by operationalizing adaptive readiness into a validated, multidimensional instrument within the Indonesian PLP environment. To create resilient teachers ready for today's pedagogical challenges, teacher education programs must methodically incorporate autonomous scaffolding and emotional resilience training into practicum curricula. In addition to providing a theoretical contribution, a multidimensional model of adaptive preparedness that has been validated, these findings also provide practical goals for practicum curriculum improvement.

1. Introduction

A crucial transitional stage in pre-service teacher education is represented by school-based teaching practicums, which are officially intended to connect the theoretical knowledge learned in university courses with the unpredictable realities of classroom instruction. According to V. Sathasivam et al., (2024), despite this intended purpose, the shift from theoretical preparation to field practice consistently reveals a persistent pedagogical divide wherein student teachers encounter complex educational ecosystems that resist the simple application of academic models. Pre-service teachers must quickly convert abstract pedagogical frameworks into practical instructional judgments in the practicum setting, which functions as a dynamic testing ground without the scaffolding or controlled settings offered during university training. The structural and cultural expectations of host institutions, which often place a higher priority on immediate classroom functionality than on analytical pedagogical experimentation, exacerbate this theory practice disjunction.

As a result, student instructors are placed in settings that require situational judgment, emotional control, and contextual improvisation in addition to material mastery. Due to inadequate alignment between preparatory curricula and the unscripted demands of authentic school settings, the practicum is still underutilized in many teacher education programs, despite the magnitude of this

shift positioning it as a crucial site for professional identity formation (Torres-Cladera et al., 2021). The practicum runs the potential of turning into a survival-oriented experience rather than a transformative developmental space in the absence of intentional pedagogical bridging.

During practicum placements, the intricacy of real-world school dynamics takes the form of three interconnected dimensions that constantly test pre-service teachers' ability to adapt and react appropriately. First, classroom management in real-world contexts seldom follows idealized behavioral models; instead, it entails managing erratic student participation, unanticipated interruptions, and the fine line between rapport and authority. Second, there is a noticeable diversity of learners in today's classrooms, including differences in cognitive readiness, linguistic backgrounds, socio-emotional needs, and cultural expectations. These differences necessitate differentiated instructional responsiveness, which cannot be fully practiced in simulated environments (Smets & Struyven, 2020).

Third, every host school has a unique institutional culture that is influenced by unwritten expectations about teacher behavior and student results, collaboration norms, leadership styles, and resource limitations. Pre-service teachers' confidence and desire to try novel pedagogical approaches are influenced by these cultural architectures, which frequently define how they are integrated, assessed, and mentored (Prastikawati et al., 2025). A high-pressure ecological system where strict adherence to pre-planned methods frequently results in the need for real-time pedagogical improvisation is created by the simultaneous negotiation of classroom management, learner variety, and institutional culture. This fact emphasizes that interpreting contextual cues, modifying instructional pace, and preserving pedagogical coherence in the face of ambiguity are more important for effective teaching than following pre-written scripts (Bass et al., 2024).

The idea of adaptive readiness has become a crucial competency paradigm in 21st-century teacher education in response to these growing contextual demands. Adaptive readiness is the psychological, cognitive, and behavioral ability of pre-service teachers to recognize new challenges, reorganize instructional strategies, and maintain professional effectiveness in the face of uncertainty, in contrast to static measures of teaching competence that place a higher priority on content knowledge or technical skill acquisition (Moran et al., 2023).

This concept includes metacognitive flexibility, emotional resilience, introspective calibration, and a growth-oriented mindset that helps inexperienced teachers see unforeseen events in the classroom as chances for pedagogical improvement rather than as preparation failures (Meierdirk & Fleischer, 2022). It is conceptually different from related constructs: teacher self-efficacy reflects beliefs about one's ability to carry out particular teaching tasks; adaptive expertise emphasizes the flexible, creative application of expert knowledge to novel problems; teacher resilience refers to the capacity to recover from adversity and sustain wellbeing over time; and adaptive readiness integrates cognitive,

emotional, and behavioral dimensions specifically oriented toward real-time responsiveness to unexpected classroom conditions. Teachers must function as adaptable practitioners capable of ongoing learning and contextual recalibration due to modern educational reforms like competency-based curricula, inclusive education mandates, and digital integration (Rapisa et al., 2026). According to this paradigm, adaptive readiness determines how well pre-service teachers handle the unavoidable discrepancies between university preparation and school reality, making it more than just a supporting characteristic but a fundamental requirement for career longevity (Moran et al., 2023). The practicum is transformed from a procedural checkpoint into a catalyst for long-term professional development when programs that foster adaptive readiness give student teachers the psychological flexibility to accept ambiguity, ask for constructive criticism, and iteratively improve their practice.

The empirical literature indicates a substantial conceptual and methodological gap in the way this construct is investigated within practicum research, despite the theoretical prominence of adaptive readiness. The psychological and adaptive aspects that support real-time instructional decision-making are largely ignored in favor of measurable teaching competencies like lesson design, assessment literacy, classroom communication, and media usage (Sandoval-Ríos et al., 2025).

Instead of being a structured, multifaceted construct that can be tested scientifically and developed pedagogically, adaptability is sometimes presented crudely as general resilience or stress coping (Ross et al., 2023). By ignoring the fluid, non-linear nature of real teaching environments, this competency-heavy approach unintentionally supports a technical-rational model of teacher preparation that presumes classroom situations are stable and predictable. Furthermore, rather of capturing real adaptive behaviors in response to changing school situations, research instruments often rely on self-reported confidence levels or mentor assessments that record perceived performance. Teacher education programs lack evidence-based routes for curriculum development since the field is unable to determine which aspects of adaptive readiness most significantly predict good practicum outcomes due to a lack of reliable, context-sensitive measurement instruments.

