



ORIGINAL RESEARCH PAPER

PERCEPTIONS OF TEACHER DEFICIENCY AND CONVERGENT POLICY PRIORITIES: A MIXED-METHODS STUDY OF TEACHER-DEFICIENT PRIMARY SCHOOLS IN DISTRICT BASTI (UTTAR PRADESH, INDIA)

Education

KEY WORDS: mixed methods; stakeholder perceptions; teacher deficiency; problem severity; school management committee; primary education; policy recommendations; India

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ABSTRACT

Teacher deficiency in primary schools is experienced not only as a statistical indicator (PTR) but as a lived organisational condition that shapes classroom processes, stakeholder expectations and local problem-solving. This mixed-methods paper integrates school-level quantitative results (N = 120 schools) with stakeholder perceptions and thematic narratives (N = 550 stakeholders; 180 teachers) to explain how teacher deficiency is understood by head-teachers, teachers, parents and School Management Committee (SMC) members, and to examine whether stakeholder-generated policy priorities converge with those implied by statistical evidence. Quantitatively, stakeholder groups differ significantly in mean problem-severity scores ($F(3,546) = 13.63, p < .001; \eta^2 \approx 0.07$), with head-teachers and teachers reporting higher severity than parents and SMC members. Qualitative analysis further indicates that stakeholders treat teacher deficiency as a chronic structural problem, describe organisational fragility and timetable instability, and emphasise a gap between recorded syllabus completion and substantive learning ('tick-mark completion'). Stakeholders consistently report that high PTR undermines classroom climate, reduces individual attention and weakens pupil engagement. Despite group differences in perceived severity, policy recommendations show strong convergence across stakeholders: filling vacancies, rationalising deployment, reducing non-teaching duties, strengthening remedial programmes and enabling constructive community involvement. The convergence between stakeholder priorities and quantitative inference strengthens the policy relevance of the findings and supports a district-level action agenda for teacher-deficient contexts.

INTRODUCTION

In teacher-deficient schooling systems, statistics such as PTR are necessary but insufficient for understanding how shortage shapes educational practice. PTR indicates resource scarcity, but it does not reveal how schools cope, how different stakeholders interpret the problem, or which solutions are locally perceived as feasible and legitimate. For policy and administration, these interpretive dimensions matter: reforms that align with local problem definitions and priorities have higher implementation viability.

This paper is situated in District Basti (Uttar Pradesh), where a substantial portion of primary schools operate with teacher deficiency. The parent thesis examined how teacher deficiency relates to functional effectiveness and learning outcomes. The current paper focuses on the stakeholder dimension: how head-teachers, classroom teachers, parents and SMC members perceive the severity and nature of problems emerging from teacher deficiency, how their perceptions differ, and how their narratives explain and contextualise the quantitative patterns.

The paper also addresses an applied question: do stakeholder-generated policy recommendations differ from those implied by statistical evidence? If stakeholder recommendations converge with quantitative inference, policy guidance can be articulated with greater confidence; if they diverge, the divergence itself becomes an important implementation constraint.

Conceptual Lens: Teacher Deficiency As An Organisational Condition

Teacher deficiency can be conceptualised as an organisational condition with three layers:

- (i) Structural layer: sanctioned posts, vacancies, deployment and PTR;
- (ii) Process layer: timetable stability, multigrade management, curriculum coverage, assessment cycles and classroom climate;
- (iii) Interpretive layer: how stakeholders define the problem,

assign accountability and prioritise solutions.

Mixed-methods integration is particularly suitable for such multi-layered conditions. Quantitative indicators capture structural and outcome patterns, while qualitative narratives reveal mechanisms and interpretive frames. In the present study, stakeholder differences in perceived severity are expected because stakeholder groups face different proximities to operational burdens and different accountability expectations.

Method Design

A convergent mixed-methods design was used in the parent study. Quantitative and qualitative strands were collected from the same district context and integrated at the interpretation stage.

