

An Empirical Assessment of Classroom Inclusiveness Practices Among Secondary School Teachers in Haridwar District of Uttarakhand

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Abstract: Inclusive education has emerged as a central concern in contemporary educational discourse, emphasizing equitable learning opportunities for all learners regardless of their diverse needs and backgrounds. The present quantitative study aims to empirically assess the classroom inclusiveness practices adopted by secondary school teachers in Haridwar District of Uttarakhand. A descriptive survey method was employed and data were collected from a sample of 100 secondary school teachers selected through stratified random sampling. A standardized Classroom Inclusiveness Practices Scale was used to measure dimensions such as inclusive pedagogy, classroom management, learner engagement, instructional adaptation and assessment practices. Statistical techniques including mean, standard deviation, t-test and one-way ANOVA were applied for data analysis. The findings revealed a moderate level of inclusive practices among teachers, with significant differences observed based on teaching experience and professional training in inclusive education. The study highlights the need for systematic teacher training, policy support and institutional initiatives to strengthen inclusive classroom practices at the secondary level. The results contribute to the growing empirical literature on inclusive education in the Indian context and offer practical implications for educators, administrators, and policymakers.

Keywords: Inclusive education, classroom inclusive Practices, secondary school teachers

1. Introduction: Inclusive education represents a paradigm shift from traditional segregated educational practices to an approach that embraces diversity and promotes equal participation of all learners in mainstream classrooms. At the secondary level, inclusiveness becomes particularly significant due to the increased academic, social and emotional demands placed on learners. Teachers play a pivotal role in translating inclusive education policies into effective classroom practices. Their beliefs, attitudes, competencies and instructional strategies directly influence the learning experiences of students with diverse needs.

In India, inclusive education has gained momentum following policy initiatives such as the **Right to Education Act (2009)** and the **National Education Policy (2020)**, which emphasize equity, access, and quality education for all. However, the successful implementation of inclusive education largely depends on teachers' classroom practices. Despite policy mandates, there remains a gap between inclusive education ideals and actual classroom implementation, particularly at the secondary school level.

The present study seeks to empirically assess the classroom inclusiveness practices of secondary school teachers in Haridwar District of Uttarakhand, providing quantitative evidence on the extent and nature of inclusiveness in real classroom settings.

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1.1 Background of the Study: Uttarakhand, as a developing educational state, has witnessed significant expansion in secondary education over the past decade. Haridwar District, being educationally and culturally diverse, presents a suitable context for examining inclusive classroom practices. Secondary schools in the district cater to students from varied socio-economic backgrounds, learning abilities, genders and cultural identities. While inclusive education policies advocate for accommodating learners with disabilities, learning difficulties and marginalized backgrounds, teachers often face challenges such as large class sizes, limited resources, lack of training and rigid curricula. Understanding teachers' classroom inclusiveness practices is essential to identify strengths, challenges and areas requiring intervention.

1.2 Significance of the Study: The present study is significant in the following ways:

- Educational Practice:** It provides insights into the actual classroom practices of secondary school teachers related to inclusiveness.
- Teacher Education:** The findings can inform pre-service and in-service teacher training programs.
- Policy Implementation:** The study evaluates how inclusive education policies are reflected at the classroom level.
- Research Contribution:** It adds to the limited quantitative research on inclusive education at the secondary level in the Indian context.
- Regional Relevance:** The study specifically addresses the educational context of Haridwar District, Uttarakhand.

2. Review of Literature: Research on inclusive education over the last fifteen years highlights the critical role of teachers in fostering inclusive learning environments. Studies conducted globally and in India emphasize instructional adaptation, positive teacher attitudes and collaborative practices as key determinants of successful inclusion.

Florian and Black-Hawkins (2011) emphasized inclusive pedagogy as an approach that benefits all learners rather than targeting specific groups. **Sharma, Forlin and Loreman (2012)** found that teacher training significantly improves inclusive classroom practices and attitudes toward diversity.

Indian studies by **Srivastava, de Boer and Pijl (2015)** reported moderate levels of inclusive practices among secondary school teachers, identifying lack of professional support as a major constraint. **Singh and Kaur (2017)** highlighted that teachers with inclusive education training demonstrated better classroom management and differentiated instruction.