In the Indonesian setting, where descriptive and qualitative approaches continue to dominate research on the *Praktik Lapangan Persekolahan* (PLP), the methodological gap is especially noticeable. Many research use journals, interviews, or case analyses to record student teachers' reflective narratives, experiencing difficulties, or mentor feedback; these studies produce rich phenomenological insights but lack quantitative rigor in mapping adaptive patterns (Alt et al., 2022). The current quantitative approach is especially pertinent in this context because the Indonesian PLP is usually shorter, more condensed, and evaluated primarily through administrative and technical compliance checklists

rather than through validated psychological readiness measures, in contrast to practicum systems in many other countries that frequently combine extended, staged field placements with structured competency portfolios and formal mentor certification.

Although these qualitative accounts shed light on subjective experiences, they seldom operationalize adaptive readiness into quantifiable indicators or statistically investigate the connections between contextual stressors, psychological readiness, and adaptive behavioral outcomes (Livet et al., 2022). As a result, there is currently no verified quantitative framework in Indonesian PLP literature that describes how pre-service teachers adapt to real-school dynamics during field placements on a cognitive, affective, and pedagogical level. The insufficient incorporation of psychological readiness models into national PLP evaluation tools, which still prioritize technical compliance over adaptive capacity, exacerbates this empirical deficiency (Carter-Veale et al., 2024). Indonesian teacher education institutions lack actionable data to determine which aspects of adaptive readiness call for focused intervention, how institutional support structures affect adaptive trajectories, or whether current PLP designs sufficiently prepare students for the unpredictable realities of modern classrooms in the absence of a systematic quantitative investigation.

The current study examines the adaptive readiness of pre-service teachers during their PLP placements by quantitatively measuring their readiness levels, identifying the most important dimensions that shape adaptive capacity, and analyzing their cognitive, emotional, and behavioral responses to real-world school dynamics in order to fill in these interrelated theoretical and empirical gaps. Three main questions serve as the research's compass: What is the overall level of adaptive readiness among PLP students? Which psychological, pedagogical, and contextual factors most significantly predict and shape their adaptive readiness? How do student teachers respond to the intersecting demands of classroom management, learner diversity, and institutional culture during real-world field experiences?

This study intends to produce empirically grounded insights that go beyond descriptive experiential descriptions by utilizing a structured quantitative approach based on established adaptive readiness indicators. The results are meant to improve PLP mentorship frameworks, provide a contextually appropriate assessment tool for evaluating adaptive readiness in Indonesian teacher education programs, and guide the methodical incorporation of adaptive training modules into pre-service curricula (Pahrudin et al., 2025). In the end, this research aims to reframe the practicum as a dynamic developmental space where adaptive readiness is actively cultivated, measured, and maintained for long-term professional effectiveness rather than as a final assessment of technical proficiency. The development and validation of a multidimensional adaptive readiness instrument specific to the Indonesian PLP environment is what makes this study unique. It provides a measurement-based addition that previous qualitative

reports in this context have not offered.

2. Method

Research Design

In order to systematically assess pre-service teachers' adaptive readiness during their School-Based Teaching Practicum (PLP), this study used a descriptive-quantitative research methodology reinforced by an explanatory analytical component. While the explanatory layer allowed for the identification of underlying psychological and pedagogical factors that most significantly predict adaptive capacity, the descriptive phase was used to map students' self-reported responses across important contextual dimensions and quantify overall levels of adaptive readiness (Mohd Adnan & Mohd Matore, 2022).

Because the study required both an accurate profile of participants' overall and dimension-specific readiness levels and an analysis of which readiness dimensions predicted overall adaptive capacity, a descriptive-quantitative design with an explanatory component was chosen instead of a purely explanatory correlational design; a purely correlational design would have addressed the predictive question but not provided the descriptive benchmarking required for practical curriculum evaluation.

In order to ensure that participants' reflections and self-evaluations were temporally linked with their recent field experiences, a cross-sectional survey approach was chosen to collect data at a single moment shortly following the practicum's conclusion. The study's goals of measuring adaptive readiness and analyzing the interactions between particular readiness dimensions and actual school dynamics are directly aligned with this design, which offers an organized empirical basis for future curriculum improvement and mentoring interventions in teacher education programs.

Participants and Sampling

The study population comprised 90 pre-service teachers who had recently completed their PLP placements at partner schools within the university's practicum network of Universitas Sembilanbelas November Kolaka. All eligible students who fulfilled the inclusion requirements, that is, full attendance during the PLP duration, completion of all required field teaching tasks, and availability during the data collection window, were invited to participate, and a total sampling technique was used in conjunction with purposive criteria (Hericco et al., 2023). While the purposive criteria (full attendance, completed field tasks, and availability) served as inclusion filters rather than a distinct selection stage, total sampling was applied to the population of PLP completers.

As a result, all students who met these criteria were included, and the two procedures worked in tandem rather than introducing selection bias. The sample, which was recruited from four undergraduate study programs, had a balanced

demographic and intellectual profile with 52.2% female participants and 47.8% male participants (Mathematics Education, English Language Education, Bahasa Indonesia Education, and Biology Education). Twelve host schools, eight public junior and senior high schools and four private ones, mostly in urban and semi-urban areas, were used to disperse the participants.

Strict anonymity was upheld throughout the research process to promote open self-reporting, and all participants gave written informed consent prior to data collection. The university's institutional review board granted ethical permission, and participation was completely optional with no academic repercussions for non-participation.

Research Instrument

A systematic questionnaire that was modified and contextualized from well-known frameworks for teaching practicum and adaptive readiness was used to gather data. Classroom management and mentorship items based on Karasova and Nehyba (2025) and Delgado et al. (2020) were added to the instrument's dimensions, which were mostly derived from the adaptive readiness and preparation frameworks of Abraham et al. (2021) and Moran et al. (2023).

In order to capture nuanced self-perceptions across five theoretically grounded dimensions, the instrument used a five-point Likert scale that ranged from 1 (Strongly Disagree) to 5 (Strongly Agree): cognitive readiness (e.g., ability to process classroom information, anticipate learning barriers, and adjust instructional strategies); emotional readiness (e.g., stress tolerance, teaching confidence, and psychological resilience in unfamiliar environments); behavioral adaptability (e.g., flexibility in classroom management response, routines, and handling behavioral challenges); and social interaction adaptability (e.g., communication with students, collaborative engagement with mentors, and navigating school staff dynamics) (Abraham et al., 2021).

