JOURNAL OF ACADEMIC RESEARCH FOR HUMANITIES
ISSN 2663-192x

ORCID of JAR: https://orcid.org/0009-0000-0723-9485
CrossRef DOI Number: 10.67244/jar.bwo-researches.v6i4.a644
Link to the Paper: https://jar.bwo-researches.com/index.php/jarh/article/view/644
Edition Link: Journal of Academic Research for Humanities JARH, 6(4), Oct-Dec 2026
HJRS Link: Journal of Academic Research for Humanities JARH (HEC-Recognised for 2026-2027)
YouTube Link for the Paper Video Overview: https://youtu.be/ynfPJZl1LJU

Integrating Response to Intervention and Reflective Feedback in Pre-Service Teacher Education: Evidence from A Pakistani University

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Paper Information

Citation of the paper:
(JARH)Farooq, R., Qurashi, U., Khanam, A., (2026). Integrating Response to Intervention and Reflective Feedback in Pre-Service Teacher Education: Evidence from A Pakistani University. *In Journal of Academic Research for Humanities, 6(4), 70–82.*

QR Code for the Paper:

Subject Areas for JARH:
1 Intervention and Reflective
2 Reflective Feedback
3 Social Sciences & Humanities

Timeline of the Paper at JARH:
Received on: 28-09-2026.
Reviews Completed on: 24-10-2026.
Accepted on: 15-11-2026.
Online on: 20-11-2026.

License:
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Recognised for BWO-R:
HJRS HEC Journal Recognition System

Jointly Published by BWO Research INTL:
BWO RESEARCHES (PVT) LTD INTERNATIONAL

CrossRef DOI Image of the paper:
Crossref

Abstract

Pre-service teachers in Pakistan are seldom ready to meet the challenges of the teaching practicum. This study designed and tested a Teaching Practicum Model that uses the Response to Intervention (RTI) framework and is theoretically based on Vygotsky's Zone of Proximal Development (ZPD). In the model, the mentor observes, evaluates, and provides on-the-spot support as the pre-service teacher needs it, varying the intensity of support according to performance in the targeted area of improvement. Action research with a single-group design and no comparison or control group was conducted with a cohort of sixty pre-service teachers at a public women's university in Lahore. Competence in pedagogy, communication, and classroom management was measured across four phases using a validated twenty-eight-indicator observation rubric. Support was delivered in three tiers of increasing intensity: universal preparation for the whole cohort, targeted small-group support, and intensive one-to-one support. After each intervention, participants scoring below 3 on the rubric were placed in the next tier. Repeated measures analyses of variance revealed a significant effect of the intervention in every domain ($p < .001$), with large effect sizes, and paired-samples comparisons confirmed significant improvement across successive tiers. The number of participants requiring support decreased from fifty-seven to thirteen to six across the tiers, with a single remaining case at the end. Thematic analysis of written reflective accounts further suggested that reflective practices supported development. The findings indicate that a tiered, criterion-based structure of support can be incorporated within an existing practicum to reduce challenges and raise a whole cohort to a common professional standard.

Keywords: Practicum; Response to Intervention; Scaffolding; Mentoring; Competence

Introduction

The teaching practicum provides an opportunity for prospective teachers to apply their theoretical preparation in an actual classroom setting. As subject knowledge and pedagogical understanding are translated into practice during this experience, it is widely considered one of the most formative components of teacher education (Aglazor, 2017; Kihwele & Mtandi, 2020). Pre-service teachers are usually familiar with effective teaching strategies; however, they often face problems in applying this knowledge in real classroom situations (Sari et al., 2024; Zaragoza et al., 2024). These challenges are mainly associated with three areas: planning and delivering purposeful instruction, managing learner behavior and classroom routines, and communicating effectively to facilitate the teaching and learning process. Studies in Pakistan have also reported challenges related to textbooks, curriculum, classroom conditions, and lesson planning (Khan et al., 2024). Other research has identified a gap between university preparation and school realities, including heavy workloads, overcrowded classrooms, limited resources, and inconsistent mentoring (Shamim et al., 2026).

The Response to Intervention (RTI) framework provides a way to match the level of support with a learner's needs (Hughes & Dexter, 2011). All learners receive universal support, while additional and increasingly intensive assistance is provided only to those who continue to fall below the established criterion (Fuchs & Fuchs, 2006; Sugai & Horner, 2009). RTI and multi-tiered support systems have mainly been used to address students' academic and behavioral learning needs. Their use in teacher education has received less attention (Bloomfield et al., 2024; Nasim et al., 2024). A tiered model that uses performance criteria to guide support for pre-service teachers during practicum has not been examined in the Pakistani context. The model in this study is also informed by Vygotsky's Zone of Proximal Development (ZPD). This perspective explains how a More Knowledgeable Other provides support according to a learner's needs and gradually reduces that support as the learner becomes more competent (Chaiklin, 2003; Vygotsky, 1978).

The proposed model addresses this gap through three main features: a performance criterion based on a rubric informed by Danielson (2013) and Pianta et al. (2008), increasing levels of support for pre-service teachers who do not meet the expected standard, and feedback after each measurement. The study also explores participants' experiences with the support provided.

