



Cover Page



PROMOTING INCLUSIVE EDUCATION IN GOVERNMENT HIGH SCHOOLS: AN ANALYSIS OF OPPORTUNITIES AND CHALLENGES

Dr Jishnupriya Rout

Lecturer in Education, Pranath (Autonomous) College, Khordha, Odisha

Abstract

This study examined the practices and opportunities of inclusive education in secondary schools of Odisha. A descriptive survey method was employed to explore the perceptions of teachers and Block Resource Coordinators (BRCCs) regarding classroom practices, infrastructural facilities, professional development opportunities, and administrative support for inclusive education. Data were collected from government secondary school teachers through questionnaires, classroom observations, and interviews with Block Resource Centre Coordinators (BRCCs). The researcher observed classroom environment, teaching methods, student participation, use of teaching aids, and teacher-student interactions. Data were analysed using percentage analysis, thematic analysis, correlation, and t-test techniques. The findings revealed that teachers generally held positive perceptions towards inclusive education and supported equal learning opportunities for all learners. Classroom observations indicated the use of inclusive practices such as peer learning, activity-based teaching, student participation, and supportive classroom environments. Government policies, parental cooperation, and guidance services emerged as key opportunities for promoting inclusion. However, challenges such as large class sizes, excessive workload, inadequate teaching-learning materials, insufficient resource rooms, limited assistive devices, shortage of special educators, and inadequate infrastructure hindered effective implementation. Teachers emphasized the need for continuous professional development and practical training in inclusive education. The study also found a low positive and statistically significant relationship between teachers' perceptions and classroom practices of inclusive education. Furthermore, a significant difference was observed between urban and rural secondary school teachers in their inclusive education practices. The study concludes that strengthening infrastructure, teacher training, resource availability, and administrative support is essential for effective inclusive education.

Keywords: Inclusive Education, Secondary Schools, Teachers' Perceptions, Classroom Practices, Triangulation

Introduction

Education is a fundamental human right and an essential instrument for social, economic, and personal development. In a democratic society, every child has the right to access quality education without discrimination based on disability, gender, caste, socioeconomic status, language, or any other characteristic. Inclusive education has emerged as an important educational approach that seeks to ensure equal learning opportunities for all children by accommodating diversity within the regular school system. Inclusive education refers to the process of educating all children, including children with disabilities and other special educational needs, in regular classrooms with appropriate support services, teaching strategies, and learning resources. It promotes participation, acceptance, equality, and respect for diversity while eliminating barriers that hinder the learning and development of children. The concept is based on the principle that every child is unique and capable of learning when provided with suitable educational opportunities and support.

In India, inclusive education has gained significant importance through various constitutional provisions, national policies, and educational programmes. The Right of Children to Free and Compulsory Education Act (2009), the Rights of Persons with Disabilities Act (2016), the Samagra Shiksha Abhiyan (2018), and the National Education Policy (NEP) 2020 emphasize equitable and inclusive quality education for all learners. These initiatives aim to create learning environments that are accessible, learner-friendly, and responsive to the diverse needs of children.

The successful implementation of inclusive education depends upon several factors, including teachers' attitudes and competencies, classroom practices, availability of teaching-learning materials, assistive devices, ICT tools, infrastructure, resource rooms, parental support, administrative assistance, and government initiatives. Teachers play a pivotal role in creating inclusive classrooms through the use of flexible teaching methods, differentiated instruction, peer learning, and



Cover Page



supportive classroom management practices. At the same time, adequate infrastructure, continuous professional development, community participation, and institutional support are essential for ensuring meaningful inclusion.

Despite these efforts, challenges such as inadequate infrastructure, shortage of trained teachers, limited assistive resources, large class sizes, and insufficient support services continue to affect the effective implementation of inclusive education in many schools. Therefore, it is important to examine the existing practices, opportunities, and challenges associated with inclusive education at the school level.

Avramidis and Norwich (2002) reviewed teachers' attitudes towards inclusive education and found that most teachers supported inclusion in principle, though concerns remained regarding workload, training, and classroom management. The study emphasized that teacher preparedness significantly influences successful inclusion. Forlin and Chambers (2011) reported that professional training positively affects teachers' confidence and competence in inclusive classrooms. Their study highlighted the importance of continuous professional development for effective implementation of inclusive education. Lindner et al. (2023) found that teachers generally demonstrate positive attitudes towards inclusive education and recognize its benefits for social participation and educational equity. However, inadequate resources and insufficient support services continue to affect implementation.

Sharma and Deppeler (2005) examined inclusive education practices in India and reported that teachers generally support inclusion but require adequate institutional support, training, and resources for successful implementation. Singal (2008) observed that inclusive education promotes participation and social integration among learners with diverse needs. The study emphasized that inclusive practices help reduce discrimination and improve educational access. Das, Kuyini, and Desai (2013) investigated teachers' preparedness for inclusive education in India and found that inadequate training, lack of infrastructure, and large classroom sizes are major barriers to effective inclusion. Bhatnagar and Das (2014) reported that Indian teachers hold positive attitudes towards inclusive education despite facing challenges such as insufficient resources, lack of special educators, and workload stress. Singal (2019) highlighted that although India has developed strong policy frameworks for inclusive education, implementation gaps continue due to infrastructural limitations, inadequate teacher preparation, and monitoring challenges.

Mohapatra (2015) examined teachers' perceptions towards inclusive education in primary schools of Odisha and found that teachers generally possess positive attitudes towards inclusion. The study also emphasized the importance of collaboration between mainstream teachers and resource teachers for effective implementation. Das and Paltasingh (2025) studied inclusive education for children with special needs in Odisha and reported that inadequate infrastructure, lack of trained teachers, shortage of assistive devices, and insufficient financial support remain major barriers to effective inclusion. The study further highlighted the need for improved resource facilities and continuous teacher training. The NEP 2020 emphasized that inclusive education requires stronger policy implementation, assistive technology support, disability-friendly infrastructure, and teacher preparedness to ensure meaningful inclusion of children with special needs.

The review of literature indicates that several studies have examined inclusive education in India and Odisha. However, most studies focus mainly on teachers' attitudes or challenges separately. Very few studies have explored both teachers' perceptions and classroom observation practices together of Government High School. Moreover, limited studies have used multiple tools such as questionnaire, observation, and interview simultaneously. The present study focuses on understanding the practices and opportunities related to inclusive education in secondary schools of Odisha. By collecting data through questionnaires, classroom observations, and interviews, the study attempts to assess teachers' perceptions, classroom practices, infrastructural facilities, professional development opportunities, and administrative support available for inclusive education. The findings of the study are expected to contribute to a better understanding of the strengths and gaps in the implementation of inclusive education and provide useful suggestions for strengthening inclusive educational practices in secondary schools. Therefore, the present study attempts to fill this gap by examining teachers' perceptions and classroom practices using a triangulation approach.



Need and Significance of the Study

The present study is significant because it examines the perceptions of teachers and BRCCs regarding Inclusive Education and observe the classroom practices in Government High Schools. As classrooms become increasingly diverse, understanding how teachers perceive and implement inclusive education is essential for ensuring equitable learning opportunities for all students. The study identifies opportunities that support inclusion, such as teacher training, government initiatives, and school support systems, while also highlighting challenges like inadequate resources, lack of specialized support, and infrastructural barriers. The findings may help policymakers, administrators, and educators develop effective strategies, improve inclusive practices, and create a more supportive and accessible learning environment for every learner.