The instrument was put through a rigorous two-stage validation process before it was fully deployed. Three senior teacher educators and two seasoned school mentors conducted an expert assessment to determine content validity. They evaluated item relevancy, language clarity, and alignment with national PLP competencies. A pilot sample (n = 30) was used to assess construct validity using Pearson product-moment correlation analysis; all items showed substantial correlations ($r > 0.30$, $p < 0.05$) against their respective dimension totals. Cronbach's Alpha was used to measure internal consistency dependability, and the results showed coefficients ranging from 0.74 to 0.86 across the five dimensions, all of which were higher than the 0.70 threshold needed for reliable quantitative research. With 35 validated items, the finished measure was both contextually suitable for the Indonesian PLP setting and psychometrically rigorous.

Table 1. Psychometric Properties of the Adaptive Readiness Questionnaire

Dimension	Item	Example Item	Construct	Reliability
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	s		Validity (r)	(Cronbach 's α)
Cognitive Readiness	7	"I can quickly adjust my lesson plan when students show confusion."	0.42–0.68*	0.82
Emotional Readiness	6	"I remain calm and focused when unexpected classroom disruptions occur."	0.38–0.71*	0.79
Behavioral Adaptability	8	"I improvise teaching strategies in real-time based on student responses."	0.45–0.74*	0.86
Classroom Management Response	7	"I effectively re-engage off-task students without disrupting lesson flow."	0.40–0.69*	0.81
Social Interaction Adaptability	7	"I communicate effectively with mentor teachers and school staff to seek guidance."	0.36–0.65*	0.74
Total Scale	35	-	-	0.91

Note. N = 30 for pilot testing; N = 87 for main sample. Construct validity assessed via Pearson product-moment correlation; all items significant at $p < 0.05$. Cronbach's Alpha > 0.70 indicates acceptable internal consistency (Field, 2018).

Data Collection Procedure

To reduce recollection bias and guarantee that participants' evaluations appropriately represented their recent field experiences, the data collection was carried out right after the PLP program ended (Muflihin et al., 2024). Obtaining administrative consent from the partner schools and the university's practicum coordination office was the first step in the coordination process. In order to maximize accessibility, expedite data entry, and enable safe anonymous responses, the validated questionnaire was then disseminated electronically using Google Forms. The computerized survey started with a brief instructional guide, an informed consent declaration, and an expected completion time of 10 to 12 minutes. Although all responses were eventually digitized into a single dataset, a manual paper-based alternative was offered upon request to account for differing digital access and guarantee inclusion. In order to enhance response completeness, two automated reminders were sent within the ten working days of the collecting period. The raw dataset was methodically examined for outlier patterns, incomplete entries, and straight-lining response behaviors once it was closed. 87 completely usable questionnaires, representing a 96.7% valid response rate, were kept for study after conventional data-cleaning procedures were applied.

Data Analysis Technique

IBM SPSS Statistics (Version 30) and JASP were used to process quantitative data for statistical computation and validation. In order to profile the overall adaptive readiness levels and look at distribution patterns across the five evaluated variables, descriptive statistics such as mean scores, standard deviations, frequencies, and percentages were calculated. A defined interval scale was used to classify mean scores in order to improve interpretative clarity and educational benchmarking: 1.00–2.00 indicated poor readiness, 2.01–3.00 indicated moderate readiness, 3.01–4.00 indicated strong readiness, and 4.01–5.00 indicated extremely high readiness. To enhance its empirical contribution, the study added an explanatory analytical layer in addition to descriptive profiling.

To corroborate the underlying structure of the adaptive readiness construct within the sample, an additional dimension verification phase was carried out using exploratory factor analysis (EFA) using principal axis factoring and varimax rotation. The concept validity established during instrument construction was corroborated by the EFA results, which validated the initially suggested five-factor structure with items loading most strongly on their intended dimensions.

The research topic of major influencing elements was also directly addressed by using multiple linear regression analysis to determine which readiness aspects most substantially predicted overall adaptive ability (Foykas et al., 2025). Standard assumptions of normality (Shapiro–Wilk), linearity, homoscedasticity, and multicollinearity ($VIF < 5.0$) were thoroughly examined before inferential testing. A 95% confidence level ($\alpha = 0.05$) was applied to all statistical tests, guaranteeing analytical rigor and conformity to the methodological requirements anticipated in national empirical journals. Standardized regression coefficients (β) and the model's R^2 were employed as impact size indicators in addition to significance tests to communicate the practical extent of each predictor's contribution to overall adaptive preparedness.

3. Result

Overall Adaptive Readiness

On the five-point Adaptive Readiness Scale, descriptive analysis of the responses from 87 pre-service teachers showed a mean total score of 3.82 ($SD = 0.47$), indicating a generally high level of adaptive readiness among PLP participants. This result indicates that, although not yet at the extremely high level (≥ 4.01), student instructors generally thought they were fairly prepared to handle the erratic demands of real-world school environments. With 68.9% of respondents in the high readiness category (3.01–4.00), 22.2% in the moderate range (2.01–3.00), and 8.9% with very high readiness (4.01–5.00), the score distribution was roughly normal (Shapiro–Wilk $p = .127$). There were no participants that had a low readiness score. These findings are consistent with earlier studies showing that pre-service teachers' confidence and contextual responsiveness are generally improved by structured practicum experiences;

however, considerable variation still exists depending on individual dispositions and institutional support systems (Altarawneh et al., 2023). Although the cohort showed collective readiness, the moderate standard deviation emphasizes that specific interventions are still required to move those in the moderate range toward sustained adaptive competence (Fraulini et al., 2025).

