

INCLUSIVE EDUCATION IN INDIA: CURRENT LANDSCAPE AND EMERGING INNOVATIONS

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ABSTRACT

Inclusive education has gained much importance in India during the recent years mainly due to legislative frameworks like Right to Education Act 2009, Rights of Persons with Disabilities Act 2016 and National Policy of Education 2020 etc. It is a basic human right conferred by natural law guarantying equitable access to learning opportunities for all students irrespective of their class, gender, religion, abilities, disabilities and socio-economic profiles. The current study focuses on examining the current status of inclusive education in India, recent technological innovations and current legislation in advancing inclusion in education in India. Careful analysis of data from various secondary sources i.e., various government reports, Census of India 2011, MHRD and UNICEF findings and published research in the area of Inclusive education and disability was carried out. It was found that though significant progress has been made in India in Inclusion of Children with disabilities into mainstream education still there exists widespread gap and challenges hindering the process. Most importantly the present study revealed low literacy among female disabled population, lack of adequate infrastructure, low teacher training and parents' reluctance to send their wards in inclusive schools etc. There is a need for adopting multi stakeholder partnership approach in realizing dream of achieving full inclusion in education and Monitoring system should be developed to analyze and solve the ground problems of Children with special needs which they face in the process of inclusion in education.

Keywords: Inclusive Education, Disabilities, Children with Special Needs, Assistive Technology, Accessibility.

INTRODUCTION

Inclusive education is a basic right conferred by natural law which guarantees equitable distribution of educational or learning opportunities for all students irrespective of their class, gender, religion, abilities, disabilities and socio-economic profiles. In simple words inclusive education means education for all. The notion of inclusive education is deeply rooted in the idea logy of ensuring quality education for each and every child within the confines of mainstream or existing schooling system, eradicating discrimination and ensuring an environment and culture of acceptance and equity (UNESCO,2020). Inclusive education or education for all concept has gained much importance in India during the recent years mainly due to policy frameworks like Right to Education Act 2009, Rights of Persons with Disabilities Act 2016 and National Policy of education 2020 etc. All these acts and policy frameworks lays stress on providing quality education to all children creating an environment of acceptance, equity and inclusion (MHRD, 2020).

SIGNIFICANCE OF INCLUSIVE EDUCATION IN INDIA

India is a diverse country having millions of children belonging to minority or marginalized groups, socio economically disadvantaged sections and suffering from disabilities commonly dealing with problem of exclusion from mainstream schools (Singal, 2019). It was found that 75% of children with special needs in India do not attend school regularly by UNESCO State of the Education Report for India 2019 making inclusive education all more important in India (UNESCO 2019). Moreover, to promote social harmony, democracy and eradicating inequalities inclusive educations becomes crucial or significant (Sharma & Deppeler, 2018).

OBJECTIVES OF THE STUDY

The current study aims to:

1. Examine present status of inclusive education in India.
2. Analyze the present legislations and policies promoting and advocating inclusive education.
3. Explore key innovations and practices in inclusive education.
4. Study the major challenges and hindrances in Inclusive education in India.
5. Provide suggestions for advancing inclusive education in India.

RESEARCH QUESTIONS

The present study will provide answers to following questions:

1. What is the current position of inclusive education in India?
2. How much present policies and legislations are effective in promoting inclusive education?
3. What are the noteworthy advancements and best practices in the area of inclusive education in India?
4. What are the main barriers hindering the progress of inclusive education in India?
5. What steps and measures can be taken to accelerate the progress of inclusive education India?

SCOPE OF STUDY

The present research paper focuses on examining the current status of inclusive education in India, examining both private and government initiatives in promoting inclusion in education. Further the study explores recent technological innovations and best practices in the area of inclusive education. Additionally, the study examines the effectiveness of current legislation in advancing inclusion in education in India.

REVIEW OF LITERATURE

There exists extensive literature on inclusive education in India highlighting both worldwide discussion and debates and local hindrances or barriers in putting into action inclusive practices in India. Initial conceptual models or frameworks (e.g. Ainscow, 1999) have laid stress on the idea that inclusion in education is not just about physical fusion of children with special needs in mainstream schools it is about creating an environment or culture that meets the diverse needs of all students, celebrating diversity and accommodating and adapting the current educations practices and policies to meet the needs of diverse students. This global outlook has significantly impacted future or successive research and policies development in

India where adoption and promotion of inclusion in education has become a necessity to promote social harmony, democracy and eradicating inequalities (UNESCO,2020).