Objectives of the Study

1. To study the perceptions of teachers and BRCCs regarding the opportunities available for promoting Inclusive education in Government High Schools and the challenges faced by teachers in implementing Inclusive education.
2. To observe the classroom practices adopted by teachers for Promoting Inclusion in Government High Schools.
3. To study the relationship between teachers' perceptions regarding Inclusive education and their classroom practices related to inclusive education.
4. To study the difference in Inclusive classroom practices between urban and rural high school teachers.

Research Questions

1. What are the perceptions of teachers and BRCCs regarding the opportunities for promoting Inclusive education and the challenges encountered in implementing inclusive education in Government High Schools?
2. What classroom practices are adopted by teachers for the implementation of Inclusive education in Government High Schools?
3. Is there a significant relationship between teachers' perceptions regarding Inclusive education and their classroom practices related to inclusive education?
4. Is there a significant difference in Inclusive classroom practices between urban and rural High School teachers?

Hypothesis of the study

H₀₁ (Null Hypothesis): There is no significant relationship between teachers' perceptions regarding Inclusive education and their classroom practices related to inclusive education.

H₁₁ (Alternative Hypothesis): There is a significant relationship between teachers' perceptions regarding Inclusive education and their classroom practices related to Inclusive education.

H₀₂ (Null Hypothesis): There is no significant difference in Inclusive classroom practices between urban and rural High School teachers.

H₁₂ (Alternative Hypothesis): There is a significant difference in Inclusive classroom practices between urban and rural High School teachers.



Cover Page



Methodology

Research Design

The present study adopted a descriptive survey design. This design was considered appropriate because it facilitates the collection of perceptions of teachers and BRCCs regarding inclusive education and the observation of classroom practices related to inclusive education in Government High Schools of Khordha District, Odisha. The study employed a **mixed-methods approach**, integrating both quantitative and qualitative techniques. Quantitative data were collected through a questionnaire and an observation schedule, whereas qualitative data were gathered through semi-structured interviews. **Methodological triangulation** was used to enhance the credibility, validity, and trustworthiness of the findings.

Participants

The population of the study comprised all teachers working in Government High Schools in Khordha District, Odisha. A sample of 100 teachers was selected from 50 Government High Schools. Out of these, 50 teachers (2 teachers from each school) were selected from 25 rural schools and 50 teachers (2 teachers from each school) were selected from 25 urban schools by using simple random sampling procedure.

To examine classroom practices related to inclusive education, the classrooms of 50 teachers (one teacher from each school) were observed using an observation schedule. In addition, 5 Block Resource Centre Coordinators (BRCCs) participated in semi-structured interviews to provide detailed qualitative information regarding their experiences, challenges, and suggestions related to the implementation of inclusive education.

Tools Used for Data Collection

The following instruments were used for data collection:

1. A self-constructed questionnaire consisting of 27 items was prepared to collect data on teachers' perceptions regarding inclusive education. The questionnaire consisted of close-ended statements based on a Likert-type scale. The responses were categorized as: Agree, Neutral, Disagree.
2. Observation Schedule to examine classroom practices related to inclusive education was used. The researcher observed the classroom environment, teaching methods, student participation, use of teaching aids, and teacher-student interactions. The responses were recorded under three categories: Always, Sometimes, and Never. The observation schedule consisted of 20 items.
3. Semi-Structured Interview Schedule to collect qualitative data from BRCCs regarding their experiences, challenges, and recommendations for inclusive education implementation.

Validity of the Tools

The tools were validated through face validity and content validity. The prepared tools were reviewed by experts in the field of education and research methodology. Necessary modifications were made based on their suggestions to ensure clarity, relevance, and appropriateness of the items.

Reliability of the Tools

A pilot study was conducted on a sample of 30 teachers from government high schools who were not included in the final study. The purpose was to test the feasibility, clarity, and reliability of the research tools. Based on the feedback received, necessary modifications were made. The reliability of the questionnaire was established using the split-half method



Cover Page



and Spearman's Rank Difference Correlation Coefficient. The observation schedule was tested through inter-rater reliability, while the interview schedule was refined and validated through repeated review and triangulation with other data sources.

Procedure of Data Collection

The researcher visited the selected schools after obtaining permission from the concerned authorities. Permission was obtained from school authorities. Participants were informed about the purpose of the study. The objectives of the study were explained to the participants. Questionnaires were distributed to teachers. Classroom observations were conducted. Interviews of BRCCs were carried out individually. The researcher ensured confidentiality and collected data systematically.

Methods of Data Analysis

Both quantitative and qualitative methods were used for analyzing the data. For Quantitative Analysis Percentage analysis, product movement Correlation(r) were used. For Qualitative Analysis Thematic analysis was used for interview responses.

Results and Discussion

Quantitative Results

Results related to Teacher's perception regarding Inclusive Education

The questionnaire was administered to Government High School teachers to understand their opinions and experiences regarding practices of inclusive education. The responses were tabulated and interpreted with the help of percentage analysis.

Table 1

Perception of Teachers related to teaching strategies for Promoting Inclusive Education

Sl No	Items	Agree (Percentage)	Neutral (Percentage)	Disagree (Percentage)
1	Inclusive classroom provides equal learning opportunities for all students.	85	9	6
2	Teaching-learning materials are adapted according to learners' needs.	40	15	45
3	Teacher uses flexible teaching methods to support diverse learners.	86	8	6
4	Student participation increases in inclusive classrooms.	74	15	11
5	Children with diverse needs study together.	72	16	12
6	Teachers face difficulty in managing diverse learners in one classroom.	65	15	20
7	Teachers experience workload stress in inclusive classrooms.	82	8	10
8	Teachers find it difficult to provide individual attention to students.	72	10	18



9	Large class size affects effective participation of all learners.	86	6	9
10	Peer learning is useful in inclusive classrooms.	72	18	10

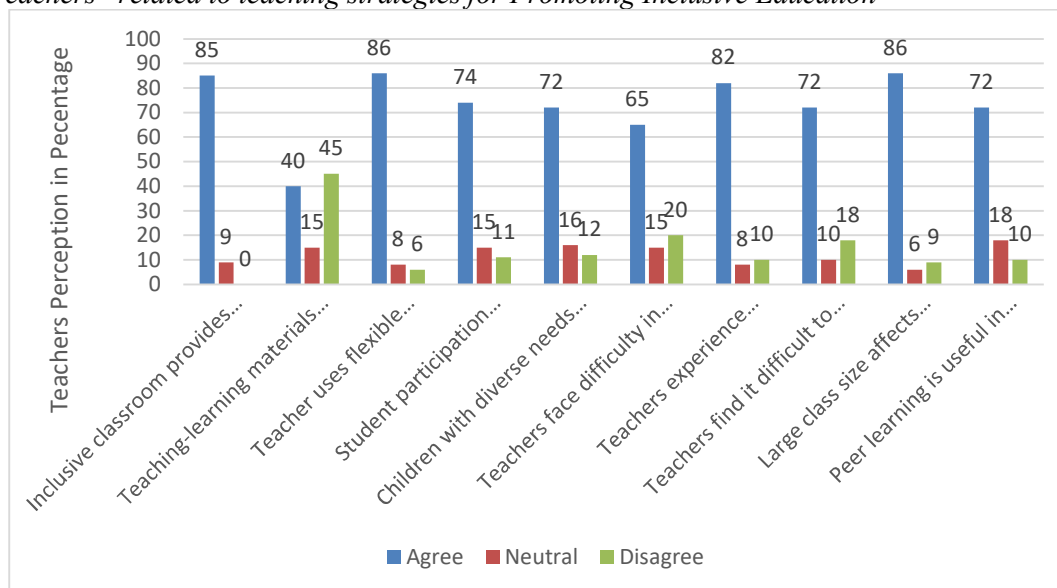
Note. The table presents the responses of teachers regarding various aspects of inclusive education practices and teaching strategies.

