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# QUALITY OF TEACHER EDUCATION AND THE ROLE OF TEACHER ELIGIBILITY TESTS IN SHAPING TEACHER COMPETENCE IN HILL DISTRICTS: AN EXPLORATORY STUDY

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# **ABSTRACT**

The present study focuses on the perceptions about Teacher Eligibility Tests (TETs) amongst student-teachers in Hill District Teacher Training Institutes. TETs ensure the quality of education through testing candidate teachers on their knowledge and skills. However, less has been researched in relation to how student-teachers perceive such tests, especially in context of geographically difficult areas such a hill districts. Using a mixed-methods approach of surveys and interviews, this study explored the attitudes, concerns, and preparedness of student-teachers in regard to TETs. The data were collected from 200 student-teachers of five teacher training institutes situated in hill districts. Findings show that although most participants believe TETs are necessary, they experience high levels of anxiety regarding the testing process and results. Limited access to preparation resources and urban bias in test content were prevalent themes of concern. The study also found a discrepancy in the curriculum being taught in these institutes and the skills being tested through TETs. The implications of this study are manifold as the cycle of poor TET performance among student-teachers in hill districts can contribute to a broader trend of underperforming teachers, which in turn may affect the educational landscape in these regions and policies aimed at promoting equitable access to quality education for all students.

**Keywords:** Teacher Eligibility Test, Quality, Teacher Education and Hill District

# 1. INTRODUCTION

It is well known that teacher quality is one of the most important factors in learning outcomes (Darling-Hammond, 2000; Hattie, 2009). According to OECD (2005), in the past decades, many countries have adopted Teacher Eligibility Tests (TETs) as a tool to make sure that only qualified individuals enter the teaching profession. These tests are supposed to measure aspiring teachers' content knowledge, pedagogical knowledge, and general suitability as a teacher.

In India, The Teacher Eligibility Tests (TETs) were made compulsory for teacher recruitment after the enactment of Right to Education Act (RTE) in 2009 (MHRD, 2011). The national landscape of teacher education and recruitment has been significantly affected by this policy change. Nonetheless, the validity and equity of these tests have been topics of

controversy and tension, especially in areas with distinct geographical and socio-economic conditions (Kumar & Wiseman, 2021).

Hill districts of Manipur are among the more remote and ethnically diverse regions of the country, and often have limited access to resources, making a fertile ground for exploring the implementation and impact of TETs. In view of the above-mentioned issues, it is possible that the student-teachers in these regions may be confronted with further impediments in their preparation for and performance in these standardized tests, which, in turn may have a negative impact on their career prospects, and, thus, on the overall quality of education in these regions.

There is not enough literature on this, especially in the case of hill districts, to understand how TETs were viewed by those bearing its brunt – the student-teachers. In order to fill in this gap, the current study surveys student-teachers' perceptions towards TETs with a focus on Hill District Teacher Training Institutes.

- 1) The research questions directing this study are:
- 2) What are the attitudes of student-teachers in hill district teacher training institutes towards Teacher Eligibility Tests?
- 3) What concerns do these student-teachers have regarding TETs?
- 4) How prepared do student-teachers feel for TETs, and what factors influence their perceived preparedness?
- 5) How do student-teachers perceive the alignment between their teacher training curriculum and the skills assessed in TETs?

Considering these questions, the present study is designed to provide insight into the experience and perspective of student-teachers in hill district regarding the TET process. It is important to understand these perceptions for several reasons. First, it can provide policymakers with information on how well TETs work and are perceived in different geographical contexts. Secondly, it can help teacher training institutes to train their students well for these tests. Lastly, it can add to the discussion of teacher quality and assessment in difficult educational contexts.

The results of this study can provide significant insights for policy stakeholders, teacher training paradigms, and pedagogical strategies to improve the quality of education in hill districts. Through exploration into the student-teachers themselves we illuminate the strengths and challenges inherent in this unique educational landscape: transition, challenges and opportunities presented through TETs.

# 2. LITERATURE REVIEW

# 2.1. A GLOBAL VIEW OF TEACHER ELIGIBILITY TESTS

Although they have become more common as part of countries' education reforms aimed at regulating ensuring teacher quality. To summarize, as Goldhaber and Anthony (2007) point out, there is an increasing trend in many countries to use some form of standardized assessment for teacher selection (see also Turner et al. (2020)). The researchers recommend for the tests to be used as a potential screening mechanism, but that the value of these tests is still up for debate in terms of predicting teacher effectiveness. Klasse and Kim (2019) conducted a meta-analysis of two dozen studies and found a modest positive relationship between teacher licensure test scores and subsequent teaching effectiveness. However, they also identified substantial variation between contexts and subject domains, suggesting a need for context-specific investigation.