Dimension-Based Analysis

Mean scores and standard deviations were calculated for each of the five core dimensions, which were operationalized using validated indicators as stated during the instrument development phase, in order to unravel the multidimensional structure of adaptive readiness. The highest-scoring dimension ($M = 4.08$, $SD = 0.51$) in Table 2 was behavioral adaptability, which shows that pre-service teachers felt most confident in their ability to adapt instructional pacing, communication styles, and pedagogical strategies in response to real-time classroom cues. Strong interpersonal agility when working with mentor teachers, school personnel, and varied learners was demonstrated by social interaction adaptability, which came in second ($M = 4.02$, $SD = 0.47$). Conversely, emotional readiness had the highest score dispersion and the lowest mean score ($M = 3.61$, $SD = 0.62$), indicating a relative susceptibility in affective regulation when faced with erratic classroom stresses. These trends are consistent with recent research indicating that during early field experiences, new instructors usually develop procedural and relational flexibility more quickly than psychological resilience (Dreer, 2020).

Table 2. Descriptive Statistics for Adaptive Readiness Dimensions (N = 87)

Dimension	Items	M	SD	Interpretation
Cognitive Readiness	7	3.79	0.54	High
Emotional Readiness	6	3.61	0.62	High
Behavioral Adaptability	8	4.08	0.51	Very High
Classroom Management Response	7	3.86	0.57	High
Social Interaction Adaptability	7	4.02	0.47	Very high
Total Scale	35	3.87	0.48	High

Note. Scale: 1.00–2.00 = Low; 2.01–3.00 = Moderate; 3.01–4.00 = High; 4.01–5.00 = Very High. M = mean; SD = standard deviation.

In cognitive readiness, when identifying classroom incompatibilities and adjusting instructional objectives, participants showed a high level of metacognitive awareness ($M = 3.84$). While pre-service teachers can plan adaptively, real-time cognitive load management is still a developmental frontier, according to indicators probing rapid cognitive restructuring under time pressure, which produced relatively lower scores ($M = 3.68$). This tension is well-documented in teacher cognition literature (Timothy et al., 2023).

The greatest score variability was seen in emotional readiness ($SD = 0.62$). When lessons deviated from planned ($M = 3.24$) or when dealing with persistent student disruptions ($M = 3.38$), respondents' self-efficacy in handling dissatisfaction was significantly lower, despite their strong confidence in maintaining instructional motivation ($M = 4.15$). These results support studies that show affective resilience to be an important but underdeveloped skill in pre-service teacher practicum paths (Mansfield et al., 2020).

In Adaptability in behavior, behavioral flexibility was the greatest attribute, reflecting participants' ability to change pedagogical approaches, scaffold emergent learning demands, and modify instructional delivery repeatedly without sacrificing lesson coherence ($M = 4.08$). PLP's repetitive, low-stakes instruction cycles, which offer controlled chances for behavioral exploration and reflective calibration, are probably the source of this strength (Asterhan & Lefstein, 2024).

In adaptability in social interaction and classroom management response, the high-to-very-high readiness range was reached by both dimensions. Establishing regular routines ($M = 3.93$) and asking for helpful mentor input ($M = 4.19$) were two areas in which participants felt most confident. However, items measuring autonomous authority in de-escalating off-task behaviors without interfering with instructional flow received more moderate ratings ($M = 3.71$), suggesting a persistent dependence on outside scaffolding when exercising independent classroom leadership, a pattern in line with studies on novice teacher socialization (Karasova & Nehyba, 2025).

Students' Responses to School Dynamics

By shedding light on how pre-service teachers processed three recurring school dynamics (student discipline, learner diversity, and interactions with senior educators) cognitively, emotionally, and behaviorally, qualitative analysis of open-ended responses from the PLP cohort ($N = 87$) enhanced the quantitative profile. In order to find recurrent patterns across the three targeted school-dynamic areas, open-ended responses were subjected to thematic analysis, which included familiarization, inductive coding, and iterative theme development. Thematic analysis found subtle conflicts between readiness and lived experience that call for further investigation, even if quantitative ratings showed strong readiness across behavioral and social dimensions.

Responding to Student Discipline

The most often mentioned difficulty was handling diverse behavioral

patterns, especially in classrooms with low intrinsic drive or frequent interruptions. When confronted with repeated off-task behaviors, participants reported experiencing early feelings of fear and self-doubt. However, many reported developing adaptive techniques through mentor coaching and iterative practice. This trend was described by one respondent: "The most challenging experience was dealing with students who were difficult to manage; at first I felt nervous and lacked confidence, but I learned to stay calm and adjust my approach" (Respondent #12).

This observation highlights an important finding: although the Behavioral Adaptability dimension had the highest numeric score ($M = 4.08$), maintaining coolness in the face of disciplinary conflict continued to be a key developmental threshold. These results are consistent with studies showing that new instructors frequently have procedural flexibility but need ongoing assistance to develop the affective resilience required for long-term classroom authority (Zhang & Luo, 2023). Significantly higher scores on both Emotional Readiness and Classroom Management Response were shown by participants who reported receiving regular, helpful feedback from mentor teachers ($r = .38$, $p = .004$). This suggests that scaffolded reflection turns disciplinary challenges into chances for professional development.

Navigating Learner Diversity

Differentiating instruction for children with varied levels of academic readiness required quick cognitive recalibration and pedagogical creativity, according to pre-service teachers. As one member pointed out: "I had to quickly adjust my materials when I realized many students lacked foundational English skills; the theory from campus didn't fully prepare me for this reality" (Respondent #9). The disparity between idealized lesson plans and the diverse reality of classroom learners was mentioned in 68% of the qualitative excerpts, which reinforced this opinion across a number of responses.

This pattern was further supported by item-level analysis, which revealed that although participants were confident in their ability to modify materials to meet the requirements of students (Item 4: $M = 3.88$), indications that probed real-time diagnostic flexibility produced relatively lower scores (Item 5: $M = 3.68$). These results are consistent with current research on adaptive expertise, which suggests that in order to effectively teach in a variety of settings, one must possess both pedagogical content knowledge and the metacognitive flexibility to identify and address emergent learning gaps in real time (Suh et al., 2024). Thus, the PLP experience seems to serve as a crucial "reality check" that forces pre-service teachers to reevaluate their presumptions regarding instructional linearity and learner homogeneity.