Participants

Quantitative school-level analysis covers 120 teacher-deficient primary schools. Stakeholder perception data includes head-teachers (n = 80), teachers (n = 150), parents (n = 220) and SMC members (n = 100), total N = 550. Teacher-level gender comparisons were conducted on N = 180 teachers.

Instruments And Data Sources

Problem Severity Scale (stakeholder version): captures perceived severity of teacher-deficiency-related problems.

Teacher interview schedules and stakeholder focus-group discussions: captured narratives on organisational functioning, learning impacts, coping and recommendations.

Analysis

One-way ANOVA tested differences in problem severity across stakeholder groups. Thematic analysis was used to identify recurring themes in interviews and focus groups. Integration was conducted by mapping themes to quantitative results (convergence, expansion and explanation).

Quantitative Results: Stakeholder Differences In

Perceived Severity

Table 1. Stakeholder-wise Problem Severity Scores

Stakeholder Group	N	Mean	SD
Headteacher	80	2.99	0.44
Teacher	150	2.99	0.43
Parent	220	2.78	0.43
SMC	100	2.71	0.41

Table 2. One-way ANOVA: Problem Severity Differences Among Stakeholders

Source	SS	df	MS	F	p-value	Effect size
Between groups	7.5051	3	2.5017	13.63	1.38e-08	$\eta^2=0.07$
Within groups	100.2156	546	0.1835			
Total	107.7207	549				

Stakeholder groups differ significantly in mean problem severity ($F(3,546) = 13.63, p < .001$). Head-teachers and teachers report the highest mean severity (both $M = 2.99$), while parents ($M = 2.78$) and SMC members ($M = 2.71$) report lower severity. The effect size is small-to-moderate ($\eta^2 \approx 0.07$), consistent with meaningful differences in perceived burden, but not with completely divergent problem recognition.

Qualitative Themes Explaining The Quantitative Pattern

Thematic analysis of interviews and focus-group discussions yielded recurring themes that deepen understanding of the quantitative results. These themes also map directly onto the functional-effectiveness dimensions measured in the quantitative strand.

Theme 1: Teacher deficiency as a chronic structural problem
Stakeholders generally portrayed shortage as long-standing rather than temporary. This chronicity contributes to normalisation, particularly among parents and SMC members, which helps explain why these groups report lower severity despite acknowledging adverse effects.

Theme 2: Organisational fragility and timetable instability
Head-teachers and teachers emphasised daily instability: merged classes, frequent reshuffling of timetables and multigrade teaching arrangements. Their severity scores are higher because they directly experience the managerial and pedagogic consequences and are accountable for daily functioning.

Theme 3: Curriculum coverage and 'tick-mark completion'
Participants distinguished between formal syllabus completion recorded in registers and substantive coverage with understanding. Under shortage, lessons are delivered in a rushed manner with limited practice and limited remedial support, particularly in Hindi and Mathematics.

Theme 4: Classroom climate and pupil engagement under high PTR
Large classes and multigrade settings were described as shifting teaching toward control and basic management rather than interactive, learner-centred instruction. This theme aligns with the strong negative correlations observed between PTR and classroom-climate and engagement dimensions in the quantitative strand.

Theme 5: Stakeholder differences in perceived severity
Parents and SMC members acknowledged problems but often normalised under-staffing as a familiar feature of schooling, while teachers framed it as an acute professional and ethical constraint. This interpretive gap helps explain the observed ANOVA differences.

Theme 6: Community support as helpful but insufficient
Volunteers, para-teachers and informal tuition were valued, yet stakeholders emphasised that such support cannot

substitute for trained, full-time teachers-especially for deeper learning and systematic remediation.

Mixed-methods Integration: Convergence, Expansion And Explanation

Integration was conducted by aligning quantitative patterns with qualitative themes. Three integration outcomes are notable.

Convergence

Both strands identify teacher deficiency as central. Quantitative evidence shows strong associations between PTR and functional effectiveness and achievement, and qualitative narratives consistently attribute instability, superficial coverage and reduced engagement to shortage.