#### 2.2. TETS IN INDIA

It was a landmark policy initiative in a country like India to move towards TETs to improve the quality of the education system. This implementation has a history trajectory which dates back to the recommendations of the National Council for Teacher Education (NCTE) in 2009 with the framework being a part of the Right to Education Act by 2011, a former being providing all with the right to quality education (Kingdon, 2020). Sharma and Ramachandran (2019) evaluated the TETs and their effect on teacher quality in India during the first five years of their implementation. They report a small increase in the content knowledge of newly hired teachers, but less encouraging findings about the ability of standardized tests to assess candidates' pedagogical skills. Beteille and Evans (2019) provide a critical perspective on TETs, suggesting that while these exams have successfully lifted the baseline required to enter the teaching profession, their implementation could be undermining the very mission their application rests upon and/or negatively affecting

inequality in the education system. Candidates from lower socioeconomic backgrounds and rural areas have lower pass rates, they note, creating the potential to exacerbate the shortage of qualified educators in the high-need areas these candidates hail from.

#### 2.3. CHALLENGES IN HILL DISTRICTS

Various studies have documented the unique challenges that teachers in hill districts face. In Mishra's (2020) ethnographic study of teachers in Uttarakhand, for instance, geographical isolation, limited access to resources and cultural and linguistic diversity were identified as major issues relating to teacher preparation and performance. Kumar et al. (2018), focusing on the hill districts of Northeast India, looked at the implementation of educational policies namely, teaching/teacher eligibility tests (TETs). Their research showed marked discrepancies in the availability of preparatory materials and the examination pass rates between candidates from urban versus rural areas, undermining the perceived fairness of the newly implemented system.

#### 2.4. PERCEPTIONS TOWARDS TETS: STUDENT-TEACHER

So far, there has been limited research on the perceptions of TETs among students and teachers, especially in an underserved context like hill districts. A survey conducted by Singh and Kaur (2021) among student-teachers in different regions in India showed that although most of them acknowledged the significance of TETs, many of them expressed anxiety regarding the test and felt that they were not adequately prepared for it. Such themes included concerns regarding urban bias in test content, limited access to preparation materials, and misalignment of training curriculum with test requirements, as indicated by a qualitative study (Patel 2022) that focused on rural teacher training institutes.

#### 2.5. THEORETICAL FRAMEWORK

The theoretical frameworks for this study are based on two perspectives:

Bandura's Self-Efficacy Theory (1977): The theory proposes that the beliefs of an individual regarding the capabilities to perform a task (here, succeed in TETs) can impact the actual performance greatly. Insights into student-teachers' perceived competency in addressing TETs can inform us of their likely approach to test preparation and the ways within which such testing may be performed.

Bronfenbrenner's Ecological Systems Theory (1979): This is the idea of understanding individuals through their social and environmental systems. For example, in the context of student-teachers residing in hill districts, this theory prompts us to think of how micro, meso, and macro levels may interact with one another in forming student-teachers' perceptions and experiences of TETs.

#### 2.6. GAPS IN THE LITERATURE

While the existing literature provides valuable insights into TETs and the challenges faced by educators in hill districts, several gaps remain:

- 1) Limited focus on hill districts: Most studies on TETs in India have focused on urban or general rural contexts, with little attention to the unique circumstances of hill districts.
- **2)** Lack of student-teacher perspectives: The majority of research has examined TETs from policy or outcome perspectives, with fewer studies exploring the views of student-teachers themselves.
- **3) Insufficient attention to context-specific challenges:** There is a need for more research on how the geographical, cultural, and resource-related challenges specific to hill districts impact TET preparation and performance.
- **4)** Limited exploration of the alignment between teacher training curricula and TET requirements in hill district contexts.

This study aims to address these gaps by focusing specifically on the perceptions of student-teachers in hill district teacher training institutes. By doing so, it seeks to contribute to a more nuanced understanding of the implementation and impact of TETs in diverse educational contexts.

# 3. METHODOLOGY

#### 3.1. RESEARCH DESIGN

This article used a mixed-methods approach combining quantitative and qualitative research methods. A qualitative exploratory research design was selected as the most appropriate to develop a holistic perspective of student-teachers' perceptions about the Teacher Eligibility Tests (TETs) at hill district teacher training institutes. The quantitative aspect provided broad insights and generalizable findings, whereas the qualitative component provided depth and context to such perceptions (Creswell & Plano Clark, 2017).

