

**REACHING THE UNREACHED :
THE STATE OF
DIFFERENTLY ABLED LEARNERS**

Dr. Bimal Charan Swain

Dr. Kartikeswar Behera

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Reaching the Unreached: The State of Differently Abled Learners

PREFACE

“Reaching the Unreached : The State of Differently Abled Learners” is a time calling literary production that calls for collaboration of teachers, teacher educators, researchers, educationists and administrators working in different levels. Inclusive Education appears to mean different things to different planners and educators for the larger interest of the excluded children who have not been brought to the fold of education due to many reasons. Despite the efforts exerted during different national programmes and need based interventions, a major chunk of the disadvantaged group of children, especially the differently abled learners have not been brought to the fold of elementary and secondary schools during DPEP and SSA interventions. Learners studying at secondary stage are not duly attended in respect of enrollment, retention and participation in quality education. Though Government provisions and facilities are available for these children they fail to take advantage of the amenities under the scheme.

Children, adolescents and adults living with disabilities still fall prey to rejection and discrimination in most aspects of their day to day life. They face difficulties in accessing services, including education and participating in community life. That is why different Acts have come into force for addressing the needs of those children and adolescents. Even in the 21st Century, quality education is a dream for them in the remote hilly areas and geographically detached areas. The needs of children living in the slum areas have not been addressed in the direction it ought to be. A thread bare discussion has been made in specific papers incorporated in the book.

The book contains twenty two conceptual and research based papers covering different categories of differently abled learners such as VI (Visually Impaired), HI (Hearing impaired) CP (Cerebral Palsy), Autistic Children, Mentally Retarded Children with Learning Disabilities (LD) etc.

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All the papers in the book are need based which will cater to the needs of consumers under D.El.Ed., B.Ed., M.Ed. and M.Phil. programmes having a subject in the course. We hope the book will fulfill the intellectual needs of the consumers.

We are thankful to all the authors whose works have been consulted, used and cited for the preparation of the papers.

Dr. Bimal Charan Swain
Dr. Kartikeswar Behera

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Inclusion in Education: A Challenge for the New Millennium

Dulal Mukhopadhyaya

Introduction

At the dawn of the new millennium 'The Dakar Framework for Action (2000)' mentioned: "The key challenge is to ensure that the broad vision of Education for All as an inclusive concept is reflected in national government and funding agency policies. Education for All... must take account of the need of the poor and the most disadvantaged, including working children, remote rural dwellers and nomads, and ethnic and linguistic minorities, children, young people and adults affected by conflict, HIV/AIDS, hunger and poor health: and those with special learning needs.." (The Dakar Framework for Action, 2000).

The new millennium is witnessing some positive as well as negative trends in education, particularly in India. Education has been brought under the provision of the Fundamental Rights in the Constitution. The MHRD Report (2007) states:

"Education has been a thrust sector ever since India attained independence. The leaders of independent India had formulated provisions for formal and non-formal education to realise the goal of Universalisation of Elementary Education (UEE). The Constitution (86th Amendment) Act 2002, enacted in December 2002 seeks to make education free and compulsory, and a Fundamental Right for all children in the age-group of 6-14 years.

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A new Article, 21A in Part III ["Fundamental Rights"] of the Constitution has been introduced to accentuate this. It reads: *"The State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine."* (MHRD, GOI, 2007).

The state has vowed to bring back all the children to school irrespective of caste, creed, religion or other barriers to education. The more discussed EDUSAT has been launched to help the different agencies of education. Thus India is a proud member of the group of super power who are disseminating education at the grass root level through this super technology. This is no doubt a healthy portrait of a multi cultural and multi religious country like India.

Any discussion on 'Inclusion on Education' should be considered on this back ground. But before going to discuss it, let us consider some other crude facts on economic and educational paradigm.