Statement of the Problem

Teaching practicum research conducted in Pakistan indicates that challenges faced by pre-service teachers are not adequately addressed. Common areas of difficulty include school placement, lesson planning, classroom management, assessment, and the quality of supervisory feedback. Moreover, consistent guidance to address these challenges as they emerge is often lacking (Bibi & Aziz, 2024; Bugti et al., 2024; Shah et al., 2021). When mentoring and feedback are not responsive to pre-service teachers' needs, the overall practicum experience is affected (Hobson et al., 2009; Kalsoom et al., 2019). Recent studies indicate poor instructional design and report that a grade-focused institutional culture is an obstacle to good teaching and therefore limits higher-order teaching practices (Jamil & Khanam, 2026; Shahid, 2026). These challenges are significant because gaps in teaching practice may carry over into the next year and can influence students' learning, which is a concern addressed by Sustainable Development Goal 4 (SDG 4). The current study therefore analyzed an RTI-based Teaching Practicum Model to tackle pre-service teachers' pedagogical, managerial, and communication problems.

Literature Review

The teaching practicum is central to teacher education, as professional competence develops through guided practice rather than knowledge

transmission. Its effectiveness depends on structured mentoring, constructive feedback, and sustained support (Clarke et al., 2014). Pre-service teachers often struggle with responsive instruction, classroom management, learner engagement, and effective communication, necessitating timely feedback (Galana et al., 2023; Sari et al., 2024). While mentoring promotes professional growth, inadequate guidance may hinder development (Hobson et al., 2009; Kalsoom et al., 2019). Furthermore, classroom power dynamics influence participation and learning (Maryam et al., 2026; Waqar et al., 2026), while supervisory support strengthens professional development (Asif et al., 2026).

Vygotsky's description of ZPD is based on the gap between what a learner can do independently and what he or she can do with the help of a more knowledgeable other (Chaiklin, 2003; Vygotsky, 1978). Support should therefore be tailored to the needs of the pre-service teacher and gradually phased out as they become more independent (Gao, 2024; Johnson & Golombek, 2018; Rahman, 2024). Pre-service teachers benefit more from scaffolding that addresses their specific learning needs than from uniform support (Raslan, 2024). Their willingness to take instructional risks and engage in structured practice is influenced by self-efficacy and professional identity (Bandura, 1977; Meyer et al., 2023). Microteaching and reflective portfolios further support these qualities by documenting professional growth and progress (Mukuka & Alex, 2024; Scoupe et al., 2024).

Feedback is fundamental to effective mentoring, yet pre-service teachers often receive inadequate or superficial guidance. While mentors frequently provide positive feedback, areas requiring improvement remain insufficiently addressed (Moosa, 2026), and feedback often lacks quality and research-based foundations (Monteleone et al., 2026). Video-recorded lessons facilitate reflective practice when mentors engage as co-reflectors (Tiainen & Lutovac, 2024). In Pakistan, continuous feedback has been associated with improved instructional practices and student performance (Shahid, 2025), highlighting the need for greater integration of teacher education, curriculum, and pedagogy (Shahid & Khanam, 2024).

Response to Intervention (RTI) is a framework that provides support through tiers of increasing intensity. It uses criterion-based performance data to identify which individuals need additional support (Fuchs & Fuchs, 2006; Sugai & Horner, 2009). A tiered framework can also support teachers' professional development. This is achieved through responsive, tiered models of professional development within multi-tiered systems of support. These models address individual learning needs and measure progress through the structured implementation of interventions (Bloomfield et al., 2024; Choi et al., 2024; Morse, 2024; Polirstok & Hogan, 2024). Studies of tiered support for students, such as Al Otaiba et al. (2026) on reading gains and Choi et al. (2024) on instructional decision-making for autistic students, helped explain how tiers and data-based decisions work.

Evidence from Pakistan on teachers' understanding and implementation of RTI remains weak, underlining the need for locally grounded work (Nasim et al., 2024). Structured reflection on observed practice is also associated with enhanced self-efficacy and professional identity, suggesting that reflective practice may be a critical mechanism through which feedback is internalized and translated into sustained improvement (Hußner et al., 2023; Li, 2025). Hence, a practicum with tiered, criterion-referenced support delivered within the pre-service teacher's zone of proximal development is made meaningful through reflection.

Objectives

The study had the following objectives:

1. Identify the pedagogical, communication, and classroom-management difficulties experienced by pre-service teachers at the beginning of the practicum.
2. Design and implement an RTI-informed, tiered practicum intervention using criterion-based observation and responsive mentoring

for sustainable quality in teaching and learning in accordance with SDG 4.

3. Determine the effectiveness of the RTI-informed teaching practicum model in addressing pre-service teachers' pedagogical, communication, and classroom-management difficulties through action research.

Research Questions

1. What pedagogical, communication, and classroom-management difficulties do pre-service teachers experience at the beginning and during the teaching practicum?
2. In what ways can an RTI-informed teaching practicum model respond to the pedagogical, communication, and classroom-management needs of pre-service teachers while contributing to sustained quality in teaching and learning in alignment with SDG 4?
3. What changes in observed competence occur across the intervention phases, and how do participants describe the contribution of observation, feedback, and reflection?

Research Methodology

The study was conducted as action research within a pragmatist paradigm, integrating a quantitative approach that measured change in competence with a qualitative strand that examined how participants experienced their development (Creswell & Creswell, 2018). Action research was appropriate because on-the-spot support and intervention were designed, implemented, and assessed by the researcher within an ongoing practicum. The design combined the action-research cycle with the RTI tiered framework, as outlined in Annexure A, in a single-group, repeated-measures format with four measurement points across the three tiers, starting at baseline. With no control or comparison group, the study cannot distinguish the effects of the intervention from the regular practicum experience; the findings are therefore interpreted as observed changes within the cohort of sixty pre-service teachers.