Interacting with Senior Teachers or Mentors

The responses emphasized how important mentor instructors are in

fostering adaptive development and the development of professional identities. In addition to reporting more confidence in navigating institutional cultures, participants who reported regular, positive encounters with mentors consistently scored higher on Social Interaction Adaptability ($M = 4.19$ for Item 29). As one respondent thought, "My mentor teacher's guidance helped me understand not just how to teach, but how to navigate school culture and build professional relationships" (Respondent #18).

This supports the claims of Delgado et al., (2020) that practicum experiences are transformed from procedural compliance to identity-shaping professional development when they receive excellent mentoring. Qualitative data, however, also showed a dependency pattern: when mentor input was scant or unclear, a number of participants voiced doubt about using independent pedagogical judgment. This conflict indicates that although the cohort's ability to adapt to social interactions is a strength ($M = 4.02$), the shift from guided practice to independent teaching is still a developmental frontier that needs deliberate curriculum support (Hicks et al., 2022).

Synthesis: The Adaptive Readiness Paradox

When taken as a whole, these qualitative findings highlight a contradiction that is fundamental to the development of pre-service teachers: participants showed high levels of self-efficacy in the behavioral and interpersonal domains, yet they continued to be vulnerable in the areas of affective regulation and independent decision-making. This tendency is consistent with the quantitative result that across all variables, Emotional Readiness had the most variability ($SD = 0.62$) and the lowest mean score ($M = 3.61$).

It is evident that adaptive readiness is a multifaceted ability that develops differently in the cognitive, affective, and behavioral domains rather than being a single, cohesive concept. Teacher education programs are better positioned to develop resilient, responsive practitioners ready for the challenges of 21st-century education when they acknowledge this heterogeneity and create focused interventions to strengthen the "weakest links" in the adaptive profile (Rowan et al., 2021). By demonstrating how procedural confidence in the behavioral and social domains coexists with unresolved affective tension during real-world classroom encounters, the qualitative narratives serve to both illustrate and explain the mechanisms underlying the quantitative results.

Dominant and Weakest Factors

The readiness variables that most substantially predicted overall adaptive readiness were found using multiple linear regression analysis. According to Table 3, the largest positive predictors were Social Interaction Adaptability ($\beta = .31$, $p = .002$) and Behavioral Adaptability ($\beta = .39$, $p < .001$), which together accounted for 53% of the variance in total readiness scores. The core engine of adaptive readiness,

according to these findings, is pre-service teachers' ability to adaptably modify instructional behaviors and navigate interpersonal school ecosystems. This conclusion is consistent with modern models of teacher agility in complex educational environments (Moran et al., 2023).

Table 3. Multiple Regression Analysis Predicting Overall Readiness (N = 87)

Predictor	β	SE	t	P
Cognitive Readiness	.15	.08	1.94	.056
Emotional Readiness	.20	.08	2.67	.009
Behavioral Adaptability	.39	.09	4.41	<.001
Classroom Management Response	.12	.08	1.58	.118
Social Interaction Adaptability	.31	.10	3.14	.002
Model Summary	$R^2 = .53$, $F(5, 81) = 19.24$, $p < .001$			

Note. Dependent variable: Total Adaptive Readiness Score (35 items). Significant predictors at $\alpha = .05$ are indicated in bold. SE = standard error. Approximate 95% confidence intervals ($\beta \pm 1.96 \times SE$) were: Cognitive Readiness [-.01, .31]; Emotional Readiness [.04, .36]; Behavioral Adaptability [.21, .57]; Classroom Management Response [-.04, .28]; and Social Interaction Adaptability [.11, .51]. The intervals for Emotional Readiness, Behavioral Adaptability, and Social Interaction Adaptability excluded zero, consistent with their significant p-values, whereas the intervals for Cognitive Readiness and Classroom Management Response included zero, consistent with their non-significant results.

In contrast, emotional readiness was the relative "weakest link" in the adaptive ready profile, with the lowest mean score ($M = 3.61$) and biggest standard deviation ($SD = 0.62$) of all the dimensions, although being statistically significant. Given that emotional regulation underpins sustained engagement, reflective practice, and resilience in the face of pedagogical setbacks, competencies increasingly acknowledged as non-negotiable for 21st-century teaching effectiveness, this vulnerability is especially consequential (Mevorach, 2021). The discovery that emotional readiness is both a developmental gap and a significant predictor offers pre-service teacher education programs a clear, empirically supported target for curriculum improvement (Molyneux, 2021).

4. Discussion

The results of this study show that pre-service teachers have a multifaceted profile of adaptive readiness that includes both significant affective vulnerabilities and excellent behavioral and social capabilities. Consistent with the research objectives, the overall high level of adaptive readiness ($M = 3.82$) confirms that

structured practicum experiences generally enhance student teachers' contextual responsiveness and professional self-efficacy. However, the significant differences across dimensions especially the relative weakness of Emotional Readiness ($M = 3.61$, $SD = 0.62$) versus the dominance of Behavioral Adaptability ($M = 4.08$) and Social Interaction Adaptability ($M = 4.02$) highlight a crucial developmental asymmetry that calls for more research and practical consideration.

According to experiential learning frameworks that highlight iterative practice as a catalyst for pedagogical flexibility, behavioral adaptability emerged as the highest predictor of overall readiness ($\beta = .39$, $p < .001$) (Shore & Dinning, 2023). Participants exhibited great confidence in their ability to modify the pace of instruction, differentiate assignments for a range of learners, and reframe explanations when students expressed uncertainty. This competency is probably a result of PLP's low-stakes, feedback-rich teaching cycles, which let pre-service teachers try new things, adjust their methods, and develop procedural fluency without facing serious repercussions for their careers. The relational scaffolding that mentor teachers and school personnel offer is also highlighted by Social Interaction Adaptability ($\beta = .31$, $p = .002$). Maxwell (2024) claim that effective mentoring turns practicum placements from procedural compliance into identity-shaping developmental spaces is supported by the qualitative responses, which consistently emphasized mentor guidance as crucial in navigating institutional cultures, interpreting unspoken norms, and developing professional rapport.