The findings reveal a highly positive perception of inclusive education. A large majority of respondents (85%) agreed that inclusive classrooms provide equal learning opportunities for all students, while only 6% disagreed. Similarly, 86% agreed that teachers use flexible teaching methods to support diverse learners, indicating that teachers recognize the importance of adapting instructional approaches in inclusive settings. Regarding student engagement, 74% of the respondents agreed that student participation increases in inclusive classrooms, and 72% agreed that children with diverse needs study together effectively. However, the responses also highlight several challenges faced by teachers. While only 40% agreed that teaching-learning materials are adapted according to learners' needs, 45% disagreed, indicating a significant gap in the availability or use of appropriate instructional materials. Teachers also reported difficulties in classroom management. About 65% agreed that managing diverse learners in a single classroom is challenging. Further, 82% agreed that inclusive classrooms increase workload stress, and 72% felt it is difficult to provide individual attention to all students.

Another major concern identified is class size. A substantial 86% of respondents agreed that large class sizes affect the effective participation of all learners, making it difficult to meet individual learning needs and ensure meaningful inclusion. Peer learning emerged as an important strategy in inclusive classrooms, with 72% of respondents agreeing that it is useful for promoting learning and participation among diverse learners. Only 10% disagreed with this statement, reflecting strong support for collaborative and peer-assisted learning approaches.

Figure 1

Perception of Teachers related to teaching strategies for Promoting Inclusive Education



Note. The figure represents the responses of teachers regarding various aspects of inclusive education practices and teaching strategies.



Table 2

Perception of Teachers Related to Availability of Infrastructure and Resources for Promoting Inclusive Education

Sl No	Items	Agree (Percentage)	Neutral (Percentage)	Disagree (Percentage)
11	Government schemes support inclusive education in schools.	82	6	12
12	The school provides ramps and barrier-free pathways for children with disabilities.	60	30	10
13	Schools do not have proper resource rooms for inclusive education.	48	6	46
14	The school provides child-friendly furniture and inclusive playground facilities.	55	10	35
15	You use assistive devices and ICT tools to improve learning opportunities.	52	14	34
16	School receives sufficient ICT facilities, technical support and teaching learning materials for inclusive practices.	65	10	25

Note. The table reveals teachers' perceptions regarding infrastructural support, government initiatives, and classroom practices associated with inclusive education.

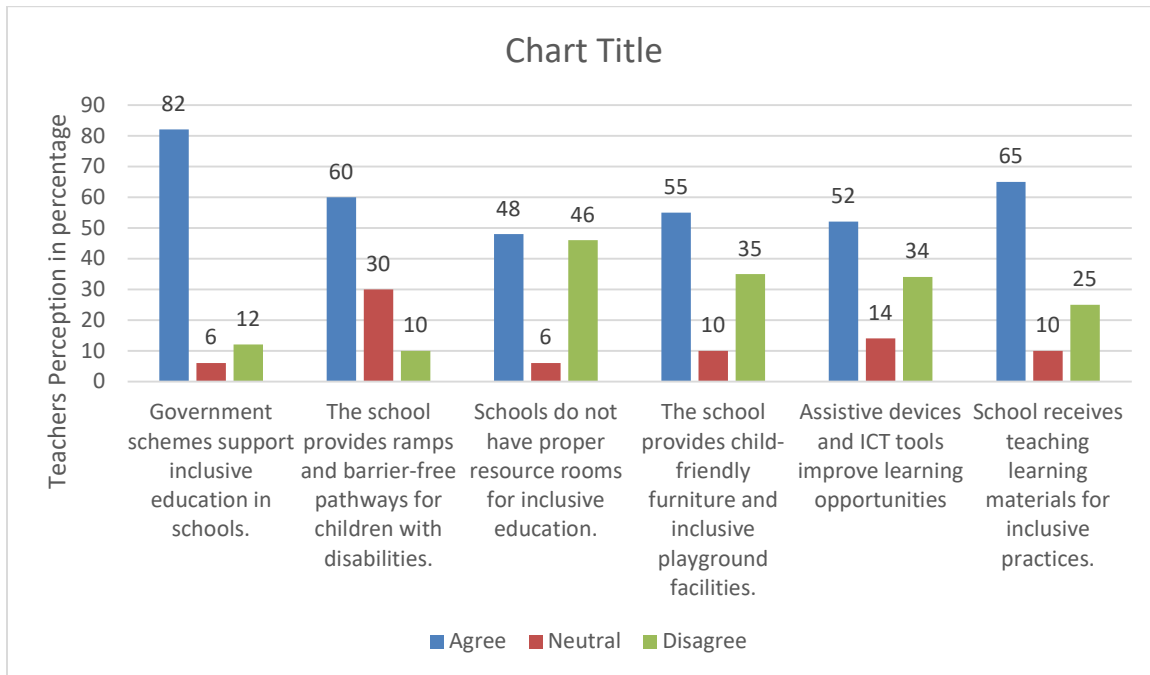
A substantial majority of respondents (82%) agreed that government schemes support inclusive education in schools, while only 12% disagreed. With regard to physical accessibility, 60% of the respondents agreed that their schools provide ramps and barrier-free pathways for children with disabilities, whereas 30% remained neutral and 10% disagreed. The findings reveal that respondents are almost equally split on the availability of resource rooms in schools. While a slightly higher proportion of teachers perceive inadequacies in resource room facilities, a nearly equal percentage believe that such facilities are available and adequate.

Concerning school infrastructure, 55% of respondents agreed that schools provide child-friendly furniture and inclusive playground facilities, while 35% disagreed. The role of technology and assistive support was viewed positively by a majority of respondents. About 52% agreed that assistive devices and Information and Communication Technology (ICT) tools improve learning opportunities for children with diverse needs. However, 34% disagreed, suggesting that access to such resources remains limited in many schools. Further, 65% of the respondents agreed that schools receive sufficient ICT facilities, technical support and teaching-learning materials to support inclusive practices, whereas 25% disagreed.



Figure 2

Perception of Teacher Related to Availability of Infrastructure and Resources for Promoting Inclusive Education



Note. The figure presents the percentage distribution of high school teachers' perceptions regarding the availability of infrastructure, resources, and support systems for inclusive education.