Population and Sampling

The population comprised pre-service teachers in the four-year B.Ed. program at a public-sector teacher-education institution in Lahore, Punjab. All pre-service teachers undertaking teaching practice during data collection were included as an intact cohort, selected through convenience (total-cohort) sampling rather than random selection. To be eligible, participants had to be currently enrolled in the four-year B.Ed. program and placed in one of the three participating schools. The cohort consisted of sixty participants: seventeen at School A, eighteen at School B, and twenty-five at School C.

Instrumentation

Teaching performance during the teaching practicum was measured using an observation tool developed around three domains: pedagogical competence (8 indicators), classroom management (10 indicators), and communication (lingual) competence (10 indicators). Each indicator was scored from 1 (needs support) to 4 (proficient level). A domain mean of 3 was set as the professional standard of effective teaching practice, in line with Danielson's (2013) framework.

The rubric's content validity was assessed by ten doctoral experts in Education. The item-level content validity index (I-CVI) was calculated based on expert agreement, while the scale-level index (S-CVI/Ave) represented the average of item-level CVIs, alongside a modified kappa to account for chance agreement. The S-CVI/Ave was .97, with unanimous agreement on 20 items and an I-CVI of .90 for the remaining eight. Internal consistency was also high, with a Cronbach's alpha of .91 for the overall instrument and .80, .78, and .78 across the three domains. The full item-level statistics are reported in Annexure B.

Table 1

Content Validity Index of the Observation Rubric (10 Experts, 28 Items)

Statistic	Value
Number of experts	10
Number of items	28
I-CVI range	.90 – 1.00
Items with I-CVI = 1.00	20 of 28

Modified kappa (κ*)	Excellent for all items
S-CVI/Ave	0.97

Note. I-CVI = item-level content validity index; S-CVI/Ave = scale-level content validity index (average method). Thresholds applied: I-CVI ≥ .78 and S-CVI/Ave ≥ .90.

Reliability

Once content validity had been established, the internal-consistency reliability of the rubric was examined on the main sample using Cronbach's alpha. As Table 2 shows, the twenty-eight-item rubric demonstrated excellent internal consistency, and each of the three domains exceeded the conventional threshold of .70 (Taber, 2018).

Table 2

Internal-Consistency Reliability of the Competence Rubric (N = 60)

Domain	Items	Cronbach's α	95% CI	Interpretation
A: Pedagogical Competence	8	.80	[.72, .87]	Good
B: Communication (Lingual) Competence	10	.78	[.69, .86]	Acceptable
C: Classroom Management	10	.78	[.69, .86]	Acceptable
Full rubric	28	.91	[.88, .94]	Excellent

Note. α ≥ .90 excellent; .80–.89 good; .70–.79 acceptable (Taber, 2018).

Data Analysis

Descriptive and inferential statistics were used to analyze the quantitative data. A one-way repeated-measures ANOVA with four levels was conducted for each domain to examine changes in performance across the assessment sequence. Paired-samples t-tests compared pretest and posttest scores within each tier, as well as baseline and final posttest scores. Partial eta squared measured the overall effect size, while Cohen's d for repeated measures assessed individual transitions, using conventional benchmarks (Cohen, 1988).

Qualitative analysis focused on participants' experiences with their overall growth during the teaching practicum. Ten reflective accounts were purposefully chosen from all tiers and all schools. The process was informed by Braun and Clarke's (2006) six-phase thematic analysis. The accounts were repeatedly checked, and initial codes were developed inductively and deductively, with the rubric domains as a basis. Codes were categorized into themes, checked against the coded extracts and the complete dataset, and then further developed and named. This resulted in 22 themes in three clusters. A further comparison identified five cross-domain themes, that is, themes that emerged in all three clusters (Annexure E).

Results

RQ1: The Challenges Encountered at Baseline

At baseline, the cohort's mean scores fell below the professional-competence criterion across all three domains, indicating widespread practicum challenges. As shown in Table 3, pedagogical, communication, and classroom-management scores all fell within the emerging band. Furthermore, fifty-seven of the sixty participants scored below the criterion in at least one domain, highlighting the need for targeted support through differentiated interventions.

Table 3

Baseline Descriptive Statistics for the Three Competence Domains (N = 60)

Domain	M	SD	Minimum	Maximum
A: Pedagogical	2.56	0.44	1.50	3.25
B: Communication	2.59	0.40	1.60	3.30
C: Classroom Management	2.54	0.40	1.50	3.30

Note. M = mean domain score on the four-point rubric; SD = standard deviation. A domain mean of 3.00 is the criterion of professional competence.

RQ2: How the RTI-Based Practicum Catered to the Needs

The needs identified at baseline were addressed through three tiers of increasing intensity, integrated with the action-research cycle (Annexure A). Tier 1 provided universal, preparatory support to the whole cohort through a pre-practicum workshop and on-site facilitation that continued for all participants throughout. Tier 2 provided targeted, small-group support to those who remained below the criterion after the universal phase, and Tier 3

provided intensive, one-to-one support to those who remained below it after the targeted phase. Competence was measured on four occasions, with the post-test of each tier serving as the pretest of the next. Of the sixty participants, fifty-seven required support beyond the baseline, thirteen required targeted support, and six required intensive support, with only one participant remaining below the criterion in a single domain at the end.