Massive Expansion or Increasing Tension

Table: 1
Population Census 2001 & 2011 (in Core)

	2001	2011
Total	102.80	121.02
Male	53.20	62.37
Female	49.65	58.65

(Data Source: O/O RGI, Census 2001 & 2011)

In keeping with its billion-plus population and high proportion of the young, India has a large formal Education System. Its target group (children and young persons in the 6-23 Years age group) numbered around 442 million in 2013, or about 40% of the country's population.

Following figures (Table 2) are some of the indicators of the size of India's Education System (figures pertain to 2013-14). The table does not include the non-formal system, which aims to educate adult illiterates, above the age of 15 years.

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Table 2
Size of the Indian Education System (MHRD, 2014)

Age group	Estimated Population 2013 (in thousands)			Corresponding Level of Education
	Total	SC	ST	
6-15 Years	256363	45386	24824	I-X
16-17 Years	45085	7749	3963	Sr. Secondary (XI-XII)
18-23 Years	140802	24077	11926	Higher Education

Above figures (Table 2) shows the target population in education at different levels.

Table 3
Size of the Indian Education System (AISHE, 2017-18)

Target Population (6-23 years age group) (2014)	1161095000
Number of Educational Institutions	
Schools (MHRD 2014)	1425564
Colleges (2017-18)	39,050 60.48% Colleges are located in Rural Areas.11.04% Colleges are exclusively for Women.
Universities (as on 2017-18)	903
Number of Teachers	6.2 million

The following comparative figures (Table 4) shows the remarkable growth of Indian Education since India became a republic in 1950.

Table 4
Quantitative Expansion of Education (MHRD 2011, AISHE 2018)

Sr. No	Item	Figure in 1950-51	Figure in 2017-18 (Unless otherwise stated)
1	Literacy Rate	18.3%	73% (2011)
2	Female Literacy Rate	8.9%	64.6% (2011)
3	Schools	0.23 million	1425564 (2013-14)
4	Colleges	370	39050
5	Universities	27	903
6	Gender Parity Index at Elementary level	0.38	1.04 (2013-14 P)

The following comparative figures show the Gross Enrolment Ratio at School Level and Higher Education Level of different categories of students.

Table 5
Gross Enrolment Ratio (GER)

Level	ALL	SC	ST
I –XII (2013-14)	84.6	92.2	86.8
Higher Education(2012-13)	21.1	15.1	11

** Data Source: For School Education:*

U-DISE-2013-14 (Provisional)

Higher Education: AISHE-2012-13 (Provisional) Report

In spite of the massive expansion of education there remain a large number of excluded populations, excluded from all sorts of educational growth. There remain patches of dark, deep dark under the bright and glaring light. Almost 47% women, a large number of special children and socially & economically backward people are still under this category. The actual figure is more than that because there are at least 1.31 crore of unaccounted children (missing children) in India (Times of India, 2005).

This has been aggravated by ‘Globalisation’ which has increased ‘Borderless Education’ in different countries, especially in developing countries. Thus it is developing tensions among the different sections of inter and intra global population. The ‘Report to the UNESCO of the International Commission on Education for the Twenty-first Century’ [1996] has given an account of these tensions. The tensions identified by the Report are:

- The global and the local
- The universal and the individual
- Long-term and short-term considerations
- On the one hand, the need for competition, and on the other, concern for equality of opportunity
- Extraordinary expansion of knowledge and human beings’ capacity to assimilate it.
- The spiritual and the material.

Spreading education through the masses may reduce these tensions, because education empowers and enlightens people.

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Educational Exclusion or Human Right Violation