Plethora of research has been done on the existing legislations and policies promoting inclusive practices in India. Several studies have explored legislations like Right to Education Act 2009, Rights of Persons with Disabilities Act 2016 and National Policy of education 2020 and highlighted their role in transforming the inclusive education landscape, promoting access and equity in education. Study conducted by Sharma and Deppeler 2018 analyzed critically these legislations and provisions and found that though these policies have been successful in providing comprehensive framework for inclusion in education however there are many challenges and barriers hindering the progress of inclusion like lack of teacher training, funds and resource allocation, infrastructural facilities and community attitude etc.

Manifold hindrances and challenges have been found in implementation of inclusion in education by several evidence-based research. One such instance is of a study conducted by Singal, 2019 which highlighted societies attitude, prevailing socio-cultural prejudice and disgrace and systematic blockages as the major cause of majority of children with special needs remaining out of mainstream schooling. Besides it was also found that poor teacher training, attitude of teachers, lack of knowledge of diverse needs of children with disabilities and lack of access to required resources impedes the progress of inclusion (Kumar & Singh, 2020). Moreover, these barriers become all more challenging and daunting due to prevailing economic disparities and unequal infrastructural development level across different regions of the country.

Further research has been done examining technological innovations and interventions which has highlighted their role in advancing inclusive education in India. A study carried out by Deshmukh and Rao ,2021 reported that the use of assistive technology and e- learning tools not only enhance classroom accessibility but also improves engagement among students with special needs. Another study carried out by Verma 2020 highlighted the role of community involvement, collaboration between government and non-government organizations in advancing the success and progress of inclusion in education.

However there exists significant research gaps requiring more extensive research and longitudinal studies examining the real experiences of students and teachers in inclusive setting, examining the ground level problems and road blocks in the success of inclusion.

POLICY FRAMEWORK AND LEGAL PROVISIONS

Robust policy and legislative framework have been evolved in India to develop and promote inclusion in education acknowledging the basic human right of each and every child to good quality education irrespective of their class, gender, religion, abilities, disabilities or socio-economic profiles etc. Over the last number of years several domestic and global pacts have significantly impacted on India's approach and perspective of inclusive education.

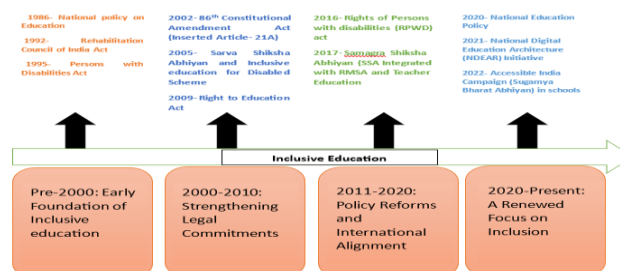


Fig.1 Policy Reforms and Legislations

Our Constitution of India is the keystone to inclusive education which warrants education as a fundamental right of each and every child. Articles in the constitution such as Article 21 A (Right to Education), Article 41 (Right to Work, Education and public Assistance) and Article 46 (Promotion of Educational and Economic Interests of Weaker Sections) etc. aids as a legal ground for several policies for inclusive education.

One of the ancient policies advocating for inclusive education was National Policy of Education (1986) which warrants for use of inclusive curriculum and adopting adaptable or flexible teaching strategies and methods to meet the diverse needs of students.

Other important statutory measures include introduction of Right to Education act 2009, Rights of Persons with Disabilities act 2016 and National Education Policy 2020 which emphasized on teacher training, infrastructural support, use of assistive technology, inclusive pedagogical approaches, monitoring systems to check progress and universal access to education etc.

KEY INNOVATIONS AND BEST PRACTICES

Through technological innovations, legislative reforms and community led partnerships and initiatives inclusive education is continuously emerging and evolving in India. These advancements are reshaping how children with special needs can get access to quality education and included in mainstream education or schooling. This section of the study provides insights into these advancements and best practices:

A. Key innovations

Innovations	For
1. Jellow Communicator (AI Based speech synthesizer)	Children with speech impairment
2. Eyegaze Technology	Children with motor impairment
3. Google Live Transcribe (spoken language to text)	Hearing Impaired Children
4. Annie (AI Powered Braille learning device)	Visually Impaired Children
5. SignAble (AI Powered Indian Sign Language Tool)	Deaf Children
6. DIKSHA (Digital Infrastructure for Knowledge Sharing- AI Led Individualized Modules)	Children with Learning Disabilities
7. Braillex (Gamified Learning Tools)	Visually Impaired Children
8. Inclusive VR Classrooms (Developed by Enable India)- Provide Virtual Science Labs	Children with physical disabilities
9. Avaz App	Children with Autism
10. Let Me Hear App	Hearing Impaired Children
11. Apps- Hello English and SkillAngels	Dyslexia and Cognitive Disabilities

B. Instances of Best Practices

- National Institute of Open Schooling has adopted Universal Design for Learning Framework wherein they provide children with special needs diverse learning materials for example- audio books, Video lectures and large print materials.
- In India, Ministry of Social Justice and Empowerment has developed Sugamya Pustakalaya in which E-Books in multiple formats are available- Braille, Daisy, audio etc.
- National Education policy 2020 has taken a robust measure of making training of teachers' mandatory in inclusive pedagogies, resources and approaches.

- Under Samagra Shiksha Abhiyan Scheme resources are provided for inclusion in education like resource rooms for special educators, assistive devices for children with special needs.
- Reservation of 5% of seats for Children with special needs in higher education institutions was done by Rights of Persons with Disabilities Act 2016.
- For Autistic students' workshop is organized for parents teaching or educating them about home-based learning approaches by NGO Chetna Foundation.
- E-Pathshala and SWAYAM online platforms are offering personalized free courses for children with special needs.
- Teacher training programmes are conducted by NISHTHA (National Initiative for School Heads' and Teachers' Holistic Advancement) for educating teachers on how to cater or meet the diverse needs of students.
- Schools in India has started using Buddy Support System where student with disability is paired with student without disability to foster engagement, relationship and co-learning.
- Rehabilitation Council of India has developed Performance based evaluation models which lay emphasis on skills rather than traditional exam system for children with intellectual Disabilities.

ANALYSIS OF CURRENT STATUS OF INCLUSIVE EDUCATION

This section deals with detailed analysis of current status of inclusive education in India. Data from various secondary sources i.e. various reports published by government and non-government agencies i.e. Press Information Bureau, MHRD, UNICEF and Census 2011 etc. and research papers was analyzed and following results have been obtained:

1. Disability statistics

Table-1 Disability Statistics		
Category	Total Population	Percentage
Total Disabled Population	2,68,10,557	2.21%
Gender Distribution		
- Males	1,49,86,202	55.90%
- Females	1,18,24,355	44.10%
Residence Distribution		
- Rural	1,86,31,921	69.50%
- Urban	81,78,636	30.50%
Age Group (0-19 years)	78,62,921	29.30%
Source: Census of India 2011		

Table-1 indicates disability statistics according to Census 2011. Out of India's Total Population i.e., 1.21 billion, 2.21% of Total Population were disabled. Further out of total disabled population 55.90% were males whereas 44.10% were females. Majority of the disabled population were residing in rural areas (69.50%). 29.30% of total disabled population were belonging to age group 0-19 years.

2. Disability Types

Table-2 Distribution of Disability Types			
Type of Disability	Overall Share (%)	Males (%)	Females (%)
In Seeing	18.8	17.6	20.2
In Hearing	18.9	17.9	20.2
In Speech	7.5	7.5	7.4
In Movement	20.3	22.5	17.5
Mental Retardation	5.6	5.8	5.4
Mental Illness	2.7	2.8	2.6
Any Other	18.4	18.2	18.6
Multiple Disabilities	7.9	7.8	8.1
Source: Census of India 2011			

Table-2 indicates percentage of population out of total disabled population suffering from which type of disability. Most prominent disability was Locomotor disability i.e., 20.3% followed by Hearing Impairment (18.9%).

3. Educational Attainment among Disabled Population

Table-3 Educational Attainment among Disabled Population		
Educational Level	Total Disabled Population	Percentage
Illiterate	1,49,86,202	55.90%
Literate	1,18,24,355	44.10%
- Below Primary	27,69,480	10.30%
- Primary	33,31,299	12.40%
- Middle	20,00,117	7.50%
- Matric/Secondary	11,16,768	4.20%
- Higher Secondary	11,16,768	4.20%
- Graduate and Above	5,90,696	2.20%
Source: Census of India 2011		

As per Table-3 which shows level of educational attainment among disabled population majority of population was illiterate (55.90%) against 44.10% literate disabled population. Majority of Population have done education till primary i.e. 12.40%. Most importantly it can be observed from data that there was sharp decline in education attainment level after primary level of education.