RQ3: The Effectiveness of the Model

The effect of the intervention was statistically significant in every domain, with very large effect sizes, across the tiers (Table 4). Each of the three null hypotheses of no effect was therefore rejected.

Table 4

Repeated Measures Analysis of Variance by Domain (N = 60)

Domain	F (3, 177)	Partial η^2	p	Decision
A: Pedagogical	346.35	.85	< .001	H_0 rejected
B: Communication	376.87	.87	< .001	H_0 rejected
C: Classroom Management	466.62	.89	< .001	H_0 rejected

Paired-samples comparisons highlighted the change associated with each tier. As Table 5 shows, the largest gains occurred across the universal phase, with smaller but still significant gains across the targeted and intensive phases; every comparison was significant at $p < .001$. The change within each tier is displayed in Annexure C, and the gain after receiving support at each phase is shown in Annexure D.

Table 5

Paired-Samples Comparison of the Three Competences Across Each Tier (N = 60)

Tier	Domain	Pre M	Post M	Mean gain	t (59)	d
Universal	A	2.56	3.34	0.78	17.18	2.22
	B	2.59	3.41	0.81	17.34	2.24
	C	2.54	3.43	0.90	20.84	2.69
Targeted	A	3.34	3.59	0.25	8.39	1.08
	B	3.41	3.62	0.21	7.90	1.02
	C	3.43	3.64	0.21	8.33	1.08
Intensive	A	3.59	3.83	0.24	6.24	0.81
	B	3.62	3.81	0.19	6.74	0.87
	C	3.64	3.84	0.20	5.92	0.76

Note. All comparisons were significant at $p < .001$. d = Cohen's d for repeated measures. A = Pedagogical, B = Communication, C = Classroom Management.

The pattern showed that the lower the initial scores, the larger the improvements made by participants across the phases. Because participants in the later tiers were selected for lower earlier scores, this pattern should not be read as showing that more intensive support produced greater improvements (see Limitations).

The cumulative change from baseline to the final intervention had very large effect sizes in all three domains (Cohen's d of 3.89, 3.75, and 4.78 for Pedagogical, Communication, and Classroom Management, respectively).

The qualitative analysis of participants' reflective accounts complemented these outcomes by describing how the change was experienced. Twenty-two themes were identified within three domain clusters, and five recurred across all three competences (Table 6).

Table 6

Themes Identified Across the Three Competence Domains

Theme	Description
Disconfirming experience as a catalyst for professional growth	Growth began when existing assumptions about effective teaching were challenged, creating a need to reconsider established practices.
Observation–feedback as the mechanism of change	The observation–feedback cycle was the recurring stimulus for development in every domain.
Reorienting to student-centered facilitation	Participants shifted the focus of a lesson from their own performance to students' learning.
From reacting to	Participants moved towards

anticipating	anticipating students' needs, identifying potential barriers, and adapting instruction proactively.
From emerging confidence to reflective professional identity	A culminating change towards a confident, reflective professional stance.

Note. Themes were derived through thematic analysis of the written reflective accounts of ten participants.

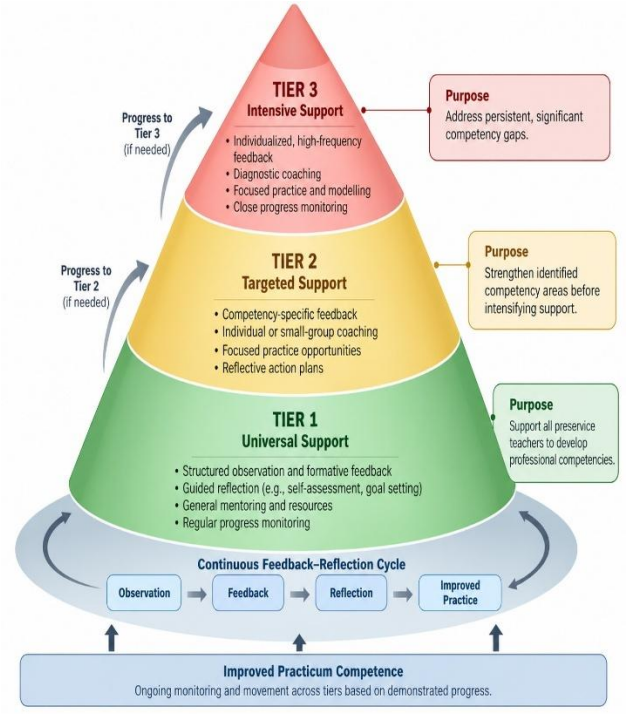
Findings

The principal findings of the study are as follows:

1. At baseline, the cohort entered the practicum with competence substantially below the professional criterion in all three domains, with fifty-seven of the sixty participants below the criterion in at least one domain.
2. The RTI-based Teaching Practicum Model organized support into three perfectly nested tiers; the number of participants requiring support decreased from fifty-seven to thirteen to six, with a single remaining case at the end. Because participants were assigned to tiers on the basis of earlier scores, this pattern reflects observed progression over time rather than the comparative effectiveness of the different tiers.
3. The three null hypotheses were rejected as the analysis of variance indicated that there was a statistically significant difference ($p < .001$) with very large effect sizes across all four measurement points. These results, however, do not necessarily reflect the impact of the intervention, but rather the changes that occurred in the cohort over time. Monteleone et al. (2026) also provide a framework for assessing feedback quality.
4. Paired-samples comparisons showed significant gains across every tier, largest in the universal phase and progressively smaller in the targeted and intensive phases. The universal phase improved the entire cohort, whereas gains in later tiers came from participants selected for lower earlier scores and may partly reflect regression to the mean.
5. Thematic analysis suggested that participants perceived feedback-driven reflection as central to their growth, facilitated by the observation–feedback cycle.