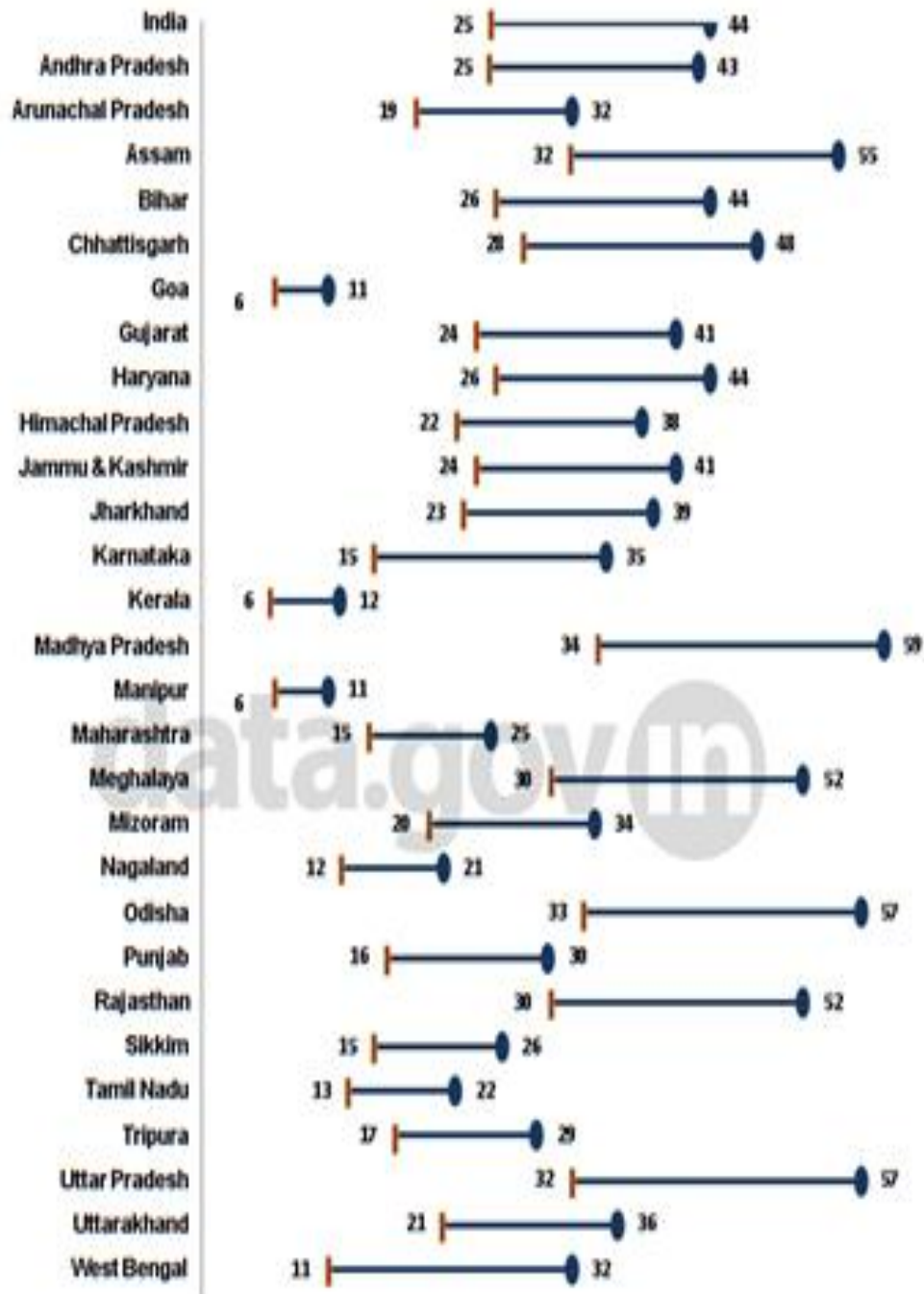
Educational deprivation means violation of Human Rights and this again develops exclusion in various ways. Now it is known that there are close links between increasing education and reduction in the rate of population growth, between education of women and family health, between education and equitable economic growth etc. These are all related to human right issues. In other words exclusion from education means violation of human right, because these excluded and illiterate people don't know their rights and so remain out of their social strata and dignities. Now let us see a glaring example of the above truth (Fig. 1&2).