UNESCO (2020) stressed that inclusive education is not merely about access but about meaningful participation and achievement for all learners. Recent studies (**Buli-Holmberg & Jeyaprathaban, 2021; Sharma & Sokal, 2022**) emphasized the importance of teacher self-efficacy and institutional support in implementing inclusive practices.

In the Indian context, post-**NEP 2020** research (**Kumar & Singh, 2023; Mehta, 2024**) indicates growing awareness of inclusive education but uneven classroom implementation, particularly at the secondary level. Despite increasing policy emphasis, empirical quantitative studies focusing on teachers' classroom practices at the district level remain limited.

2.1 Research Gaps: The review of literature reveals that:

- Most Indian studies focus on **teacher attitudes** rather than **actual classroom practices**.
- Limited quantitative studies exist at the **secondary school level**, particularly in Uttarakhand.
- There is insufficient district-level empirical evidence on classroom inclusiveness practices.

The present study addresses these gaps by quantitatively assessing classroom inclusiveness practices among secondary school teachers in Haridwar District.

2.2 Objectives of the Study

1. To assess the level of classroom inclusiveness practices among secondary school teachers.
2. To compare inclusiveness practices based on gender.
3. To examine differences in inclusiveness practices based on teaching experience.
4. To study the impact of professional training in inclusive education on classroom practices.

2.3 Hypotheses of the Study

1. There is no significant difference in classroom inclusiveness practices between male and female secondary school teachers.
2. There is no significant difference in classroom inclusiveness practices based on teaching experience.
3. There is no significant difference in classroom inclusiveness practices between trained and untrained teachers in inclusive education.

3. Methodology

3.1 Research Design: A descriptive survey method was employed.

3.2 Sample: The sample consisted of 100 secondary school teachers from government and private schools in Haridwar District, selected using stratified random sampling.

3.3 Tool: A self-developed Classroom Inclusiveness Practices Scale (Scale Range: 1–5) was used, covering five dimensions:

- Inclusive pedagogy
- Classroom management
- Learner engagement
- Instructional adaptation
- Inclusive assessment

3.4 Statistical Techniques: Mean, standard deviation, t-test and one-way ANOVA were used for data analysis.

4. Data Analysis and Results: The collected data were analysed using SPSS (Version 26). Descriptive and inferential statistics were employed to examine classroom inclusiveness practices among secondary school teachers.

Table 1
Descriptive Statistics of Classroom Inclusiveness Practices (N = 100)

Dimension of Inclusiveness Practices	Mean	Std. Deviation
Inclusive Pedagogy	3.42	0.51
Classroom Management	3.58	0.47
Learner Engagement	3.36	0.55
Instructional Adaptation	3.21	0.62
Inclusive Assessment	3.18	0.59
Overall Inclusiveness Practices	3.35	0.49

Interpretation: The overall mean score ($M = 3.35$) indicates a **moderate level of classroom inclusiveness practices** among secondary school teachers. Classroom management scored the highest, suggesting that teachers are relatively effective in maintaining inclusive learning environments. However, instructional adaptation and

inclusive assessment received lower mean scores, indicating challenges in modifying teaching strategies and assessment methods to meet diverse learner needs.

4.1 Hypothesis Testing

Table 2

t- Test Showing Gender Differences in Classroom Inclusiveness Practices

Gender	N	Mean	SD	Df	t	Sig. (p)
Male	52	3.33	.50	98	.48	.675
Female	48	3.37	.48			

Interpretation: The obtained *p*-value (0.675) is greater than the 0.05 significance level, indicating **no statistically significant difference** in classroom inclusiveness practices between male and female teachers. Hence, **Hypothesis 1 is accepted**. This suggests that gender does not play a determining role in the implementation of inclusive classroom practices.

Table 3

ANOVA Showing Differences Based on Teaching Experience

Teaching Experience	N	Mean	Std. Deviation
Less than 5 years	28	3.12	0.46
5–10 years	34	3.31	0.48
More than 10 years	38	3.56	0.45

Source of Variance	SS	df	MS	F	Sig.
Between Groups	2.94	2	1.47	6.41	0.003
Within Groups	22.26		.23		
Total	25.20				

Interpretation: The ANOVA results reveal a **significant difference** in classroom inclusiveness practices based on teaching experience ($F = 6.41, p < 0.01$). Teachers with more than 10 years of experience scored highest. Therefore, **Hypothesis 2 is rejected**. Experience appears to enhance teachers' ability to adopt inclusive strategies effectively.