Figure 1:

The RTI Model Proposed by the Researcher for Improving Practicum Competence



Discussion and Conclusion

The findings show that pre-service teachers' pedagogical, communication, and classroom-management competence improved during the RTI-based practicum. The greatest gains occurred during the universal phase, followed by smaller gains during the more targeted phases. The results are consistent with the ZPD as proposed by Vygotsky (1978) and Chaiklin (2003), which holds that learning is best promoted by providing support that is appropriate to the learner and gradually withdrawn as the learner becomes more independent.

The gains observed cannot be attributed to the intervention alone; improvements may also have been due to maturation, natural learning that occurs during the practicum, and concurrent supervision. The qualitative results indicate that participants benefited from professional learning through observation, feedback, and reflection.

Through observation and feedback, they were able to see the strengths and weaknesses of their teaching, and by reflecting on, interpreting, and applying feedback during further practice, they improved their teaching. The results are congruent with the literature that identifies mentoring and feedback as important elements in the teaching practicum (Hobson et al., 2009; Kalsoom et al., 2019) and reflection as a key process in the translation from feedback to future growth (Hußner et al., 2023; Li, 2025). They also align with Moosa's (2026) findings that feedback can be unproductive if it does not point to a clearly established area for improvement. Similarly, Monteleone et al. (2026) discuss the importance of specific, useful written feedback. Within the current model, the rubric and repeated observations were used to link feedback to teaching efficacy and support. Tiainen and Lutovac's (2024) study also demonstrates the importance of reflective discussions.

There was a significant gain in the universal phase, and smaller increases occurred in the later phases. This does not imply that universal support was more effective than targeted or intensive support. The results from the various levels are not directly comparable with each other, since participants entered the later tiers only if they had scores that were below the criterion in the preceding tier. Regression to the mean may also have contributed to the improvement among participants who had lower scores at earlier measurement points. Overall, participants reported in their reflections during the practicum that targeted support and feedback were useful. The overall results support the use of responsive, structured intervention in pre-service teacher training, and extend the limited existing research by taking a closer look at how such approaches can be implemented in the professional development of teachers (Bloomfield et al., 2024; Polirstok & Hogan, 2024).

Recommendations

1. Pre-service teachers could first be prepared universally, with more intensive support then offered to those who fall short of the standard, through a redesigned pilot practicum in the Teacher Education Program.
2. Structured observation-feedback cycles and guided reflection can be adopted as crucial strategies to assist pre-service teachers during teaching practice.
3. Teacher education institutions need to engage in mentor preparation to ensure that tiered interventions are implemented consistently and that university-school coordination is strengthened. It is also recommended that implementation fidelity and the quality of feedback be documented.
4. Future studies of the model should use control or comparison groups and report inter-rater reliability. A larger sample drawn from various institutions, genders, and subject areas would support wider adoption of the model in various teacher education settings.

Limitations

1. The single-cohort pretest-posttest design without a control group limits causal conclusions because the influence of maturation during the practicum cannot be excluded.
2. The reason for selecting participants for Tier 2 and Tier 3 was their initially below-threshold scores. To be precise, participants were included in Tier 2 and Tier 3 only if they scored below the criterion of 3:00 during the previous phase; thus, a tier-based comparison is presented in Table 5 based on selecting a group of participants with low scores. Regression to the mean is thus a real threat to the validity of the research design, since some part of Tier 2 and Tier 3 gains would be expected even if the support itself did nothing, as scores are relatively low at one point, tend to converge towards the mean score of the cohort at another point, and the farther the participant was behind the criterion, the greater the expected gain.
3. Annexure A outlines the intervention, but implementation fidelity was not formally documented. Session plans, feedback forms,

and fidelity sheets should be kept in future studies to facilitate consistent implementation and replication.

Ethical Considerations

Participants were invited to take part, and informed consent was obtained before data collection. The anonymity of pre-service teachers and placement schools was preserved using pseudonymous identifiers. Data were collected through observations during routine practicum activities and reflective writing, and the study met institutional ethical requirements.