In rural Rajasthan, boys under 20 comprise 44% of male deaths, indicating the abysmal state of rural health care, especially for children. In comparison to urban Rajasthan, boys and girls below 20 comprise 17 % and 31 % respectably of male and female deaths, which could be due to easier access to health care in towns. In contrast, only over 7 % of deaths in Kerala are girls below 20 years of age. Kerala has the best statistics followed by Tamilnadu, Maharastra, West Bengal, Karnatak, Himachal Pradesh.... (Times of India- Sept. 2007)

Inclusive education is considered now a basic developmental right, because it seeks to address the learning needs of every child, youth and adult specially focus on those who are in vulnerable and marginalised position due to exclusion.

Proponents of 'Inclusive Education' give special importance on it for three reasons-

a) Human Rights Issue b) Good Education and c) Good Social Sense



(Source: NITI Aayog / Planning Commission 2013)

Fig. 2 Exclusion or extinction (Mortality Statistics 2013, GOI)

CSIE (2006) has described it in the following way:

a) Human Rights

1. All children have the right to learn together;
2. Children should not be devalued or discriminated against by being excluded or sent away because of their disability or learning difficulty;
3. Disabled adults, describing themselves as special school survivors, are demanding an end to segregation;
4. There are no legitimate reasons to separate children for their education. Children belong together - with advantages and benefits for everyone. They do not need to be protected from each other.

b) Good Education

5. Research shows children do better, academically and socially in integrated settings.
6. There is no teaching or care in a segregated school, which cannot take place in an ordinary school.
7. Given commitment and support, inclusive education is a more efficient use of educational resources.

c) Good Social Sense

8. Segregation teaches children to be fearful, ignorant and breeds prejudice.
9. All children need an education that will help them develop relationships and prepare them for life in the mainstream.
10. Only inclusion has the potential to reduce fear and build friendship, respect and understanding. (Ten Reasons for Inclusion, *Centre for Studies on Inclusive Education, United Kingdom-2006*)

The National Policy of Education 1986 (as revised in 1992) had considered inclusive frame of education and indicated three thrust areas in elementary education:

- (i) Universal access enrolment;
- (ii) Universal retention of children up to 14 years of age; and
- (iii) A substantial improvement in the quality of education to enable all children to achieve essential levels of learning.

Provisions and Privileges of the Marginalized Groups in the Indian Constitution

The Indian Constitution, Part III, in its Fundamental Rights (Art. 15) declares, "Prohibition of discrimination on grounds of religion, race, caste,

sex or place of birth.” Again the Article 21A (86th Amendment, 2002) states, “The State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine.”

Article 14 states, “The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth.” So it is clear that Article 14 offers special privileges for the Marginalized Groups.

Article 15 (3) states, “Nothing in this article shall prevent the State from making any special provision for women and children (Actually the Article is for Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth. However, on the basis of this the state should not hesitate to offer special provisions for such people)”.

Again in Article 15 (4), “Nothing in this article or in clause (2) of Article 29 shall prevent the State from making any special provision for the advancement of any socially and educationally backward classes of citizens or for the Scheduled Castes and the Scheduled Tribes. [Clause (2)] of Article 29 says that no citizen shall be denied admission into any educational institution maintained by the State or receiving aid out of State funds on grounds only of religion, race, caste, language or any of them”.

Article 17 states, “Untouchability is abolished and its practice in any form is forbidden. The enforcement of any disability arising out of untouchability shall be an offence punishable in accordance with law.” So, Article 17 strictly prohibits segregation on the basis of religion or caste or such issue in classrooms and school campuses, which often make students from such circumstances stop their education uncompleted.

Article 30 (1) states, “All minorities, whether based on religion or language, shall have the right to establish and administer educational institutions of their choice.”

Again Article 30 (2) writes, “The state shall not, in granting aid to educational institutions, discriminate against any educational institution on the ground that it is under the management of a minority, whether based on religion or language.”

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The Amendment of the Constitution (2006) has done to protect both human rights and right to education. Some of these are as follows:

Art. 14. Equality before law.

Art. 15. Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth.

Art. 17. Abolition of un-touchability etc.

Art. 29. Protection of interests of minorities.

Art. 41. Right to work, to education and to public assistance in certain cases.

Art. 46. Promotion of educational and economic interests of Scheduled Castes, Scheduled Tribes and other weaker sections.