Table 4

t-Test Showing Impact of Training in Inclusive Education

Training Status	N	Mean	SD	df	t	Sig. (p)
Trained	46	3.61	.44	98	5.31	0.00
Untrained	54	3.13	.47			

Interpretation: The *p*-value (0.000) indicates a **highly significant difference** between trained and untrained teachers. Teachers who received professional training in inclusive education demonstrated significantly higher classroom inclusiveness practices. Hence, **Hypothesis 3 is rejected**. This highlights the critical role of professional development in fostering inclusive classrooms.

4.2 Discussion of Results: The present study sought to empirically assess classroom inclusiveness practices among secondary school teachers in Haridwar District of Uttarakhand and to examine differences based on gender, teaching experience and professional training. The findings are discussed below in light of existing national and international research.

4.2.1 Overall Level of Classroom Inclusiveness Practices: The findings revealed that secondary school teachers demonstrated a **moderate level of classroom inclusiveness practices** ($M = 3.35$). This indicates that teachers are partially implementing inclusive education principles, particularly in areas such as classroom management and learner engagement, while facing challenges in instructional adaptation and inclusive assessment.

This result is consistent with the findings of **Srivastava, de Boer, and Pijl (2015)**, who reported moderate implementation of inclusive practices in Indian secondary schools due to systemic constraints such as large class sizes and limited resources. Similarly, **Singh and Kaur (2017)** found that while teachers were willing to support diverse learners, they often lacked the pedagogical flexibility required for full inclusion.

International research also supports this outcome. **Florian and Black-Hawkins (2011)** argued that inclusive pedagogy requires a shift from individualized accommodation to designing learning experiences that benefit all learners, a transition that many teachers find challenging. The moderate level of inclusiveness observed in the present study suggests that such pedagogical shifts are still in progress at the secondary level.

However, the findings contrast with studies conducted in more resource-rich educational contexts. For example, **Buli-Holmberg and Jeyaprathaban (2021)** reported higher levels of inclusive practices in secondary schools where institutional support and collaborative teaching models were well established. This disparity highlights the contextual influence of infrastructure and policy support on inclusive education implementation.

4.2.2 Gender and Classroom Inclusiveness Practices: The study found **no significant difference** in classroom inclusiveness practices between male and female teachers. This suggests that gender does not significantly influence teachers' ability or willingness to implement inclusive strategies.

This finding is supported by **Sharma and Sokal (2022)**, who reported that inclusive teaching efficacy is more strongly related to professional competence and self-efficacy than to gender. Similarly, **Avramidis and Norwich (2010)** found that demographic variables such as gender had minimal impact on inclusive practices when teachers had comparable training and experience.

In the Indian context, **Kumar and Singh (2023)** also reported no significant gender differences in inclusive classroom practices among secondary school teachers, attributing this to standardized teacher education curricula and shared professional responsibilities. The present study reinforces the view that inclusiveness is a professional attribute rather than a gendered characteristic.

4.2.3 Teaching Experience and Classroom Inclusiveness Practices: The results indicated a **significant difference** in classroom inclusiveness practices based on teaching experience, with teachers having more than ten years of experience demonstrating higher levels of inclusiveness.

This finding aligns with **Florian (2014)**, who emphasized that inclusive teaching competence develops over time through classroom exposure, reflective practice, and experiential learning. Experienced teachers are often better equipped to manage diverse classrooms, anticipate learner needs, and adapt instructional strategies accordingly. Supporting evidence from the Indian context is provided by **Mehta (2024)**, who found that experienced secondary school teachers exhibited greater confidence and flexibility in implementing inclusive practices compared to novice teachers. Similarly, **Sharma et al. (2012)** reported that teaching experience positively influences teachers' comfort levels in addressing diverse learning needs.

However, some studies present contrasting findings. **Loreman et al. (2013)** suggested that experience alone does not guarantee effective inclusive practices unless accompanied by continuous professional development. The present study partially supports this argument, as experience emerged as a significant factor, but training was found to have an even stronger impact on inclusiveness practices.

4.2.4 Professional Training in Inclusive Education: One of the most significant findings of the study was that teachers who had received **professional training in inclusive education demonstrated significantly higher levels of classroom inclusiveness practices** than untrained teachers.