Table 3

Perception of teachers Related to Teacher Training and Professional Development for Promoting Inclusive Education

Sl No	Items	Agree (Percentage)	Neutral (Percentage)	Disagree (Percentage)
17	Teachers receive sufficient training for inclusion.	54	20	26
18	Training programs improve knowledge and skills to use ICT for inclusive education.	58	7	35

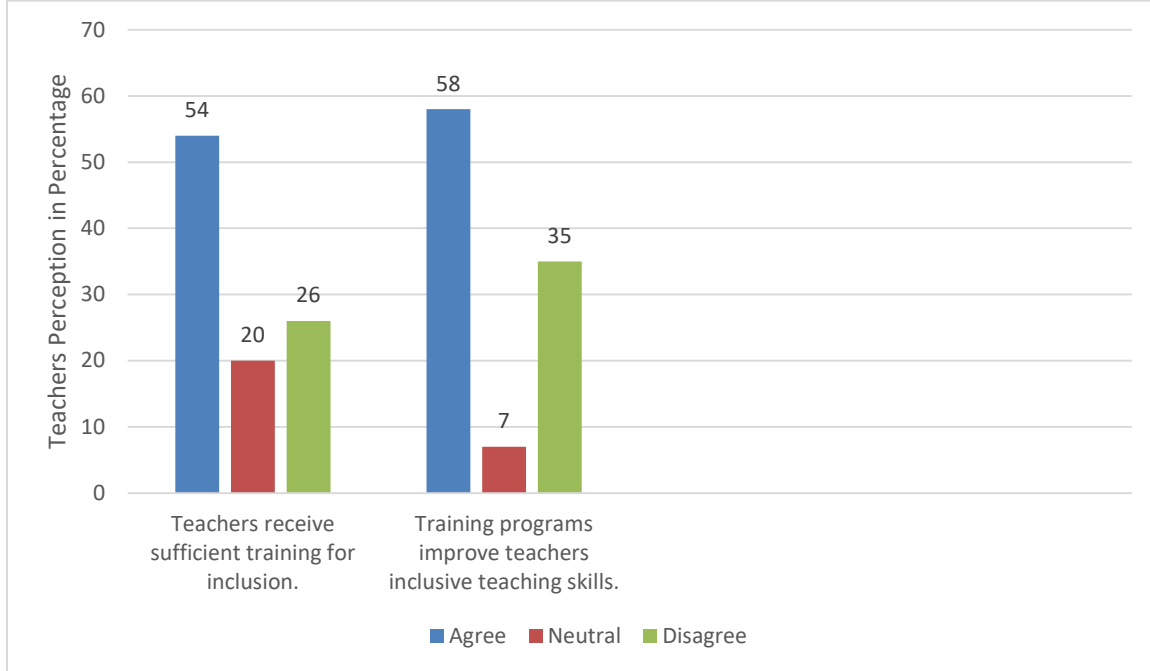
Note. The data highlight opportunities to strengthen inclusive education through enhanced teacher training and continuous professional development.

The findings indicate that only 54% of the respondents agreed that teachers receive sufficient training for inclusive education, while 26% disagreed and 20% remained neutral. The majority of teachers (58%) agreed that training programs enhance their knowledge and skills in using Information and Communication Technology (ICT) for inclusive education.



Figure 3

Perception of Teachers Related to Teacher Training and Professional Development for Promoting Inclusive Education



Note. The figure presents the percentage distribution of teachers' perceptions regarding training for inclusive education.

Table 4

Perception of Teachers Related to Availability of Community and Administrative supports for Promoting Inclusive Education

Sl No	Items	Agree (Percentage)	Neutral (Percentage)	Disagree (Percentage)
19	Community participation in inclusive education is inadequate.	46	10	44
20	Parents cooperate in inclusive education.	65	18	17
21	School authorities support inclusive practices.	68	17	15
22	Government policies support inclusive education effectively.	84	8	8
23	Guidance and counselling services are available in the school.	80	5	15
24	School management support inclusive practices.	56	10	34
25	Schools face financial difficulties in implementing inclusion.	68	10	22
26	There is a shortage of special educators in government schools.	58	6	36



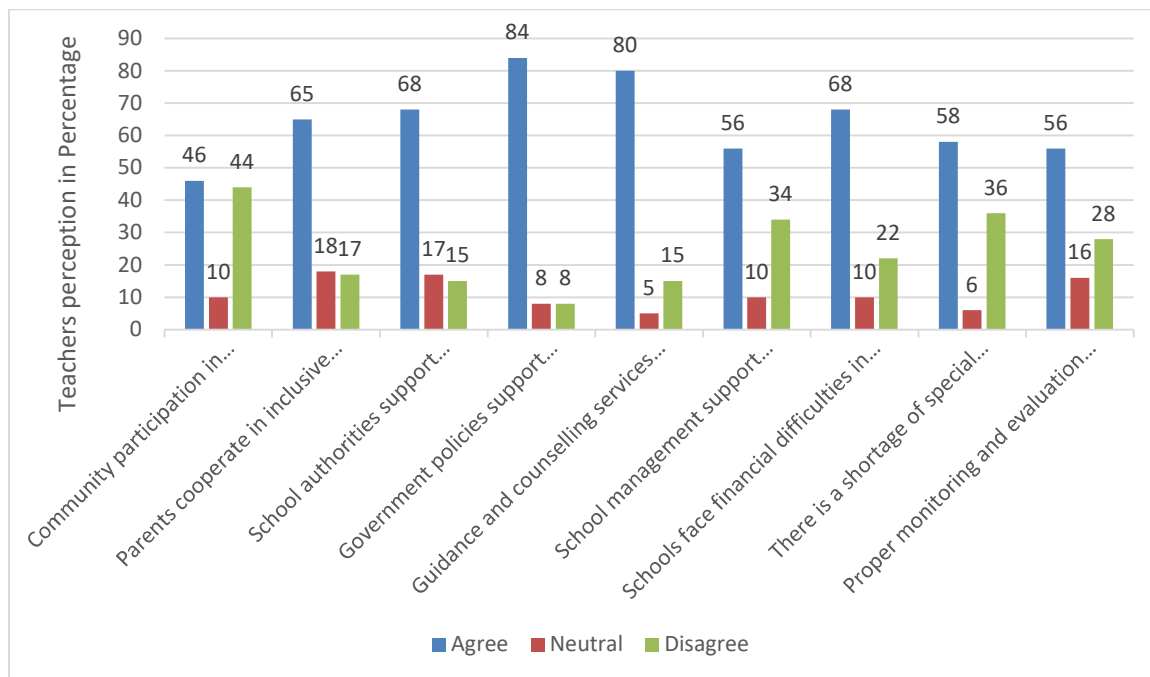
27	Proper monitoring and evaluation of inclusive practices are lacking.	56	16	28
----	--	----	----	----

Note. The table presents the percentage distribution of teachers' perceptions regarding the availability of community and administrative support for inclusive education.

The findings reveal mixed opinions regarding community participation in inclusive education. While 46% of the respondents agreed that community participation is inadequate, 44% disagreed and 10% remained neutral. Parental cooperation appears to be relatively positive, with 65% of respondents agreeing that parents cooperate in inclusive education, while only 17% disagreed. Support from educational institutions is also viewed favourably. About 68% of respondents agreed that school authorities support inclusive practices, and 56% agreed that school management supports inclusive education. However, the fact that 34% disagreed with the latter statement indicates that management support may vary across schools and requires further strengthening. Government support received a highly positive response, with 84% of respondents agreeing that government policies effectively support inclusive education. The availability of guidance and counselling services was also acknowledged by a large majority of respondents. About 80% agreed that such services are available in their schools, indicating that schools are increasingly recognizing the importance of psychological and educational support services for diverse learners. Financial constraints emerged as a significant concern. Nearly 68% of respondents agreed that schools face financial difficulties in implementing inclusive education. While 58% agreed that there is a shortage of special educators in government schools, 36% disagreed regarding the availability of special educators. This indicates variations in staffing conditions across different schools and regions. Similarly, 56% of respondents agreed that proper monitoring and evaluation of inclusive practices are lacking, while 28% disagreed.

Figure 4

Perception of Teachers Related to Availability of Community and Administrative supports for Promoting Inclusive Education



Note. The table presents the percentage distribution of teachers' perceptions regarding the availability of community and administrative support for inclusive education.