Art. 51A (k). Who is a parent or guardian to provide opportunities for education to his child or, as the case may be, ward between the age of six and fourteen years.

In Article 350 (A) we get,” It shall be the endeavor of every State and of every local authority within the State to provide adequate facilities for instruction in the mother-tongue at the primary stage of education to children belonging to linguistic minority groups; and the President may issue such directions to any State as he considers necessary or proper for securing the provision of such facilities.”

These all related to the human right to education declared in the Universal Declaration of Human Rights in 1949 and ‘the Right of the Child’ stated in Article 2 of the Convention on the Right of the Child (UN, 1989). Implication of this right is that all children have the right to receive the same kind of education without any discrimination on grounds of disability, ethnicity, religion, language, gender, capabilities, etc. The Salamanca Statement and Framework for Action (1994) asserts that:

“Regular schools with inclusive orientation are the most effective means of combating discrimination, creating welcoming communities, building an inclusive society and achieving education for all.”

(Salamanca Statement, Art. 2. 1994)

In December 1994, the General Assembly of the UNO had declared the decade 1994-2004 as the ‘Decade for Human Rights Education’ where they defined Human Right Education as:

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“..a life-long process by which people at all levels of development and in all strata of society learn respect for dignity of others and the means and methods of ensuring the respect in all societies.”

This declaration is very important in the present century, because the present world is tormented by war and destruction, developing high pitch of tension due to discrimination between the rich and the poor, men and women, literate and illiterate etc. Besides these there are discrimination to specially challenged people, discrimination due to caste and class, religious bias and many more.

Thus there are a large number of people excluded from most of the facilities of the society and remains illiterate and they are deprived of and are ignorant of these Human Rights. A large number of this population, in developing countries, is facing similar problems.

Different Types of Discrimination

Discrimination creates exclusion in education and other sectors too. Again discrimination develops marginalisation. A study by Katarina Tomasevski (2010) on Marginalisation indicates that Marginalisation develops from the following sources:

abandoned children, asylum seeking children, beggars, child labourers, child mothers, child prostitutes, children born out of wedlock, delinquent children, disabled children, displaced children, domestic servants, drug-using children, girls, HIV-infected children, homeless children, imprisoned children, indigenous children, married children, mentally ill children, migrant children, minority children, nomadic children, orphans, pregnant girls, refugee children, sans-papiers (children without identity papers), sexually exploited children; stateless children, street children, trafficked children, war-affected children and working children.

Governmental Policies to remove discrimination is known as Positive Discrimination. It may be explained as follows:

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“Positive Discrimination is some special privileges and reservation offered to the marginalized groups, in different developmental areas like education, employment, administration etc. to bring them into the mainstream of the society. It is also known as compensatory discrimination on the argument that they were marginalized on account of different historical and social factors”.

Different Types of Discrimination exists in the society. It develops exclusion in different areas of the society. Some of the sources of discrimination are:

- i) *Gender Discrimination or Gender Bias* -Gender discrimination or Gender bias is denying some particular gender groups the rights and opportunities that are enjoyed by some other gender groups of the same society only because they belong to this particular gender. Hence, if a person who belongs to a particular gender is denied an opportunity because that person doesn't deserve it on the basis of the qualifying criteria, it cannot be called gender discrimination or gender bias.
- ii) *Racial Discrimination* - Racial discrimination is denying some particular racial groups the rights and opportunities that are enjoyed by some other racial groups of the same society only because they belong to this particular race. Hence, if a person who belongs to a particular race is denied an opportunity because that person doesn't deserve it on the basis of the qualifying criteria, it cannot be called racial discrimination.
- iii) *Caste Based Discrimination* - Caste discrimination is denying some particular caste groups the rights and opportunities that are enjoyed by some other caste groups of the same society only because they belong to this particular caste. Hence, if a person who belongs to a particular caste is denied an opportunity because that person doesn't deserve it on the basis of the qualifying criteria, it cannot be called caste based discrimination.
- iv) *Religious Discrimination* - Religious discrimination is denying some particular religious groups the rights and opportunities that are enjoyed by some other religious groups of the same society only because they belong to this particular religion. Hence, if a person who belongs to a particular religion is denied an opportunity

because that person doesn't deserve it on the basis of the qualifying criteria, it cannot be called religious discrimination.