This result strongly supports existing research. **Sharma, Forlin, and Loreman (2012)** found that targeted training programs significantly improve teachers' attitudes, confidence, and instructional strategies related to inclusion. Similarly, **UNESCO (2020)** emphasized that teacher preparedness is central to achieving meaningful inclusion. Recent studies further corroborate this finding. **Sharma and Sokal (2022)** demonstrated that professional training enhances teachers' self-efficacy, which in turn positively influences inclusive classroom practices. In the Indian context, **Kumar and Singh (2023)** reported that teachers who underwent inclusive education training were more adept at differentiated instruction and inclusive assessment.

The strong statistical significance observed in the present study underscores the importance of institutionalizing inclusive education training within both pre-service and in-service teacher education programs. It also supports the policy directives outlined in the **National Education Policy (NEP) 2020**, which emphasizes continuous professional development for teachers.

4.2.5 Dimension-wise Interpretation of Inclusiveness Practices: The dimension-wise analysis revealed that **classroom management** received the highest mean score, while **instructional adaptation and inclusive assessment** received the lowest.

This pattern is consistent with findings by **Singh and Kaur (2017)**, who reported that teachers are generally competent in managing classrooms but struggle with modifying curricula and assessment methods. **Florian and Spratt (2013)** also observed that inclusive assessment remains a challenging area, as traditional examination systems often fail to accommodate diverse learner needs.

The relatively lower scores in instructional adaptation suggest a need for focused training on differentiated instruction and Universal Design for Learning (UDL), as advocated by **CAST (2018)** and supported by **UNESCO (2020)**.

4.3 Synthesis of Findings: Overall, the findings of the present study largely **support existing research literature**, particularly regarding the role of professional training and teaching experience in promoting inclusive classroom practices. While gender was found to be a non-significant variable, contextual factors such as institutional support and policy implementation emerged as implicit influences.

The moderate level of inclusiveness practices observed in Haridwar District reflects broader national trends in India, where inclusive education policies are well articulated but unevenly implemented at the classroom level.

4.4 Implications of the Discussion: The discussion highlights the need for:

- Systematic and continuous professional development in inclusive education
- Greater emphasis on instructional adaptation and inclusive assessment
- Policy-level support for translating inclusive education mandates into classroom practice

These implications reinforce the urgency of bridging the gap between inclusive education theory and practice.

5. Conclusion: The present quantitative study was undertaken to empirically assess the classroom inclusiveness practices of secondary school teachers in Haridwar District of Uttarakhand. The findings of the study provide

important insights into the current status of inclusive education at the secondary level and highlight key factors influencing its effective implementation.

The results revealed that secondary school teachers demonstrate a **moderate level of classroom inclusiveness practices**, indicating partial realization of inclusive education principles in classroom settings. Teachers were relatively more effective in managing inclusive classrooms and engaging learners, while instructional adaptation and inclusive assessment emerged as challenging areas. This suggests that although teachers are willing to support diverse learners, they often lack the pedagogical strategies and assessment flexibility required for fully inclusive practices.

The study further established that **gender does not significantly influence classroom inclusiveness practices**, implying that inclusiveness is shaped more by professional competence than by demographic characteristics. In contrast, **teaching experience was found to have a significant impact**, with more experienced teachers exhibiting higher levels of inclusive practices. This finding underscores the value of experiential learning and reflective practice in developing inclusive teaching competencies.

One of the most significant conclusions of the study is that **professional training in inclusive education plays a decisive role** in enhancing classroom inclusiveness practices. Teachers who had received training demonstrated significantly higher levels of inclusiveness compared to their untrained counterparts. This highlights the critical importance of systematic and continuous professional development programs in translating inclusive education policies into effective classroom practices.

Overall, the study concludes that while inclusive education at the secondary level in Haridwar District is progressing, it remains at an **evolving stage**. Strengthening teacher training, promoting instructional flexibility and providing institutional and policy-level support are essential for advancing inclusive classroom practices. The findings reinforce the view that inclusive education is not merely a policy mandate but a continuous professional practice that requires sustained effort, support and capacity building.

In conclusion, enhancing classroom inclusiveness practices among secondary school teachers is pivotal for achieving equity and quality in education. By addressing the identified gaps and strengthening teacher preparedness, educational institutions and policymakers can contribute meaningfully to the realization of inclusive education goals in the Indian context.

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