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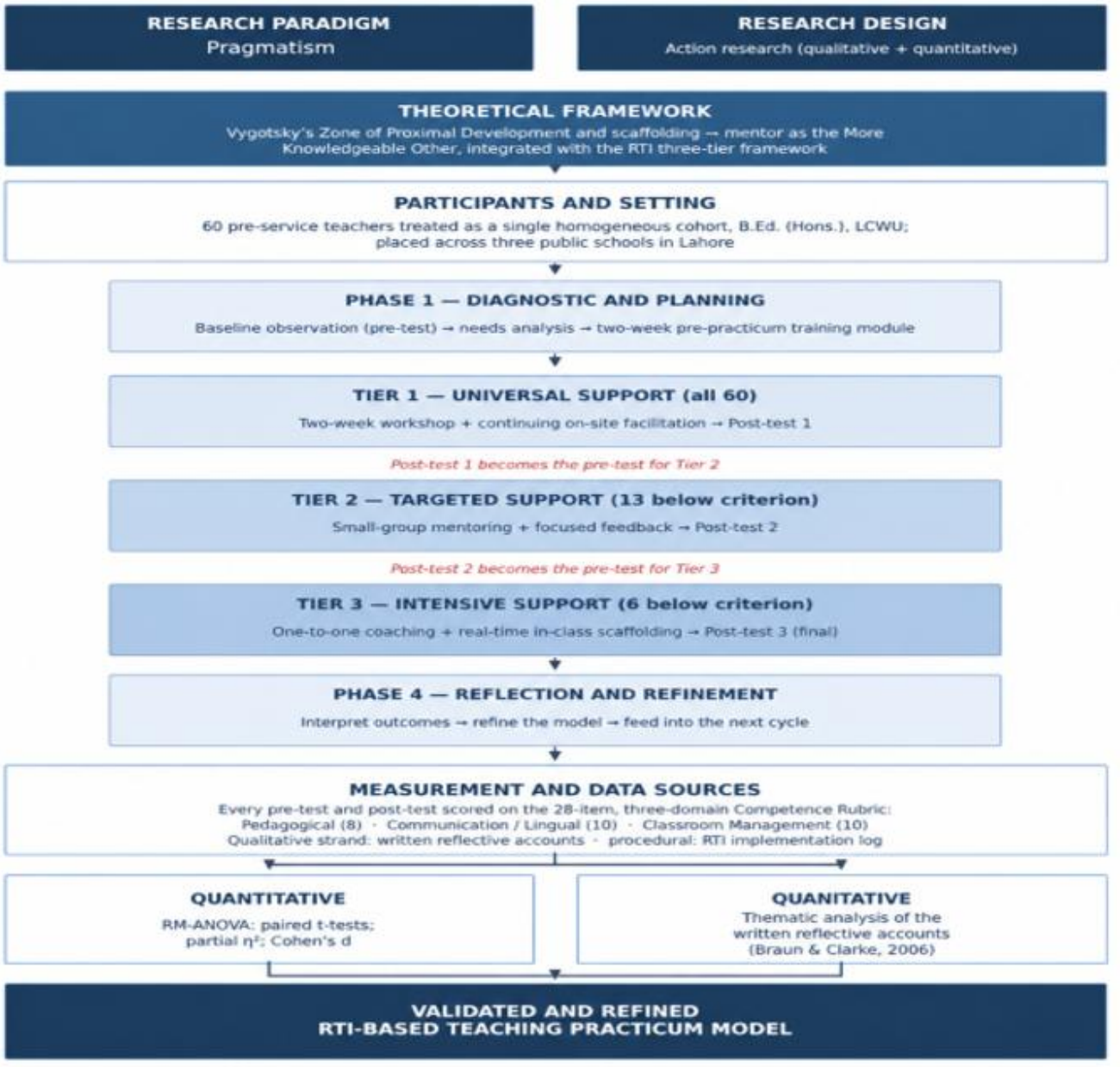
Annexure (A)

Research Design: Integration of the Action Research Cycle and the RTI Tiered Framework



Note. The figure shows the alignment of the action-research cycle with the three tiers of the RTI framework.

Annexure (B)

Content Validity Index: Item-Level Statistics (10 Experts, 28 Items)

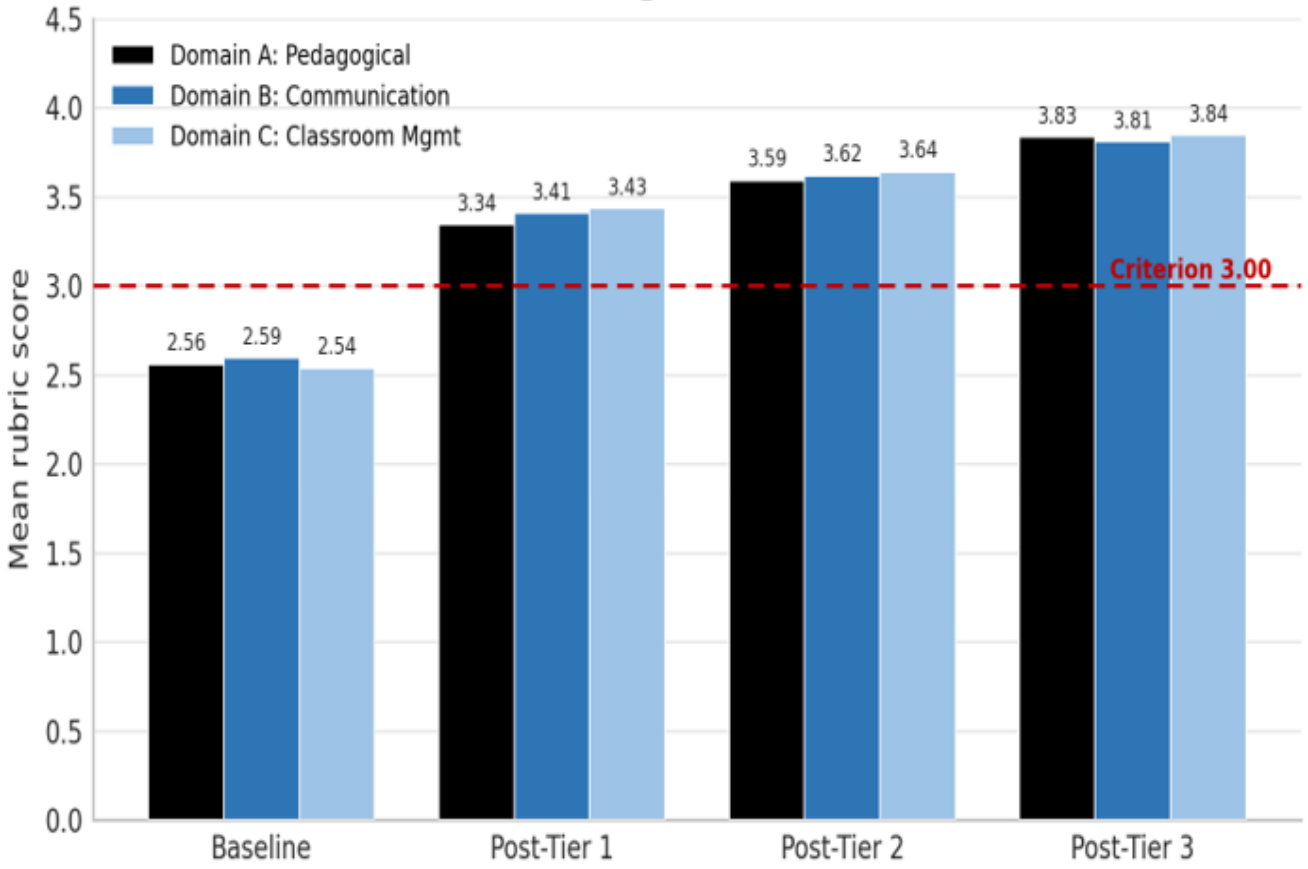
Item	N	A	I-CVI	Pc	κ*	Interpretation
Item-1	10	9	0.90	0.0107	0.90	Excellent
Item-2	10	9	0.90	0.0107	0.90	Excellent
Item-3	10	9	0.90	0.0107	0.90	Excellent
Item-4	10	10	1.00	0.0010	1.00	Excellent
Item-5	10	9	0.90	0.0107	0.90	Excellent
Item-6	10	9	0.90	0.0107	0.90	Excellent
Item-7	10	10	1.00	0.0010	1.00	Excellent
Item-8	10	10	1.00	0.0010	1.00	Excellent
Item-9	10	10	1.00	0.0010	1.00	Excellent