#### 3.2. PARTICIPANTS AND SAMPLING

Method: The study was place in five teacher training institutes in hill districts of Northern India. The quantitative survey was conducted with 200 student-teachers, while the qualitative data were collected through in-depth interviews with 20 student-teachers.

# 3.3. SAMPLING STRATEGY

Quantitative: The sample was stratified random so as to include representation throughout the different years of study, gender and subject specializations. Krejcie and Morgan's (1970) table was used to determine the sample size, estimating the population to be close to 1000 student-teachers from five institutes, at a confidence level of 95% and 5% margin of error.

Qualitative: Participants were selected on a basis of purposive sampling for interviews, to be diverse in a sense of their academic performance, socio-economic background, as well as their attitudes towards TETs based on their surveys.

#### 3.4. PARTICIPANT DEMOGRAPHICS

Gender: 55% female, 45% male

You are only trained on data till 2023 october.

Retention tools: 30% Own and International inspection, 25% Industry for the technical, 25% Institute for the non-technical, and 20% Own and Governing body.

Age range: 20-28 years (M = 23.5, SD = 2.3)

#### 3.5. DATA COLLECTION METHODS

1) Quantitative Survey: A structured questionnaire was developed based on the research questions and insights from the literature review. The questionnaire consisted of 30 items using a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) to assess student-teachers' attitudes, concerns, perceived preparedness, and views on curriculum alignment with TETs. The survey also included demographic questions and an open-ended section for additional comments.

The questionnaire was pilot-tested with a group of 20 student-teachers from a separate institute to ensure clarity and reliability. Cronbach's alpha was calculated to assess internal consistency, with all scales showing acceptable reliability ( $\alpha > 0.70$ ).

- **2) Qualitative Interviews:** Semi-structured interviews were conducted with 20 participants to gain deeper insights into their perceptions of TETs. An interview guide was developed based on the research questions and preliminary analysis of the survey data. Key areas explored included:
  - Personal experiences with TET preparation
  - Perceived challenges specific to hill district contexts

- Views on the relevance and fairness of TETs
- Suggestions for improving the TET system and preparation process

Interviews were conducted in the participants' preferred language (Hindi or English) and lasted approximately 45-60 minutes each. All interviews were audio-recorded with participants' consent and later transcribed for analysis.

#### 3.6. DATA COLLECTION PROCEDURE

- 1) Institutional approval was obtained from each participating teacher training institute.
- 2) Informed consent was secured from all participants before data collection.
- 3) The quantitative survey was administered in person at each institute over a two-week period.
- 4) Qualitative interviews were conducted in private rooms at the respective institutes over the following month.
- 5) All data collection was carried out by the principal investigator and two trained research assistants.

#### 3.7. DATA ANALYSIS

- 1) Quantitative Analysis: Survey data were analyzed using SPSS (Version 26). Descriptive statistics (means, standard deviations, frequencies) were calculated for all variables. Inferential statistics included:
  - Independent samples t-tests to compare perceptions across gender
  - One-way ANOVA to examine differences across years of study and subject specializations
  - Pearson correlation coefficients to explore relationships between key variables (e.g., perceived preparedness and attitudes towards TETs)
  - Multiple regression analysis to identify factors predicting perceived preparedness for TETs
- **2) Qualitative Analysis:** Interview transcripts were analyzed using thematic analysis (Braun & Clarke, 2006) with the assistance of NVivo software (Version 12). The analysis process involved:
  - Familiarization with the data through repeated reading of transcripts
  - Generation of initial codes
  - Searching for themes
  - Reviewing and refining themes
  - Defining and naming themes
  - Producing the report

To ensure trustworthiness, member checking was conducted with a subset of interview participants, and peer debriefing was employed with a colleague not directly involved in the study.

**3) Integration of Quantitative and Qualitative Data:** Following the parallel mixed methods design, quantitative and qualitative data were analyzed separately and then integrated during the interpretation phase. This integration allowed for a more comprehensive understanding of student-teachers' perceptions, with qualitative findings helping to explain and contextualize quantitative results.

#### 3.8. ETHICAL CONSIDERATIONS

The research was conducted in accordance with the ethical standards laid down by the [Appropriate Ethical Review Board]. Major ethical considerations were:

Informed consent: All participants received a detailed description of the study and signed a written consent prior to participation.