Discussion

The findings indicate that teachers hold a positive attitude toward inclusive education and recognize its benefits in providing equal opportunities and enhancing student participation. However, challenges such as inadequate adaptation of teaching-learning materials, difficulties in managing diverse learners, increased workload, limited individual attention, and large class sizes hinder the effective implementation of inclusive teaching strategies. Therefore, greater institutional support, teacher training, resource provision, and manageable class sizes are essential for strengthening inclusive education practices.

The findings suggest that teachers perceive government support, peer learning, and the provision of teaching-learning materials as important contributors to the successful implementation of inclusive education. While many schools have made progress in ensuring accessibility through ramps, barrier-free pathways, child-friendly infrastructure, and the use of assistive technologies, notable gaps continue to exist. Strengthening infrastructural facilities, increasing access to assistive devices and ICT tools, and ensuring the equitable distribution of inclusive learning resources would further enhance the effectiveness of inclusive education practices in school. The result highlights the need for further assessment and strengthening of resource room facilities to ensure effective implementation of inclusive education practices.

The result highlights the need for more comprehensive and continuous professional development programs to equip teachers with the competencies required for managing diverse classrooms effectively. Teachers appear to recognize that professional development enhances their knowledge, teaching strategies, classroom management skills, skills to use ICT and capacity to address the diverse learning needs of students. The findings reveal that teacher training is viewed as a critical opportunity for promoting effective inclusive education. Although many teachers acknowledge the benefits of training programs in enhancing inclusive teaching skills, a significant proportion believe that the training currently available is not sufficient. Therefore, greater emphasis should be placed on organizing regular, need-based, and practice-oriented training programs to strengthen teachers' preparedness and confidence in implementing inclusive education successfully.

The findings indicate that inclusive education benefits from considerable support from parents, school authorities, guidance and counselling services, and government policies. However, challenges remain in the areas of community participation, financial resources, availability of special educators, and monitoring of inclusive practices. To strengthen inclusive education, greater efforts are needed to enhance community engagement, provide adequate funding, ensure the availability of specialized personnel, and establish effective monitoring and evaluation systems. Such measures would contribute significantly to the successful and sustainable implementation of inclusive education in schools.

Results related to Observation of Inclusive Classroom practices

The classroom observation schedule was used to study the actual teaching practices followed in inclusive classrooms. The observations focused on classroom environment, participation of learners, teaching methods, and interaction patterns. Analysis of Observation Schedule on Inclusive Education practices of 50 teachers of 50 Government High Schools.

Table 5

Inclusive Classroom Practices of 50 teachers of Government High Schools

Sl. No.	Items	Always (%)	Sometimes (%)	Never (%)
1	The teacher encourages participation of all children in classroom activities.	80	14	6



Cover Page



2	Children with special needs are included in classroom learning.	74	16	10
3	Activity-based learning activities are used during teaching.	84	10	6
4	The teacher provides individual attention to children when needed.	70	20	10
5	Teaching-learning materials and ICT tools are used effectively.	66	24	10
6	The classroom environment is friendly and supportive.	90	10	
7	Children interact positively with each other.	80	13	7
8	The teacher uses simple and understandable language.	88	10	2
9	The classroom seating arrangement supports inclusion.	60	28	12
10	Children are encouraged to participate in group activities.	78	16	6
11	The teacher appreciates children's efforts equally.	80	12	8
12	Learning activities are adapted according to children's needs.	60	23	17
13	Assistive materials or aids are used for diverse learners.	48	32	20
14	The classroom is safe and accessible for all children.	70	20	10
15	Children show interest and engagement during classroom activities.	84	10	6
16	The teacher maintains positive behavior management practices.	80	14	6
17	Inclusive values such as cooperation and respect are promoted.	90	10	
18	The teacher encourages peer learning and cooperation.	78	16	6



19	Classroom Activities Support Emotional and Social Development	80	10	10
20	The overall classroom atmosphere reflects inclusive education practices.	84	10	6

Note. The table presents the percentage distribution of teachers' classroom practices related to inclusive education based on observations of 50 teachers from 50 Government High Schools. The responses were recorded under three categories: Always, Sometimes, and Never.

Item 1: The Teacher Encourages Participation of all children in classroom activities

Most observations (80%) showed that teachers encourage participation of all learners in classroom activities. This indicates active involvement of students in inclusive classrooms.

Item 2: Children with special needs are included in classroom learning.

A majority of observations (74%) indicated that children with special needs are included in classroom learning. However, some disagreement suggests that inclusion practices are not fully uniform in all classrooms.

Item 3: Activity-Based Learning Activities are Used During Teaching

Most classrooms (84%) were observed using activity-based learning methods. This reflects the use of learner-centered teaching approaches that support inclusive education.

Item 4: The Teacher Provides Individual Attention to Children When Needed

Most teachers (70%) were observed providing individual attention to learners whenever required. This indicates supportive teaching practices for diverse learners.

Item 5: Teaching-Learning Materials and ICT tools are Used Effectively

The majority of observations (68%) showed effective use of teaching-learning materials and ICT tools, though some classrooms may still require improved instructional resources, materials and ICT tools.

Item 6: The Classroom Environment is Friendly and Supportive

This item received the highest agreement percentage (90%). It indicates that most classrooms provide a friendly, supportive, and positive environment for inclusive learning.

Item 7: Children Interact Positively with Each Other

Most observations (80%) revealed that children interact positively with one another in the classroom. This indicates healthy peer relationships and cooperative learning in inclusive settings.

Item 8: The Teacher Uses Simple and Understandable Language

A very high percentage (88%) of observations showed that teachers use simple and understandable language during teaching. This helps learners with diverse needs understand classroom instruction effectively.



Item 9: The Classroom Seating Arrangement Supports Inclusion

Although the majority agreed (60%), a considerable percentage remained neutral. This suggests that classroom seating arrangements are supportive in some classrooms but require improvement in others.

Item 10: Children are Encouraged to Participate in Group Activities

Most classrooms (78%) encouraged group participation among children. This reflects collaborative learning practices that support inclusion and social interaction.

Item 11: The Teacher Appreciates Children's Efforts Equally

The majority of observations indicated (80%) that teachers appreciate all children equally. This demonstrates fairness and positive reinforcement in inclusive classrooms.

Item 12: Learning Activities are Adapted According to Children's Needs

Only 60% agreed that learning activities are adapted according to children's needs. This suggests that curriculum adaptation and differentiated instruction still need improvement.

Item 13: Assistive Materials or Aids are Used for Diverse Learners

This item received comparatively lower agreement (48%). It indicates limited use of assistive materials and aids for diverse learners in classrooms.

Item 14: The Classroom is Safe and Accessible for All Children

Most observations (70%) showed that classrooms are safe and accessible for children. However, some schools may still lack complete accessibility facilities.

Item 15: Children Show Interest and Engagement During Classroom Activities

A high percentage (84%) of observations indicated that children actively participate and show interest during classroom activities. This reflects positive classroom engagement in inclusive settings.

Item 16: The Teacher Maintains Positive Behavior Management Practices

Most observations (80%) indicated that teachers maintain positive behavior management practices in classrooms. This helps create a disciplined, respectful, and supportive learning environment for all learners.

Item 17: Inclusive Values such as Cooperation and Respect are Promoted

This item received the highest agreement percentage (90%). It shows that classrooms strongly promote inclusive values such as cooperation, respect, equality, and mutual understanding among students.