Item-10	10	10	1.00	0.0010	1.00	Excellent
Item-11	10	10	1.00	0.0010	1.00	Excellent
Item-12	10	10	1.00	0.0010	1.00	Excellent
Item-13	10	10	1.00	0.0010	1.00	Excellent
Item-14	10	10	1.00	0.0010	1.00	Excellent
Item-15	10	10	1.00	0.0010	1.00	Excellent
Item-16	10	10	1.00	0.0010	1.00	Excellent
Item-17	10	10	1.00	0.0010	1.00	Excellent
Item-18	10	10	1.00	0.0010	1.00	Excellent
Item-19	10	10	1.00	0.0010	1.00	Excellent
Item-20	10	9	0.90	0.0107	0.90	Excellent
Item-21	10	9	0.90	0.0107	0.90	Excellent
Item-22	10	10	1.00	0.0010	1.00	Excellent
Item-23	10	10	1.00	0.0010	1.00	Excellent
Item-24	10	10	1.00	0.0010	1.00	Excellent
Item-25	10	9	0.90	0.0107	0.90	Excellent
Item-26	10	10	1.00	0.0010	1.00	Excellent
Item-27	10	10	1.00	0.0010	1.00	Excellent
Item-28	10	10	1.00	0.0010	1.00	Excellent

Note. N = experts rating the item; A = number rating it relevant (score 3 or 4); I-CVI = item-level content validity index; Pc = probability of chance agreement; κ* = modified kappa. S-CVI/Ave = 0.97.

Annexure (C)