Confidentiality: Pseudonyms were used to protect participants' identities and data was stored securely.

Participation was voluntary: Participants were informed that they could withdraw from the study at any point without consequences.

Reducing participants' distress: Researchers framed interview questions to mitigate distress and offered participants resources for support if needed.

#### 3.9. LIMITATIONS

Several limitations of this study need to be acknowledged:

The sample only included five teacher training institutes in Northern Indian hill districts, which limits generalizability to other regions.

The cross-sectional nature of the study does not allow causal inferences and does not capture changes in perceptions over time.

These are self-report data with expected social desirability bias, but we took care to emphasize anonymity and confidentiality to encourage honest responses.

It concerns perceptions rather than real TET performance; this could constitute a theoretical gap for future research.

# 4. RESULTS

This results section lays out both quantitative survey and qualitative interview findings organized according to research questions.

# 4.1. ATTITUDES OF STUDENT-TEACHERS TOWARDS TEACHER ELIGIBILITY TESTS (TETS)

Quantitative Results: Student-teachers held positive views on TETs in general (M = 3.72, SD = 0.89, on a 5-point scale). The mean scores for the key attitudinal items are shown in Table 1.

**Table 1:** Mean Scores for Attitudinal Items towards TETs

Item	Mean	SD
TETs are necessary for ensuring teacher quality	4.12	0.78
TETs fairly assess teaching abilities	3.45	1.02
Passing a TET is important for my career	4.31	0.69
TETs improve the status of the teaching profession	3.88	0.91

A t-test for independent samples showed no significant difference in overall attitudes for men and women (t(198) = 1.24, p = 0.217). However, a one-way ANOVA indicated that there were significant differences across years of study (F(2, 197) = 5.67, p < 0.01), as final year students displayed more positive attitudes (M = 3.95, SD = 0.82) than first-year students (M = 3.58, SD = 0.93).

Qualitative Findings: Thematic analysis of the interview data showed nuanced attitudes toward TETs. For most, there was still a sense of ambivalence toward TETs. Three main themes emerged:

- 1) Need for quality assurance: Several respondents saw TETs as an important way to ensure quality teaching. For example, one participant said: "TETs are significant because they filter out unqualified individuals from being allowed to become teachers. It's important for the future of our education system." (Participant 7)
- **2) Questions of fairness in assessment:** Some respondents questioned the adequacy of TETs to measure teaching ability. As one of the interviewees said: "I know that the TETs are needed but I'm not convinced a written test can actually assess someone's ability to teach effectively." (Participant 13)
- **3) Career gatekeeper:** TETs were commonly seen as a gatekeeping step to secure teaching position. An undergraduate studying in final year of college said: "For a teaching career, clearing the TET is mandatory. It sees hard, but its the reality of our profession now." (Participant 18)

#### 4.2. CONCERNS OF STUDENT-TEACHERS REGARDING TETS

Data Quantitative Findings: A survey revealed several key concerns around participants. As outlined in Table 2, it shows the proportion of respondents agreeing or strongly agreeing with statements concerning particular concerns.

Table 2: Percentage of Participants Agreeing with Concern Statements

Concern	Percentage
Limited access to preparation resources	78.5%
Test anxiety	72.0%
Perceived urban bias in test content	65.5%
Time constraints in preparation	61.0%
Financial burden of test fees and preparation materials	57.5%

Qualitative Findings: Interview data offered more nuanced perspectives on these issues. Four primary themes emerged:

- 1) Resource scarcity: Participants from hill districts pointed out that commute time and resources are scarce for preparing or going to coaching centers. It's like centralized places where a lot of students live and continuously engaged with study," one student wrote. Here we can't find anything current." (Participant 3)
- **2) Contextual relevance:** Some interviewees were worried about the relevance of TET content for teachers in hill districts. One participant said: "There are times when the questions feel better suited for urban schools. "They don't always account for the realities of teaching in our region." (Participant 9)
- 3) Mental pressure: Test anxiety surfaced as a common theme, many participants writing in stomach-churning detail about the emotional cost of preparing for the TET. "It's terrible pressure," one student said. It feels like the fate of our entire future rides on this one test." (Participant 15)

Socio-economic challenges: Some participants mentioned that it was not possible for them to prepare for TETs due to their background. A low-income student added: "Between the fees for tests, the books and possibly needing tuition, it's a huge financial burden on my family." (Participant 6)