Expansion

Quantitative results show limited location differences. Qualitative data expands this by indicating that shortage is experienced as a district-wide issue; semi-urban schools may have marginally better access to supplementary tuition, but core shortage problems remain similar.

Explanation

The stakeholder ANOVA shows differences in perceived severity. Qualitative narratives explain this pattern through accountability proximity and normalisation: those managing instruction daily perceive the burden more intensely than those observing outcomes indirectly.

Overall, the mixed-methods integration indicates that stakeholder narratives do not contradict statistical inference; rather, they enrich it by specifying mechanisms and feasibility constraints.

Convergent Policy Recommendations

Stakeholders across groups converged on a common set of priorities, which also align with policy directions implied by the statistical findings.

Priority 1: Fill vacancies and ensure adequate staffing
The most consistent recommendation is to recruit and post sufficient teachers to reduce PTR, particularly in severely deficient schools.

Priority 2: Rationalise deployment and reduce uneven distribution
Stakeholders emphasised that some schools remain overburdened while others have relatively better staffing. A transparent rationalisation process can reduce extreme PTRs.

Priority 3: Reduce non-teaching duties in teacher-deficient schools
Teachers highlighted that non-teaching assignments disproportionately harm instruction when staffing is low. Minimising such burdens protects teaching time.

Priority 4: Strengthen remedial and support programmes
Because learning gaps are linked to shortage, stakeholders emphasised remedial support for foundational skills, particularly in Hindi and Mathematics.

Priority 5: Constructive community involvement as a complement
Community participation is valued for facilitation and accountability. However, stakeholders consistently framed it as complementary rather than substitutive.

DISCUSSION

The stakeholder findings demonstrate that teacher deficiency is simultaneously a structural and interpretive problem. Even when all groups recognise that shortage harms learning, the perceived severity differs by role proximity. Head-teachers and teachers experience the

shortage as a constraint on professional responsibility and as a source of chronic stress. Parents and SMC members recognise the constraint but often adapt expectations, in part because shortage is perceived as normal in government schooling.

This normalisation is policy-relevant. When shortage becomes normalised, community pressure for change may weaken, and accountability structures may focus on compliance rather than substantive learning. Conversely, high teacher stress can contribute to burnout, absenteeism and further instability.

The theme of 'tick-mark completion' is particularly important. It captures a gap between administrative indicators of coverage and actual learning. In shortage conditions, the system may appear functional on paper while learning deteriorates. Therefore, policy monitoring should include learning indicators and functional routines, not only administrative completion.

Finally, the community-support theme aligns with quantitative results showing small effects. Stakeholders value community initiatives, but they also recognise limits. This suggests that community participation should be designed with realistic roles-supporting reading practice, attendance follow-up and minor facilitation-while the state remains responsible for teacher provisioning.

Implications

For district administration, the findings support a combined strategy: (i) staffing reform targeting severe deficiency, and (ii) process support that stabilises organisational routines. For school leaders, the results highlight the importance of routine protection-stable timetables, prioritising foundational teaching time and structured multigrade management. For community bodies (SMCs), the study suggests focusing on supportive monitoring and facilitation rather than attempting to replace professional teaching. For researchers, the results illustrate the value of integrating perception measures with process and outcome indicators to guide implementable policy.

Limitations And Future Research

The stakeholder scales capture perceived severity and may be influenced by awareness and expectations. Qualitative narratives, while rich, are context-specific. Future research can examine how stakeholder perceptions change after staffing interventions and whether perception shifts predict implementation success. More granular measurement of community support dosage can test whether high-intensity support models produce stronger functional gains.

CONCLUSION

Stakeholders in District Basti largely agree that teacher deficiency undermines school functioning and learning, but their perceived severity differs by role proximity and normalisation. Mixed-methods integration indicates strong convergence between stakeholder narratives and statistical patterns, and policy recommendations align closely across data sources. Addressing teacher deficiency through vacancy filling, rational deployment and protection of teaching time emerges as the central action agenda, with community participation positioned as a supportive complement.

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