Conversely, with the lowest mean score and the greatest variability across all markers, emotional readiness was shown to be the most vulnerable attribute. The "adaptive readiness paradox" is revealed by its relative weakness, despite being statistically significant as a predictor ($\beta = .20$, $p = .009$). Pre-service teachers believe they are highly capable of changing instructional behaviors and interacting socially, but they find it difficult to control their emotions when lessons deviate from plans or when dealing with persistent student disruptions. Molyneux's (2021) observation that teacher education frequently overemphasizes technical competencies while under-preparing novices for the emotional work of classroom realities is reflected in this tension.

This divide was further highlighted in qualitative excerpts, where participants discussed their initial feelings of fear, dissatisfaction, and dependence on outside validation when faced with unplanned problems. Heterogeneous emotional preparation is also suggested by the high standard deviation ($SD = 0.62$), which shows that some children have strong resilience while others need focused psychological care. This result supports the McLay & Reyes's (2024) advice that, in addition to pedagogical skill acquisition, 21st-century teacher preparation explicitly addresses affective regulation. PLP structures offer regular, low-stakes opportunities to practice behavioral and social routines, but they seldom offer comparable structured opportunities to practice and receive feedback on emotional self-regulation; even in cases where overall readiness is high, emotional competence is less likely to develop at the same pace as procedurally reinforced

skills in the absence of intentional affective scaffolding.

It's interesting to note that in the regression model, Cognitive Readiness and Classroom Management Response did not achieve statistical significance. This implies that their influence may be modulated through behavioral and social channels, but it does not lessen their significance. For example, cognitive flexibility probably indirectly improves adaptive readiness by facilitating real-time instructional modifications, which fall under the category of behavioral adaptability. Comparably, enhanced teacher-student rapport and cooperative problem-solving may be the main ways that classroom management abilities function, which is consistent with the Social Interaction dimension.

Future research utilizing structural equation modeling to explore the indirect links between cognitive, managerial, and affective competencies is necessary to support this mediation hypothesis (Hachem et al., 2022). Additionally, these results can be placed inside more comprehensive theoretical frameworks. From the standpoint of adaptive expertise (Suh et al., 2024), the affective vulnerability in emotional readiness indicates that the innovation-oriented, reflective dimension of adaptive expertise is still underdeveloped, while the behavioral strength seen here reflects the procedural, efficiency-oriented dimension of expertise. According to teacher resilience theory (Zhang & Luo, 2023), the pattern shows that pre-service teachers rely more on relational, external resources like routines, peers, and mentors than on internal, self-regulatory resources for stress management.

This aligns with viewpoints on self-regulated learning, which highlight that developing procedural skills through repeated practice alone is easier than developing foresight, self-monitoring, and self-reflection under affective load. Lastly, pre-service teachers may be building a professional identity around visible performance competence before they have solidified the emotional stability that sustains that identity over time, according to a professional identity development perspective (Torres-Cladera et al., 2021). This is because strong behavioral confidence and fragile emotional regulation coexist.

By showing that adaptive preparation is a dynamic, contextually negotiated construct that develops unevenly across cognitive, affective, and behavioral dimensions, our findings theoretically challenge unitary models of teacher readiness. The findings practically need a paradigm change in PLP design, shifting from the development of technical skills to integrated affective-behavioral training. In addition to pedagogical practice, teacher education programs should incorporate systematic emotional regulation seminars, stress-inoculation simulations, and reflective debriefing sessions. In order to promote scaffolded autonomy and progressively lessen reliance as pre-service teachers develop their ability to make independent decisions, mentor training must also be improved.

In particular, practicum coordination offices at the institutional level should set up accessible psychological support channels and regular check-ins so that affective difficulties are identified and addressed before they undermine adaptive

development; mentor teachers should be given structured protocols for emotionally responsive feedback, such as identifying signs of student-teacher stress, modeling constructive emotional coping strategies, and gradually transferring disciplinary decision-making authority to pre-service teachers. In order to ensure that theoretical frameworks are verified against real-world ambiguities prior to field implementation, curriculum architects should also link university-based microteaching with authentic school restrictions.

There are a few limitations that should be acknowledged. First, the cross-sectional approach restricts causal inferences about developmental pathways by capturing adaptive readiness at a single post-practicum time point. To better understand how adaptive capacities change over time, longitudinal tracking over several practicum cycles might be beneficial. The present cross-sectional results cannot answer the empirical question of whether emotional preparedness gradually converges with behavioral and social readiness throughout repeated practicum exposures or whether targeted intervention is necessary to close the gap.

Second, social desirability bias may be introduced if self-reported measurements are used, especially in areas like behavioral flexibility and emotional control. Multi-informant assessments (e.g., mentor ratings, classroom observations, video-stimulated recall) should be used in future research to triangulate self-perceptions with outside evaluations. Third, generalizability across other institutional contexts may be limited because the sample was taken from a single university network.

Fourth, potential variation in adaptive readiness across demographic subgroups, such as gender, study program, or school type, was not examined in the current analysis. Future research should test for such differences where sample sizes allow to ascertain whether these factors moderate adaptive readiness development. External validity would be strengthened by replication across several teacher education programs, especially in rural and under-resourced settings. Lastly, combining quantitative modeling with qualitative ethnographic techniques may provide deeper understanding of the micro-processes of adaptive calibration during in-person classroom interactions.

5. Conclusion

This study shows that during their practicum assignments, pre-service teachers showed a typically high level of adaptive readiness; yet, this preparation is marked by a clear multidimensional asymmetry. Social Interaction and Behavioral Flexibility The effectiveness of relational mentoring and iterative practice cycles in fostering pedagogical flexibility and interpersonal agility is demonstrated by the fact that adaptability emerges as the biggest predictor of overall adaptive capability. On the other hand, despite great procedural competence, emotional readiness is the most vulnerable attribute, indicating a severe deficit in affective control. These results highlight the fact that adaptive readiness is a complex, contextually negotiated ability that develops unevenly

across cognitive, behavioral, and psychological dimensions rather than a single attribute.