4. Literacy rates

Table-4 Literacy Rates among Disabled Population	
Category	Literacy Rate
Total	54.50%
- Males	62.60%
- Females	44.60%
Source: Census of India 2011	

Table-4 shows literacy rates among disabled population indicating that overall literacy rate among disabled population was 54.50% wherein literacy rates among disabled males was highest (62.60%) in comparison to disabled females.

5. Educational Attainment Based on Disability type

Table-5 Educational attainment among PWD based on the type of disability	
Seeing Disability	52.8% are literate
Hearing Disability	56.9% are literate

Speech Disability	58.3% are literate
Movement Disability	60.2% are literate
Mental Retardation	41.3% are literate
Mental Illness	48.8% are literate
Other Disabilities	60% are literate
Multiple Disabilities	33.3% are literate
Source: Press Information Bureau	

As per Table-5 (Educational attainment among PWD based on the type of disability) it can be observed that majority of persons with multiple disabilities were illiterates (only 33.3% were literates). Further majority of people suffering from locomotor disability were literates (60.2%).

6. Attendance Rates

Table-6 The attendance rates for children with disabilities aged 5-19 years	
School Attendance	Percentage
Attending School	61.20%
Not Attending School	38.80%
Source: Census of India 2011	

As per Table-6 only 61.20% of Total Disabled children aged between 5-19 years were enrolled in schools against to 38.30% not attending schools.

7. Gender Distribution of Children attending Inclusive Schools

Table-7 Gender distribution of children attending inclusive schools		
	Male	Female
Non-disabled children:	30%	38%
Disabled children:	18%	14%
Source: Ray & Ghanta, 2022		

Table-7 present gender distribution of children attending inclusive schools. It was found that out of Total Disabled Children Population only 18% males and 14% females were attending or enrolled in inclusive schools which is very less in comparison to enrolment by non-disabled children.

8. School Accessibility

Table-8		
Accessibility Feature	% of Schools with Feature (Approx.)	Source
Ramps with handrail facility	49.72%	UDISE+ 2021-22
Accessible Toilets (CWSN friendly toilets)	26.96%	UDISE+ 2021-22
Primary and Secondary school teachers Trained in Special education	30%	Meena, 2022

Table-8 reveals shocking data regarding school accessibility only 26.96% of schools had Children with Special Needs friendly schools. With respect to availability of ramps with handrails only 49.72% of the students have it. Moreover, study conducted by Meena, 2022 reported that 70% of total primary and secondary teachers have not received training in special education and not dealt with Special children.

CHALLENGES AND BARRIERS IN INCLUSIVE EDUCATION IN INDIA

Inclusive education has gained much importance in India during the recent years mainly due to legislative frameworks like Right to Education Act 2009, Rights of Persons with Disabilities Act 2016 and National Policy of education 2020 etc. It is a basic human right conferred by natural law guarantying equitable access to learning opportunities for all students irrespective of their class, gender, religion, abilities, disabilities and socio-economic profiles. Though significant progress has been made in India in Inclusion of Children with disabilities into mainstream education still there exists widespread gap and challenges hindering the process. This section of the research papers puts light on the barriers and challenges in Inclusive education in India:

1. Inadequate Teacher Training

Meena, 2022 in her study reported that 70% of teachers belonging to primary and secondary schools have not received any training in special education or how to use inclusive methodologies and pedagogies catering to the needs of diverse students. Due to this they are unable to understand and meet the needs of children with disabilities.

2. Paucity Of Infrastructure and Learning Resources

Another significant barrier hindering the success of Inclusive education in India is paucity of infrastructure and learning resources. According to UDISE+ 2021–22 report only 49.72% and 26.96% of total schools have ramps with handrails and Children with special needs friendly Toilets respectively. Moreover, schools have limited learning resources and assistive devices like wheelchairs, braille books etc making it difficult to include such children in mainstream education.

3. Dearth of Special Educators

One of the most important challenges in the progress of realising dream of inclusive education in India is shortage in availability of special educators. Under Samagra Shiksha initiative only 27,774 special educators were available which is very low in comparison to large population of disabled children aged between 5-19 years.