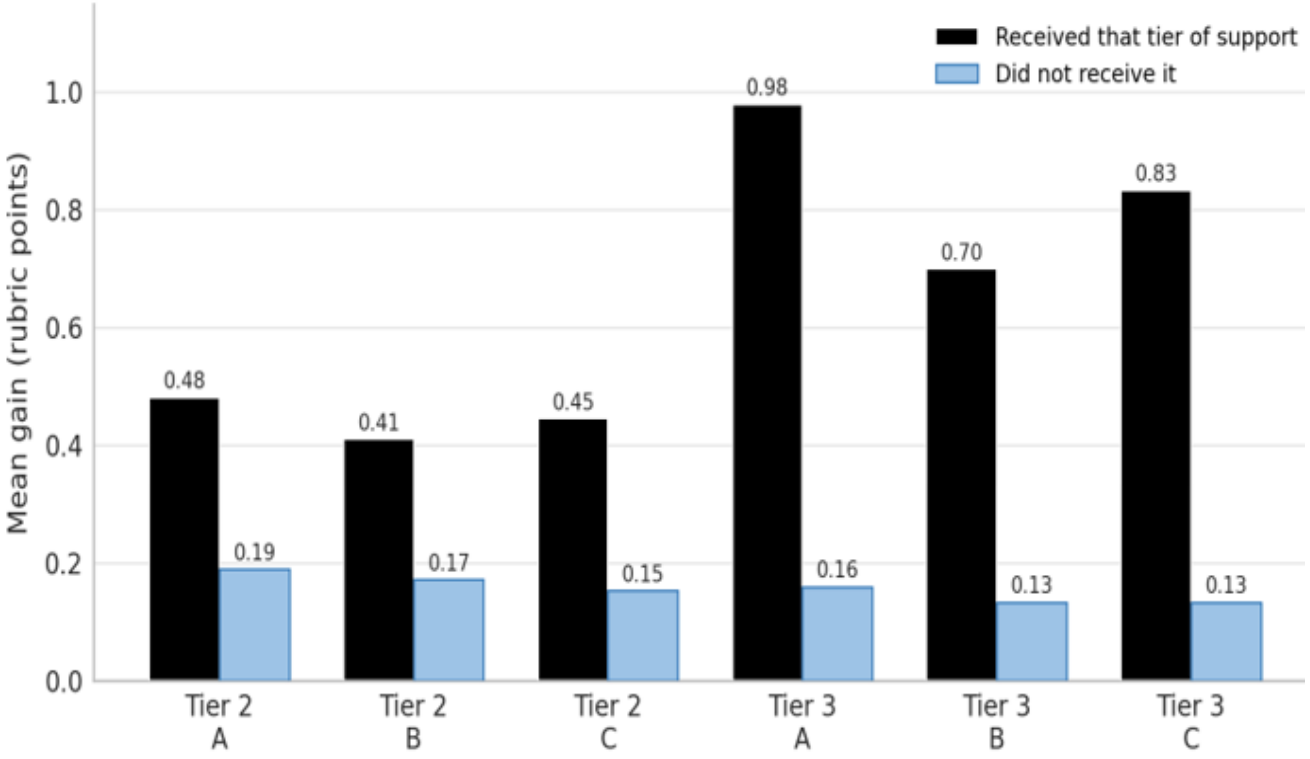
Mean Domain Scores Across the Tiers



Note. The bars show the cohort mean in each domain at baseline and after each tier, against the criterion of 3.00 (dashed line).

Annexure (D)

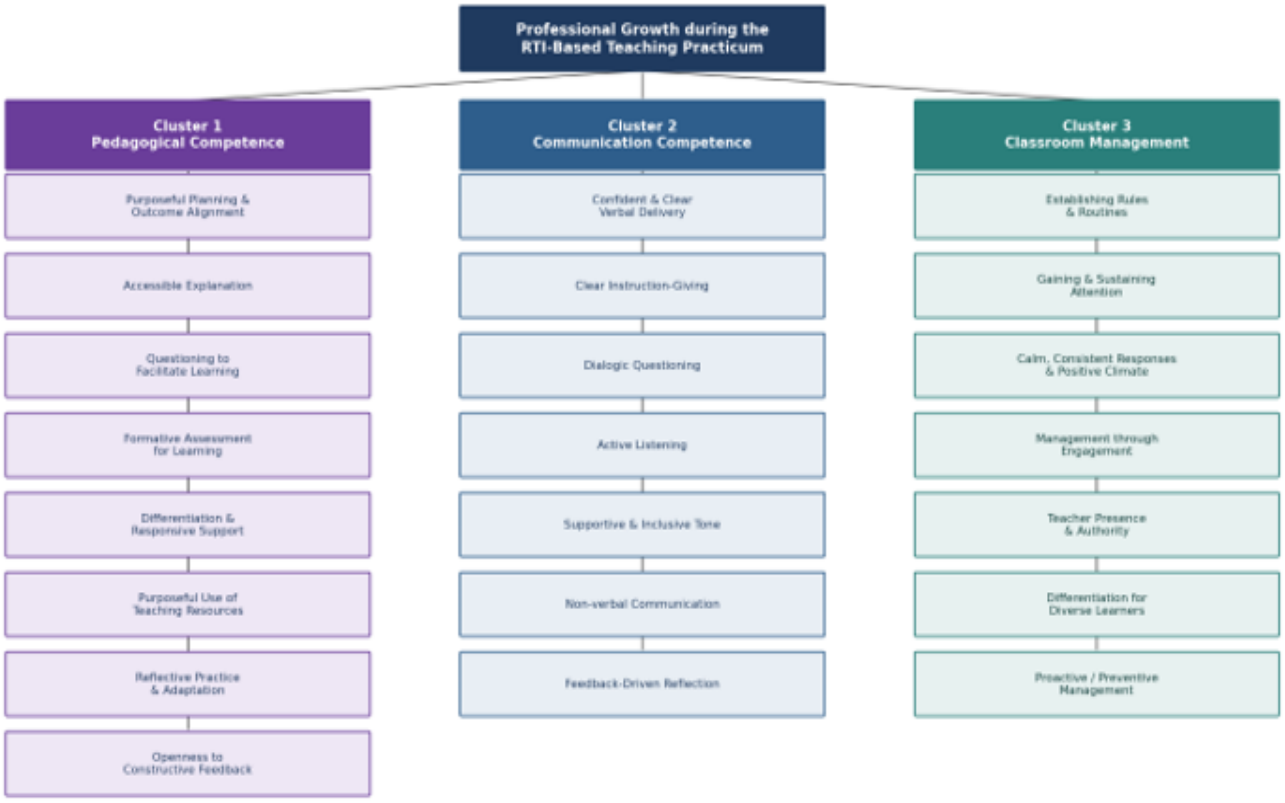
Mean Gain by Support Status During the Targeted and Intensive Tiers



Note. Black bars denote participants who were below the criterion at the start of the phase and therefore received that tier of support; light bars denote those who were not.

Annexure (E)

Thematic Map of Clusters, Themes and Sub-themes



Note. The figure represents the relationships among the three domain clusters and the themes identified within them.