- v) *Linguistic Discrimination* - Linguistic discrimination is denying some particular Linguistic groups the rights and opportunities that are enjoyed by some other linguistic groups of the same society such as getting education in their own mother tongue.
- vi) *Discrimination based on Ability /Disability*—Disabilities develop discriminations in different areas of lives and societies. This increases exclusion in society, in education, in family life and other areas of personal development and empowerment. A person with a disability may also differ with the medical profession or others about how his or her disability is classified. The classification of one disability "does not stand alone," as it is also inscribed into the greater discourse of the classification of all disabilities (Bowker& Star, 1999, p. 173).

Some other sources of discrimination are:

- Poverty
- Children in crisis and post crisis
- Street children
- Children with disabilities
- Social inequalities
- Economic slowdown

And it is true that there have been severe discriminations in India on the basis of religion, caste, race, language, gender etc., and for improving such people, to include them in the part of mainstream, the Constitution as well as different Government policies offer some positive discrimination towards such people.

Inclusion or Confusion

Confusions persist relating to the term 'Inclusion'. Inclusion in education is a broad term. It denotes to include all learners in educational setting and inclusive education has relatively a narrow boundary. It means inclusion of specially challenged learners in education systems. In addition to problems related to definition, there often is a philosophical or conceptual distinction between mainstreaming and inclusion. Those who support the idea of mainstreaming believe that a child with disabilities first belongs to the

special education environment and that the child must be capable in his/her way into the regular education environment.

In contrast, those who support inclusion believe that the child always should begin in the regular environment and be removed only when appropriate services cannot be provided in the regular classroom. Sometimes different terms are used interchangeably without considering the inner meaning of the term. These are: Marginalisation, Social Discrimination, Exclusion, Mainstreaming, Inclusion and Full Inclusion. So to clear the confusion about the concepts, a clear definition of the terms is necessary.

Mainstreaming: Generally, mainstreaming has been used to refer to the selective placement of special education students in one or more "regular" education classes. Proponents of mainstreaming generally assume that a student must "earn" his or her opportunity to be placed in regular classes by demonstrating an ability to "keep up" with the work assigned by the regular classroom teacher. This concept is closely linked to traditional forms of special education service delivery.

Full Inclusion: Full inclusion means that all students, regardless of handicapping condition or severity, will be in a regular classroom /programme full time. All services must be taken to the child in that setting.

Inclusion: Inclusion is a term which expresses commitment to educate each child, to the maximum extent appropriate, in the school and classroom he or she would otherwise attend. It involves bringing the support services to the child (rather than moving the child to the services) and requires only that the child will benefit from being in the class (rather than having to keep up with the other students). Proponents of inclusion generally favour newer forms of education service delivery. (Research Bulletin Number 11, 1993, from Phi Delta Kappa's Center for Evaluation, Development, and Research).

Sailor and Skrtic (1995) have listed the following elements in their definition of inclusion:

- "Inclusion of all children with diverse abilities in schools they would attend if they had no disability
- Representation of children with diverse abilities in schools and classrooms in natural proportion to their incidence in the district at large

- Zero rejection and heterogeneous grouping
- Age-and grade appropriate placement of children with diverse abilities
- Site-based coordination and management of instruction and resources
‘effective schools’ style decentralised instruction models.”
(Sailor, W. and Skrtic, T. M, 1995)

The UNESCO has given a broad definition of Inclusive education in the following way:

“Schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. This should include disabled and gifted children, street and working children, children from remote or nomadic populations, children from linguistic, ethnic or cultural minorities and children from other disadvantaged or marginalized areas or groups.” (*The Salamanca Statement and Framework for Action on Special Needs Education, 2000*)

Social Discrimination: Often people are discriminated in the society due to several reasons. These reasons are man made and considered justified by the section of the society. Thus a large section of the population remains excluded in the society with no faults for them. In the USA, Black people are considered excluded by the white. In India, many categories of people are excluded by another group. This discrimination arises from religion, caste, creed, culture etc.