The implications for teacher education programs are obvious: PLP curricula must purposefully incorporate scaffolded autonomy-building, emotionally responsive mentorship, and affective resilience training in addition to technical skill development. To monitor the development of adaptive readiness and identify its underlying cognitive-affective pathways, future research should use multi-method assessments and longitudinal approaches. In the end, educational environments that acknowledge adaptive readiness as a continuous, evolving requirement for 21st-century teaching excellence rather than as a practicum completion goal are necessary to build resilient, responsive novice teachers. In theory, this study provides a validated, multifaceted model of adaptive readiness within the Indonesian PLP context; in practice, it provides teacher education programs with specific, empirically supported goals, especially emotional regulation and scaffolded autonomy, to enhance practicum curricula and mentor training.

5. References

- Abraham, J., Ferfolja, T., Sickel, A., Mānoa, Power, A., Curry, C., & Fraser, D., Mackay, K. (2021). Development and Validation of a Scale to Explore Pre-Service Teachers' Sense of Preparedness, Engagement and Self-Efficacy in Classroom Teaching. *Australian Journal of Teacher Education*, 46(1), 1–23. <https://doi.org/10.14221/ajte.202v46n1.1>
- Alt, D., Raichel, N., & Naamati-Schneider, L. (2022). Higher Education Students' Reflective Journal Writing and Lifelong Learning Skills: Insights From an Exploratory Sequential Study. *Frontiers in Psychology*, 12, 707168. <https://doi.org/10.3389/fpsyg.2021.707168>
- Altarawneh, A. F., Alkhazaleh, M., Alkhazaleh, Z. M., & Tarawneh, R. T. (2023). School-based practicum and pre-service teachers' self-efficacy: Impact and challenges. *International Journal of Education and Practice*, 11(2), 308–319. <https://doi.org/10.18488/61.v11i2.3340>
- Asterhan, C. S. C., & Lefstein, A. (2024). The search for evidence-based features of effective teacher professional development: A critical analysis of the literature. *Professional Development in Education*, 50(1), 11–23. <https://doi.org/10.1080/19415257.2023.2283437>
- Bass, I., Espinoza, C., Bonawitz, E., & Ullman, T. D. (2024). Teaching Without Thinking: Negative Evaluations of Rote Pedagogy. *Cognitive Science*, 48(6), e13470. <https://doi.org/10.1111/cogs.13470>
- Bronwen Maxwell—Effective mentor training, education and development a qualitative multilevel meta-synthesis [2024]. (n.d.).
- Carter-Veale, W. Y., Cresiski, R. H., Sharp, G., Lankford, J. D., & Ugarte, F. (2024). Assessing departmental readiness to support minoritized faculty. *New*

- Directions for Higher Education, 2024(205), 47–57.
<https://doi.org/10.1002/he.20494>
- Delgado, M. (2020). Community Health Workers in Action: The Efforts of “Promotores de Salud” in Bringing Health Care to Marginalized Communities. New York: Oxford University Press.
- Dreer, B. (2020). Towards a better understanding of psychological needs of student teachers during field experiences. *European Journal of Teacher Education*, 43(5), 676–694.
<https://doi.org/10.1080/02619768.2020.1744557>
- Flores Delgado, L. D., Olave Moreno, I., & Villarreal Ballesteros, A. C. (2020). The impact of role modeling on the professional identity of pre-service teachers. *Indonesian Journal of Applied Linguistics*, 10(1), 143–152.
<https://doi.org/10.17509/ijal.v10i1.25024>
- Foykas, E., Raikou, N., Beazidou, E., & Karalis, T. (2025). Transformative Potential in Special Education: How Perceived Success, Training, Exposure, and Experience Contribute to Teacher Readiness for Inclusive Practice. *Education Sciences*, 15(11), 1476.
<https://doi.org/10.3390/educsci15111476>
- Fraulini, N. W., Marraffino, M. D., Garibaldi, A. E., Johnson, C. I., & Whitmer, D. E. (2025). Adaptive training instructional interventions: A meta-analysis. *Military Psychology*, 37(5), 479–493.
<https://doi.org/10.1080/08995605.2024.2377884>
- Furwana, D., Muin, F. R., Zainuddin, A. A., & Mulyani, A. G. (2024). Unlocking the Potential: Exploring the Impact of Online Assessment in English Language Teaching. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 12(1), 653–662.
- Hachem, M., Gorgun, G., Chu, M.-W., & Bulut, O. (2022). Social and Emotional Variables as Predictors of Students’ Perceived Cognitive Competence and Academic Performance. *Canadian Journal of School Psychology*, 37(4), 362–384. <https://doi.org/10.1177/08295735221118474>
- Hericco, D. L. N., Ian, G. E. (2023). A Two-Fold Approach in Investigating the Factors in Practice Teaching Experiences of Technology Livelihood and Vocational Education Preservice Teachers. *Journal of Technical Education and Training*, 15(4). <https://doi.org/10.30880/jtet.2023.15.04.008>
- Hicks, J., Dewey, J., Abebe, M., Kramer, M., & Schuchardt, A. (2022). Teasing apart the impacts of curriculum and professional development on teaching assistants’ teaching practices. *PLOS ONE*, 17(2), e0262841.
<https://doi.org/10.1371/journal.pone.0262841>
- Karasova, J., & Nehyba, J. (2025). Novice teachers’ classroom behaviour management: Situations, responses and impact on student behaviour. *British Educational Research Journal*, 51(5), 2116–2141.
<https://doi.org/10.1002/berj.4166>