Item 18: The Teacher Encourages Peer Learning and Cooperation

Most observations (78%) revealed that teachers encourage peer learning and cooperative activities. Such practices improve interaction, teamwork, and social inclusion among learners.

Item 19: Classroom Activities Support Emotional and Social Development



A majority of observations (80%) showed that classroom activities support emotional and social development of children. This reflects the holistic nature of inclusive education practices.

Item 20: The Overall Classroom Atmosphere Reflects Inclusive Education Practices

Most respondents (84%) agreed that the overall classroom atmosphere reflects inclusive education practices. This indicates that classrooms are generally supportive, participatory, and inclusive in nature.

Discussion

The observation schedule analysis reveals that inclusive classroom practices are being implemented positively in most schools. Teachers were generally observed encouraging participation, using activity-based learning, and maintaining supportive classroom environments. The findings also show that children with special needs are included in classroom learning activities to a considerable extent. However, improvement is still needed in providing individual attention and effective use of teaching-learning materials and ICT tools. Therefore, continuous teacher support and adequate classroom resources are essential for strengthening inclusive education practices in secondary schools of Odisha.

The observation schedule analysis shows that inclusive classroom practices are positively implemented in most schools. Teachers generally encourage interaction, group participation, equal appreciation, and use understandable language in classrooms. Students also showed active interest and engagement during learning activities. However, areas such as assistive materials, classroom seating arrangements, and adaptation of learning activities require further improvement. Therefore, schools should strengthen inclusive resources, classroom accessibility, and differentiated teaching strategies to improve inclusive education practices in secondary schools of Odisha. Analysis and

The overall observation schedule analysis indicates that inclusive classroom practices are positively implemented in most secondary schools. Teachers were observed promoting participation, cooperation, peer learning, equality, respect, and supportive classroom management practices. Students actively interacted with one another, and classroom activities supported both academic and social development.

However, certain areas such as use of assistive materials, adaptation of learning activities, and classroom infrastructure still require improvement. Therefore, continuous teacher training, improved classroom resources, and stronger institutional support are necessary for effective implementation of inclusive education practices in secondary schools of Khordha District.

Qualitative Results Related to Interview Data

Interview were conducted to gather detailed qualitative information from five BRCCs regarding their understanding, experiences, and challenges related to inclusive education. The responses were grouped into themes.

Theme 1: Understanding of Inclusive Education

Most BRCCs stated that inclusive education means providing equal educational opportunities to all children, including children with disabilities, in regular schools. They emphasized participation, equality, and non-discrimination in the teaching-learning process.

Theme 2: Implementation of Inclusive Practices

BRCCs reported that inclusive practices are implemented through:

classroom participation, special support for children with disabilities, remedial teaching,



teacher guidance, and monitoring visits to schools. Some respondents mentioned that schools are trying to follow inclusive policies under National Education Policy 2020.

Theme 3: Teacher Training and Support

Most BRCCs mentioned that teachers receive orientation programs, workshops, and short-term training related to inclusive education. However, they also stated that many teachers still require more practical training.

Theme 4: Challenges in Inclusive Education

The major challenges identified by BRCCs were: lack of trained teachers, inadequate infrastructure, shortage of teaching-learning materials, large classroom size, limited financial support, and lack of awareness among parents.

Theme 5: Infrastructure and Resources

Most of BRCCs stated that many schools have ramps and basic facilities, but many schools still lack of assistive devices and ICT tools.

Theme 6: Role of Parents and Community

BRCCs highlighted that parental cooperation is important for inclusive education. Some parents actively support schools, while others are less aware about inclusive practices.

Theme 7: Government Support and Policies

Most respondents appreciated government initiatives and policies related to inclusive education. However, they suggested better implementation, increased funding, and regular monitoring.

Theme 8: Suggestions for Improvement

The BRCCs suggested more teacher training programs, improved infrastructure, adequate teaching-learning materials, appointment of special educators, regular monitoring, and increased awareness programs for parents and society.

The respondents emphasized the need for collaborative efforts among government, schools, teachers, and parents for effective inclusive education.

Discussion

The responses indicate that BRCCs possess a positive understanding of inclusion and recognize the importance of educating all learners together. The findings show that schools have started adopting inclusive practices, though implementation differs from school to school. Teacher training is available but not sufficient for effective classroom inclusion. Continuous professional development is necessary. The respondents emphasized the need for collaborative efforts among government, schools, teachers, and parents for effective inclusive education. Lack of trained teachers and infrastructure are major barriers. Government support exists, but implementation needs strengthening. Teacher training, parental awareness, and resource availability are essential for successful inclusion.

Triangulation of data

The triangulation of questionnaire, observation, and interview data demonstrates that inclusive education is being positively promoted and practiced in secondary schools. Teachers, school authorities, and BRCCs generally support the philosophy of inclusion and recognize its benefits for learners. Classroom observations confirm the presence of many inclusive practices, including participation, peer learning, cooperation, and supportive learning environments. However, the



findings also reveal persistent challenges related to teacher training, infrastructure, assistive resources, ICT tools classroom management, large class sizes, financial limitations, and monitoring mechanisms. Therefore, strengthening teacher capacity, improving infrastructure and resource availability, ensuring adequate funding, and enhancing institutional and community support are essential for the effective and sustainable implementation of inclusive education in secondary schools.

Relationship between Teachers' Perceptions and Classroom Practices of Inclusive Education

Table 6

Correlation between Teachers' Perceptions and Classroom Practices of Inclusive Education (N = 50)

Variables	N	r-value	Critical (0.05)	r	Critical (0.01)	Interpretation
Teachers' Perceptions and Classroom Practices	50	0.312	0.279		0.361	Low positive significant relationship at the 0.05 level

Note. $df = 48$. The obtained correlation coefficient ($r = .312$) exceeded the critical value at the .05 level ($r = .279$) but did not exceed the critical value at the .01 level ($r = .361$).

The Pearson product-moment correlation coefficient revealed a low positive relationship between teachers' perceptions and classroom practices of inclusive education ($r = .312$). The obtained correlation coefficient exceeded the critical value at the .05 level of significance ($r = .279$) but not at the .01 level ($r = .361$). Therefore, the relationship was statistically significant at the .05 level. Results indicated a low positive and statistically significant relationship, $r(48) = .312, p < .05$. This suggests that teachers with more positive perceptions of inclusive education tend to demonstrate better inclusive classroom practices. So, H_0 There is no significant relationship between teachers' perception and classroom practices of inclusive education was rejected and there is significant relationship between teachers' perception and classroom practices of inclusive education was accepted.

However, the low magnitude of the correlation indicates that teachers' perceptions alone are not sufficient to ensure effective inclusive practices. Factors such as professional training, availability of teaching-learning resources, administrative support, infrastructure, and class size also influence the successful implementation of inclusive education. Thus, the study concludes that positive teacher perceptions are significantly related to inclusive classroom practices, although the relationship is modest. The finding highlights the importance of strengthening teachers' attitudes through continuous professional development, training programmes, and supportive school environments to enhance the quality of inclusive education.

Difference in Inclusive Classroom Practices between Urban and Rural High Schools Teachers

Table 7

Comparison of Inclusive Classroom Practices between Urban and Rural High Schools Teachers

Group	N	M	SD	t	df	p	Result
Rural Teachers	25	51.48	4.26	3.00	48	< .05	Significant



Urban Teachers	25	55.08	4.21				
----------------	----	-------	------	--	--	--	--

Note. The analysis revealed a statistically significant difference between urban teachers ($M = 55.08$, $SD = 4.21$) and rural teachers ($M = 51.48$, $SD = 4.26$), $t(48) = 3.00$, $p < .05$.