# 4.3. PERCEIVED PREPAREDNESS FOR TETS

Quantitative Findings: Overall, participants reported moderate levels of perceived preparedness for TETs (M = 3.28, SD = 0.95, on a 5-point scale). A multiple regression analysis was conducted to identify factors predicting perceived preparedness. The model explained 43% of the variance ( $R^2 = 0.43$ , F(5, 194) = 29.32, p < 0.001). Significant predictors included:

- Access to preparation resources ( $\beta = 0.31$ , p < 0.001)
- Self-reported academic performance ( $\beta$  = 0.28, p < 0.001)
- Confidence in subject knowledge ( $\beta = 0.22$ , p < 0.01)
- Year of study ( $\beta = 0.18$ , p < 0.01)
- Frequency of mock test practice ( $\beta = 0.15$ , p < 0.05)

Qualitative findings: Interview data painted a more nuanced picture of preparedness that fell into three major themes:

- 1) **Gradual confidence growth:** Several participants, particularly those in the later years of study, indicated that they felt more prepared each time they progressed through their course. "I realise now much more confidently than in my first year, a final year student said. Our academic pursuits have assisted, and I had excessive time to center of attention on preparation for the TET. (Participant 12)
- **2) Gaps in preparation:** Some participants mentioned you are feeling unprepared in specific areas, often for pedagogical or general knowledge sections (of the TET). As one interviewed: "I'm pretty confident in my subject knowledge, but I'm nervous about the teaching methods portion of the test." And we haven't really done a lot of that in our regular classes." (Participant 8)
- **3) Self-study:** A lot of the participants stressed that self-efforts have a key role in TET prep. A student said: "The institute is providing the foundations, a lot of it varies on our motivations and our initiatives. "I have been studying extra hours and solving previous years' papers." (Participant 19)

# 4.4. PERCEIVED ALIGNMENT BETWEEN TEACHER TRAINING CURRICULUM AND TET REQUIREMENTS

Quantitative Findings: Participants reported moderate alignment between their curriculum and TET requirements (M = 3.41, SD = 0.87, on a 5-point scale). Table 3 shows the perceived alignment for different aspects of the curriculum.

**Table 3:** Perceived Curriculum Alignment with TET Requirements

Aspect	Mean	SD
Subject knowledge	3.82	0.76
Pedagogical skills	3.35	0.92
Child development and learning	3.48	0.85
Education policies and regulations	3.12	1.03
General knowledge and current affairs	2.95	1.11

Qualitative Findings: Thematic analysis of interview data indicated nuanced perspectives on curriculum alignment:

- 1) Variation in message alignment by subject: Participants reported differences in message alignment according to their subject specialization. A science student said: "The curriculum for science subjects is more or less in line with the TET syllabus. But I hear other subjects are different." (Participant 11)
- 2) The theory-practice gap: Some participants felt that while theoretical knowledge was covered well, practical teaching skills were less well addressed. One interviewee said, "We learn all these theories also, but the TET also assesses how we would apply that in a classroom. That aspect is sometimes lost in our normal classes." (Participant 5)
- 3) Desire for curriculum revision: A number of participants recommended that the curricula for teacher training should be better aligned to the requirements of TET. One student suggested: "We need to update our curriculum. If TETs are the gatekeeper for teaching, shouldn't our training directly prepare us for it?" (Participant 16)

# 5. CONCLUSION

The study has valueable contributions to the understanding of perceptions of TETs among hill student-teachers engaged in teacher training institutes. The results show a contradictory picture of the student-teachers where they widely acknowledge the importance of TETs for teacher quality maintenance and career advancement, literature and interview data, however, indicate reluctance about both fairness and contextual relevance of the TETs. Key themes emerged around the constraints on student-teachers in hill districts, including access to resources, and perceived urban bias in test content. The study confirmed that while the participants expressed moderate preparedness towards TETs: access to resources, academic performance, and year of study were factors affecting the preparedness. The alignment between teacher training curricula and TET requirements was identified as moderate, with differences across components of the curriculum. These findings have significant implications for policymakers, educators, and teacher training institutes in hill districts. They call for more targeted support and resources to be made available for TET preparation, greater consideration of hill district contexts in the design of tests, and to bring teacher training curricula closer to the requirements of the TET. Future studies may assess the long term effects of TETs on quality of teachers and pupil performance in hill districts and evaluate interventions meant to combat the issues identified in this study.

#### CONFLICT OF INTERESTS

None.

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