- Livet, M., Blanchard, C., & Richard, C. (2022). Readiness as a precursor of early implementation outcomes: An exploratory study in specialty clinics. *Implementation Science Communications*, 3(1), 94. <https://doi.org/10.1186/s43058-022-00336-9>
- Mansfield, C., Beltman, S., Curtin. (2020). "I Actually Felt More Confident": An Online Resource for Enhancing Pre-service Teacher Resilience During Professional Experience. *Australian Journal of Teacher Education*, 45(4), 30–48. <https://doi.org/10.14221/ajte.2020v45n4.3>
- McLay, K. F., & Reyes, V. C. (2024). Beyond TPACK: A case for foregrounding affect in technology rich 21st-century teaching and learning. *Journal of Computer Assisted Learning*, 40(6), 3201–3214. <https://doi.org/10.1111/jcal.13055>
- Meierdirk, C., & Fleischer, S. (2022). Exploring the mindset and resilience of student teachers. *Teacher Development*, 26(2), 263–278. <https://doi.org/10.1080/13664530.2022.2048687>
- Mohd Adnan, R., & Mohd Matore, M. E. E. (2022). Development of Adversity Quotient (AQ) index of pre-service teachers in Institute of Teacher Education (IPG). *Frontiers in Public Health*, 10, 940323. <https://doi.org/10.3389/fpubh.2022.940323>
- Molyneux, T. (2021). Preparing teachers for emotional labour: The missing piece in teacher education. *Journal of Teaching and Learning*, 15(1), 39–56. <https://doi.org/10.22329/jtl.v15i1.6333>
- Moran, R. M. R., Robertson, L., Tai, C., Ward, N. A., & Price, J. (2023). Developing pre-service teachers' adaptive expertise through STEM-CT integration in professional development and residency placements. *Frontiers in Education*, 8, 1267459. <https://doi.org/10.3389/feduc.2023.1267459>
- Muflihini, M. H., Arif Budi Raharjo, Hanif Cahyo Adi Kistoro, & Khairul Ummah Mohamad Jodi. (2024). Competence Strengthening of Hard Skills and Soft Skills of Prospective Religious Education Teacher Students through the Introduction to School Field Program (PLP) in Indonesia. *Jurnal Pendidikan Agama Islam*, 21(1), 60–73. <https://doi.org/10.14421/jpai.v21i1.8554>
- Pahrudin, A., Irwandani, Aridan, M., & Barata, M. F. (2025). Teacher Readiness for Deep Learning in Islamic Education: A Rasch Model Analysis of Challenges and Opportunities. *Journal of Teaching and Learning*, 19(4). <https://doi.org/10.22329/jtl.v19i4.9573>
- Prastikawati, E. F., Mujiyanto, J., Saleh, M., & Fitriati, S. W. (2025). Factors Influencing Assessment Decision-Making of Pre-Service EFL Teachers: Insights From the Teaching Practicum Experience. *Theory and Practice in Language Studies*, 15(4), 1330–1339. <https://doi.org/10.17507/tpls.1504.31>

- Rapisa, D. R., Hermanto, H., & Suparno, S. (2026). Teacher Competency in Practicing Inclusive Education: A Systematic Review. *Journal of Teaching and Learning*, 20(2). <https://doi.org/10.22329/jtl.v19i3.9373>
- Ross, P. M., Scanes, E., & Locke, W. (2023). Stress adaptation and resilience of academics in higher education. *Asia Pacific Education Review*. <https://doi.org/10.1007/s12564-023-09829-1>
- Rowan, L., Bourke, T., L'Estrange, L., Lunn Brownlee, J., Ryan, M., Walker, S., & Churchward, P. (2021). How Does Initial Teacher Education Research Frame the Challenge of Preparing Future Teachers for Student Diversity in Schools? A Systematic Review of Literature. *Review of Educational Research*, 91(1), 112–158. <https://doi.org/10.3102/0034654320979171>
- Sandoval-Ríos, F., Gajardo-Poblete, C., & López-Núñez, J. A. (2025). Role of data literacy training for decision-making in teaching practice: A systematic review. *Frontiers in Education*, 10, 1485821. <https://doi.org/10.3389/educ.2025.1485821>
- Shore, A., & Dinning, T. (2023). Developing student's skills and work readiness: An experiential learning framework. *Journal of Work-Applied Management*, 15(2), 188–199. <https://doi.org/10.1108/JWAM-02-2023-0016>
- Smets, W., & Struyven, K. (2020). A teachers' professional development programme to implement differentiated instruction in secondary education: How far do teachers reach? *Cogent Education*, 7(1), 1742273. <https://doi.org/10.1080/2331186X.2020.1742273>
- Suh, J. K., Hand, B., Ercan-Dursun, J., Sahin, E., & Fulmer, G. (2024). Exploring the Complexity of Adaptive Teaching Expertise within Knowledge Generation Environments. *Education Sciences*, 14(4), 415. <https://doi.org/10.3390/educsci14040415>
- Timothy, V., Fischer, F., Watzka, B., Girwidz, R., & Stadler, M. (2023). Applying Cognitive Load Theory in Teacher Education: An Experimental Validation of the Scale by Leppink et al. *Psychological Test Adaptation and Development*, 4(1), 246–256. <https://doi.org/10.1027/2698-1866/a000052>
- Torres-Cladera, G., Simó-Gil, N., Domingo-Peñafiel, L., & Amat-Castells, V. (2021). Building Professional Identity during Pre-Service Teacher Education. *Center for Educational Policy Studies Journal*, 11(3), 35–54. <https://doi.org/10.26529/cepsj.1070>
- V. Sathasivam, R., Abdullah, M. N. S., & Abd Rauf, R. A. (2024). Theory-Practice Divide: Pre-service Teachers' Application of Pedagogical Knowledge During Teaching Practicum. *Pertanika Journal of Social Sciences and Humanities*, 32(1), 69–86. <https://doi.org/10.47836/pjssh.32.1.04>
- Zhang, S., & Luo, Y. (2023). Review on the conceptual framework of teacher resilience. *Frontiers in Psychology*, 14, 1179984. <https://doi.org/10.3389/fpsyg.2023.1179984>