An independent-samples t -test was conducted to examine the difference in Inclusive Education classroom practices between Urban and Rural High Schools Teachers. Since the calculated t -value exceeded the critical value at the .05 level of significance, the difference was statistically significant. So, H_0 , there is no significant difference in Inclusive Education classroom practices between Urban and Rural High Schools Teachers was rejected and alternative hypothesis there is a significant difference in Inclusive Education classroom practices between Urban and Rural High Schools Teachers was accepted. The table results indicated that urban teachers ($M = 55.08$, $SD = 4.21$) had significantly higher Inclusive Education classroom practices scores than rural teachers ($M = 51.48$, $SD = 4.26$), $t(48) = 3.00$, $p < .05$.

The findings indicate that urban teachers demonstrated significantly better inclusive classroom practices than rural teachers. This difference may be attributed to greater access to training, infrastructure, teaching resources, and administrative support in urban schools. The result is consistent with previous studies, which reported better implementation of inclusive education in urban educational settings

Major Findings

1. Positive Attitude of Teachers Towards Inclusive Education

The present study found that teachers and BRCCs generally hold positive attitudes towards inclusive education and believe that inclusive classrooms provide equal learning opportunities for all learners. This finding is consistent with earlier studies reporting that teachers generally hold positive attitudes towards inclusive education, although effective implementation requires adequate support, resources, and opportunities to address practical challenges (Sharma & Desai, 2002; Sharma & Deppeler, 2005; Bhatnagar & Das, 2014).

2. Inclusive Practices Promote Participation and Social Integration

The study revealed that inclusive classrooms encourage participation, peer interaction, and cooperative learning among students. This finding is consistent with Singal (2008), who observed that inclusive education in India promotes social participation and acceptance among children with diverse learning needs. Similar teaching approaches were highlighted by Agrawal (2015), who found that collaborative learning supports inclusion

3. Teachers Face Challenges in Managing Diverse Classrooms

The present study found that teachers experience workload stress, difficulty in classroom management, and challenges in providing individual attention. Similar findings were reported by Das, Kuyini and Desai (2013), who found that large class sizes, inadequate training, and insufficient support services pose major challenges for Indian teachers implementing inclusive education.

4. Lack of Infrastructure and Resources Affects Inclusion

The study identified inadequacies in resource rooms, assistive devices, ICT tools and inclusive infrastructure. This finding aligns with previous studies indicating that inadequate infrastructure, limited resources, and administrative barriers are major challenges to the effective implementation of inclusive education in schools (Jha, 2007; Singal, 2016; Mukhopadhyay, 2018).



5. Teacher Training is Essential for Successful Inclusion

The findings indicate that teachers value training programmes but perceive them as insufficient. This finding is consistent with studies highlighting the importance of professional training, continuous teacher preparation, capacity building, and resource support for effective inclusive education (Sharma et al., 2008; Mukhopadhyay, 2014; NCERT, 2014).

6. Government Policies Support Inclusion but Implementation Gaps Remain

The present study found that teachers appreciate government policies supporting inclusive education but identify shortcomings in implementation, monitoring, and funding. This finding is consistent with Singal (2019), who observed that although India has developed progressive inclusive education policies, implementation remains uneven due to administrative and resource-related constraints.

7. Parental and Community Participation Enhance Inclusive Education

The study revealed that parental cooperation positively contributes to inclusive education. This finding is supported by MHRD (2020) and Singal (2014), who emphasized that family and community participation are critical for the successful implementation of inclusive education in India.

8. A significant positive relationship was found between teachers' perceptions and inclusive classroom practices ($r = .312$, $p < .05$). This finding is supported by Sharma and Desai (2002), who reported that positive teacher attitudes enhance the implementation of inclusive education in Indian schools.

9. There is significant difference in Inclusive classroom practices between urban and rural High School teachers. Urban teachers demonstrated significantly better inclusive classroom practices than rural teachers. This finding is consistent with studies by Singal (2008), which highlighted that urban schools generally have greater access to training, resources, and support services necessary for effective inclusion.

Conclusion

The present study explored the practices and opportunities of inclusive education in secondary schools of Odisha using questionnaire, observation, and interview methods. The findings revealed that teachers generally hold positive perceptions towards inclusive education and believe that inclusive classrooms provide equal learning opportunities for all learners. Teachers acknowledged the importance of flexible teaching methods, peer learning, collaborative activities, and supportive classroom environments in facilitating the participation of students with diverse needs. Classroom observations further confirmed that most teachers encourage cooperation, participation, respect, and social interaction among students. Interview findings also indicated that educational stakeholders possess a sound understanding of the philosophy and significance of inclusive education.

The study identified several opportunities that facilitate the implementation of inclusive education. Government policies and schemes, parental cooperation, guidance and counselling services, peer support, and school-level initiatives were found to contribute positively to inclusion. Many schools have also taken steps to improve accessibility through ramps, barrier-free pathways, and other supportive facilities. A significant positive relationship was found between teachers' perceptions and classroom practices of inclusive education, suggesting that favourable attitudes contribute to better implementation of inclusive practices.

Despite these positive developments, several challenges continue to hinder effective implementation. Teachers reported difficulties in managing diverse classrooms, providing individualized attention, adapting teaching-learning materials, and handling increased workloads. Inadequate infrastructure, shortage of assistive devices, insufficient resource rooms, limited disability-friendly facilities, and inadequate professional training emerged as major concerns. The study also



revealed significant differences between urban and rural schools, with urban teachers demonstrating better inclusive classroom practices due to comparatively better access to resources, infrastructure, and support services.

Based on the triangulation of quantitative and qualitative findings, it can be concluded that inclusive education in secondary schools of Odisha is progressing in a positive direction. However, strengthening teacher training programmes, improving infrastructure, ensuring the availability of assistive devices and special educators, enhancing community participation, and providing adequate financial and administrative support are essential for achieving the goals of inclusive education and ensuring equitable, quality education for all learners.

Delimitations of the Study

1. The study is delimited to Government High Schools of Khordha District, Odisha.
2. The study includes only teachers working in Government High Schools.
3. The study is confined to 50 Government High Schools selected from Khordha District.
4. The study is delimited to 5 BRCCS of Khordha District.

Suggestions of the Study

Based on the findings, the following suggestions are offered:

- Regular and need-based training programmes should be organized to enhance teachers' competencies in managing diverse classrooms and implementing inclusive teaching strategies.
- Schools should be provided with adequate infrastructure, including ramps, accessible toilets, barrier-free pathways, and disability-friendly classroom facilities.
- Resource rooms should be established and equipped with appropriate teaching-learning materials, assistive devices, and technological support for learners with special needs.
- Special educators, counsellors, and support personnel should be appointed in schools to assist teachers in addressing the diverse needs of learners.
- Teachers should be encouraged to adapt instructional methods, assessment practices, and learning materials according to the abilities and needs of individual students.
- Greater attention should be given to rural schools by ensuring equitable distribution of resources, infrastructure, and professional support services.
- Strong collaboration among teachers, parents, school administrators, community members, and government agencies should be promoted to support inclusive educational practices.
- Awareness programmes should be conducted for parents and communities to develop positive attitudes towards inclusion and encourage active participation in the educational process.
- Adequate financial support should be provided for the procurement of assistive devices, development of accessible infrastructure, and implementation of inclusive programmes.
- Continuous monitoring, evaluation, and follow-up mechanisms should be established to assess the effectiveness of inclusive education policies and practices at the school level.