4. Poor Attitude towards CWSN

In India Poor attitude and social stigma towards disability poses major hindrance in inclusive education. Not only society but parents are reluctant to send their wards or allow their children to mix with Children with special needs. People think or have perception that children with disabilities are uneducable and had no abilities in them. Even teachers are reluctant to teach and make extra efforts for these children (Singal, 2016).

5. Wide gaps between Policy Planning and its Implementation

Though plethora of policies and legislations have been enacted and developed but there exist significant gaps in policies planning and implementation. Due to Poor monitoring systems inconsistencies in achieving results and targets can be seen.

6. Funds a major issue

Inclusive education is a white elephant approach which requires large funds for making it possible in reality. However, funds have been a major issue in India. Due to low availability schools have less availability of resources, assistive technology, special educators, resource rooms etc.

7. Reluctance to Change:

People fear change they are reluctant to accept change even if it is for their benefit. Parents of children with special needs are reluctant to send their children in inclusive schools.

8. Fixed Curriculum and Rigid Assessment Procedures

Education system in India is rigid and focuses heavily on written examination. Fixed curriculum is followed for each student not meeting the diverse needs of students. Shortage of Individualised Education plans and flexible assessment procedures make it more difficult to include children with special needs in mainstream education.

SUGGESTIONS FOR STRENGTHENING INCLUSIVE EDUCATION IN INDIA

1. Accentuating Teacher Training and Capacity Building

Teacher Training Programmes should be strengthened by integrating inclusive education in teacher training programmes. It should be made mandatory for all teachers (pre-service and in service teachers). Initiatives like NISHTHA should be expanded. Online teacher training modules should be utilised to reach teachers in remote areas.

2. Expanding Accessible Infrastructure and Learning Resources

More Campaigns like Accessible India should be launched to develop and provide friendly school infrastructure for Children with special needs. Schools should be provided with support and funds in equipping themselves with suitable resources needed by CWSNs like assistive technology, Braille Books and smart classrooms etc.

3. Modifying Curriculum and Assessment Strategies

National Curriculum Framework should be adopted and curriculum should be made flexible to meet the diverse needs of students. Assessment methods should be revised and broadened like focussing more on skills, open book exams, oral tests etc. Adoption of Universal design for learning approach to provide various modes of instruction and assessment.

4. Increasing Awareness and Removing Socio-cultural Barriers

Government and non-government organisations should collaborate and launch awareness campaigns on disability, needs of Divyang community, how community, parents, peers and teachers can help them, policies made for disabled population etc. These campaigns should work on sensitising society towards Divyang Community and remove social stigmas against them. People should be made aware that disability is not a curse even they are normal people who have right to live and enjoy.

5. Heightening Policy Implementation and Funding

Monitoring system should be developed to analyze and solve the ground problems of Children with special needs which they face in the process of inclusion in education. Full Implementation should be done of Rights of Persons with Disabilities Act 2016. Budget allocation from GDP should be increased.

6. Promotion of Use of AI Driven Technology

Ai Driven Assistive tools and technology should be made accessible and affordable for Children with special needs. People should be sensitized about AI led assistive technology.

7. Improving Data Collection and Research

Government, non-government and world organisations, should collaborate and conduct research and studies on needs and problems of Divyang students. Commissions should be developed who monitor the progress of inclusive education in India. Strengthening of UDISE+ mechanism to track the status should be done.

8. Strengthening Collaboration between Different Stakeholders

Inclusive education needs participation of all people in the society to make it a success. It needs partnership and joint efforts of all i.e., Parents, Policy makers, Government, NGOs, Students, teachers, Special educators, Counsellors, Technology Developers etc.

CONCLUSION

Inclusive education has gained much importance in India during the recent years mainly due to legislative frameworks like Right to Education Act 2009, Rights of Persons with Disabilities Act 2016 and National Policy of Education 2020 etc. It is a basic human right conferred by natural law guarantying equitable access to learning opportunities for all students irrespective of their class, gender, religion, abilities, disabilities and socio-economic profiles. Though significant progress has been made in India in Inclusion of Children with disabilities into mainstream education still there exists widespread gap and challenges hindering the process like paucity of infrastructure and learning resources, dearth of special educators, poor attitude towards CWSN, wide gaps between policy planning and its implementation etc. The current study highlighted the current status of inclusive education in India, recent technological innovations and current legislation in advancing inclusion in education in India. Findings of the study suggest need for strong dedication towards inclusive education, partnership between different stakeholders, adoption of evidence-based policies and technology driven innovative solutions.

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