Cover Page



Educational Implication of The Study

Based on the findings of the present study, the following educational implications emerge:

1. Implication for Teachers

Teachers should adopt learner-centred and inclusive teaching strategies such as differentiated instruction, cooperative learning, peer tutoring, and flexible assessment practices to address the diverse learning needs of students. Positive teacher attitudes should be strengthened through continuous professional development.

2. Implication for Teacher Education Institutions

Teacher education institutions should incorporate comprehensive courses on inclusive education, disability awareness, classroom management, differentiated pedagogy, and assistive technology in both pre-service and in-service teacher education programmes to enhance teachers' competencies.

3. Implication for School Administrators

School heads should create an inclusive school environment by ensuring adequate teaching-learning resources, promoting collaboration among teachers, organizing regular training programmes, and encouraging inclusive practices within the school.

4. Implication for Educational Infrastructure

Schools should be equipped with barrier-free infrastructure, ramps, accessible classrooms, resource rooms, assistive devices, ICT facilities, and inclusive learning materials to ensure equal participation of all learners, including children with disabilities.

5. Implication for Government and Policy Makers

Government agencies should strengthen the implementation of inclusive education policies by providing adequate financial support, recruiting special educators, improving monitoring mechanisms, and ensuring equitable distribution of resources, particularly in rural schools.

6. Implication for Rural Schools

Special attention should be given to rural secondary schools by providing additional infrastructure, teacher training, resource support, and regular academic supervision to reduce the disparity between rural and urban schools in implementing inclusive education.

7. Implication for Parents and Community

Schools should promote active participation of parents and the local community in planning and supporting inclusive education programmes. Strong school-community partnerships can enhance awareness, reduce stigma, and provide better support for students with diverse learning needs.

8. Implication for Professional Development

Continuous capacity-building programmes, workshops, refresher courses, and mentoring should be organized to improve teachers' knowledge, confidence, and skills in implementing inclusive classroom practices effectively.

9. Implication for Classroom Practices

Teachers should provide equal learning opportunities by encouraging collaboration, participation, activity-based learning, and individualized support so that every learner can actively participate in classroom activities irrespective of ability or background.



Cover Page



10. Implication for Future Research

The findings of the study provide a basis for further research on inclusive education in different educational settings. Future studies may include larger samples, private schools, higher secondary schools, and longitudinal designs to examine the long-term effectiveness of inclusive education practices. Comparative studies between government and private schools regarding inclusive practices may be undertaken. Studies on parental attitudes towards inclusive education may be conducted. Research on problems faced by children with special needs in inclusive classrooms may be conducted. Studies on effectiveness of teacher training programs in inclusive education may be undertaken. Studies related to inclusive education at secondary and higher education levels may be undertaken. Experimental studies on innovative inclusive teaching methods may be conducted.

References

1. Agrawal, R. (2015). Inclusive classroom practices in Indian schools. *Journal of Educational Studies*, 12(2), 45–52.
2. Ainscow, M. (2005). Developing inclusive education systems: What are the levers for change? *Journal of Educational Change*, 6(2), 109–124. <https://doi.org/10.1007/s10833-005-1298-4>
3. Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129–147. <https://doi.org/10.1080/08856250210129056>
4. Behera, R. (2018). Inclusive classroom practices in rural schools of Odisha. *Educational Research Review*, 10(3), 55–63.
5. Bhatnagar, N., & Das, A. (2014). Regular school teachers' concerns and perceived barriers to implementing inclusive education in India. *International Journal of Instruction*, 7(2), 89–102.
6. Booth, T., & Ainscow, M. (2011). *Index for inclusion: Developing learning and participation in schools* (3rd ed.). Centre for Studies on Inclusive Education.
7. Das, A., Kuyini, A. B., & Desai, I. (2013). Inclusive education in India: Are the teachers prepared? *International Journal of Special Education*, 28(1), 27–36.
8. Dash, B. (2017). Challenges of implementing inclusive education in Odisha. *Journal of Indian Education*, 43(2), 41–50.
9. Government of India. (2016). *The Rights of Persons with Disabilities Act, 2016* (Act No. 49 of 2016). Ministry of Law and Justice. <https://legislative.gov.in/>
10. Government of India. (2020). *National Education Policy 2020*. Ministry of Education.
11. Mangal, S. K. (2017). *Educating exceptional children: An introduction to special education*. PHI Learning.
12. Ministry of Education. (2021). *NIPUN Bharat: National initiative for proficiency in reading with understanding and numeracy*. Government of India.
13. Ministry of Human Resource Development. (2018). *Samagra Shiksha: An integrated scheme for school education*. Government of India.
14. Mishra, S. (2015). Teachers' awareness towards inclusive education in Odisha schools. *Odisha Journal of Educational Research*, 5(1), 22–29.
15. Mukhopadhyay, S. (2018). Barriers to inclusive education in Indian classrooms. *Indian Educational Review*, 56(1), 67–78.
16. National Council of Educational Research and Training. (2005). *National curriculum framework 2005*. NCERT.
17. National Council of Educational Research and Training. (2006). *Position paper: National focus group on education of children with special needs*. NCERT.
18. National Council of Educational Research and Training. (2014). *Including children and youth with disabilities in education: A guide for practitioners*. NCERT.
19. National Council for Teacher Education. (2009). *National curriculum framework for teacher education: Towards preparing professional and humane teachers*. NCTE.



Cover Page



20. Nayak, P. (2019). Teacher awareness and inclusive education in Odisha schools. *Odisha Educational Journal*, 6(2), 51–60.
21. Panda, K. C. (2016). *Education of exceptional children*. Vikas Publishing House.
22. Pradhan, P. (2020). Teacher preparation for inclusive education in Odisha. *International Journal of Educational Development*, 15(1), 30–38.
23. Rehabilitation Council of India. (2020). *Guidelines for inclusive education*. RCI.
24. Sahoo, K. (2021). Collaboration and inclusive education practices in Odisha schools. *Indian Journal of Teacher Education*, 8(2), 73–81.
25. School and Mass Education Department, Government of Odisha. (2022). *Guidelines for inclusive education under Samagra Shiksha*. Government of Odisha.
26. School and Mass Education Department, Government of Odisha. (2023). *Samagra Shiksha Odisha: Annual work plan and budget*. Government of Odisha.
27. Sharma, U. (2018). Teacher education and inclusive education in India. *Journal of Research in Special Educational Needs*, 18(S1), 5–12. <https://doi.org/10.1111/1471-3802.12402>
28. Sharma, U., & Desai, I. (2002). Measuring concerns about integrated education in India. *Asia Pacific Disability Rehabilitation Journal*, 13(1), 2–14.
29. Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs*, 12(1), 12–21. <https://doi.org/10.1111/j.1471-3802.2011.01200.x>
30. Singal, N. (2006). Inclusive education in India: International concept, national interpretation. *International Journal of Disability, Development and Education*, 53(3), 351–369. <https://doi.org/10.1080/10349120600847797>
31. Tripathy, S. (2020). Inclusive practices in primary schools of Odisha. *Journal of Educational Development*, 14(1), 33–42.
32. UNESCO. (1994). *The Salamanca statement and framework for action on special needs education*. UNESCO.
33. UNESCO. (2009). *Policy guidelines on inclusion in education*. UNESCO.
34. United Nations. (2006). *Convention on the Rights of Persons with Disabilities*. United Nations.