Inclusion, Education and Empowerment

Education and enjoyment of human rights are both sides of the same coin, because education develops knowledge and skills and mould attitudes toward life and society. Again education also helps:

- Strengthening respect for human rights and fundamental freedom.
- Developing the human personality and sense of dignity.
- Promoting understanding the tolerance, gender equality, and friendship among all people of all racial, national, ethnic, religious and linguistic groups.
- Enabling everyone to participate in the society.
- Developing peace among the different groups of people.

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Some of the problems which develop exclusion are:

1. High literacy gap between male and female,
2. High rate of gender disparity in almost every walk of lives,
3. Perceivable rural - urban divide,
4. Alarming high school drop-out rates,
5. Unsolved problems of specially challenged people,
6. Isolation of people by religion, caste, creed, economy etc.

A close relationship exists between illiteracy and poverty. Poverty breeds poverty and widens the gaps among different social indicators. Education is the most powerful tool that can reduce and eliminate various inequalities exists in societies in a systematic way and thus reduces social exclusion, because

“....learning to read and write can do a great deal to liberate children from tremendous powerlessness experienced by illiterate persons in modern society, even when these skills are acquired through fairly routine methods. Similarly, children benefit from associating with other children in a learning environment, even when the content of the learning activities themselves is of limited interest.” [Public Report on Basic Education India, 1999].

Empowerment and education is again closely related to one another.

Education empowers people. Empowered persons have the critical mass of knowledge, understanding and emotional integrity to follow their intrinsic motivation to live their life on their own terms. They have tuned into their inner wisdom, they have become their most resourceful self, and turned-down the volume of any conflicting or limiting messages from their past and from people around them. They think more clearly and are able to distinguish the useful information that they receive from the world around them.

The World Bank has defined empowerment in the following way:

‘Empowerment is the process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes. Central to this process is actions which both build individual and collective assets, and improves the efficiency and fairness of the organizational and institutional context which govern the use of these assets’ [World Bank, 2006].

Empowerment helps participation of weaker, marginalised and excluded sections in the process of development of the self and the society. Thus it has the capacity of creating new dimensions of lives of the marginalised and excluded groups to get access to different social development paradigm. Five major dimensions of empowerment are:

- Cognitive,
- Economic,
- Psychological,
- Political and
- Physical (Kumar, 2005).

Major indicators of these dimensions are:

- Freedom of movement,
- Right to form associations and assembly peacefully,
- Occupational freedom,
- Right to earn and spend money,
- Independent decision making,
- Right to own and transfer property,
- Right to utilize public services,
- Right to exercise control over body,
- Right against abuse and exploitation of all kinds,
- Right to profess and practice religion.
- Right to information (Singh, 2005).

There is no denying the fact that education is the most important criteria to achieve and exercise all these dimensions. Naturally all those people who are out of the educational arena remain secluded in their own closet circle without any form of social recognition, rights and knowledge of the world around them.

Big Questions – But No Answers?

Economic deprivation, habitation, livelihood, ethnicity, religion, disability, gender etc. may obstruct the access of the marginalized people in education. However, the exact cultural, social and economic consequences of these factors vary from time to time, from country to country and from location to location. Millions of Indian population who live in slums, by the roadside or nearby railway lines or in the uninhabitable places is another side of this story. Almost 30% of these populations are poor migrants from other places who have moved to the cities and towns in search of

livelihood. Actually this population is the missing population. The children of this population are missing children from government statistics. They do not even get a place in the Government Census Report. They are excluded people. Those who live in metropolis or in other urban and semi-urban location may have easy access to schools. But these isolated children remain out of schools, rooming with their parents here and there according to their work of the parents or spend their days as rag pickers and other such works. So a school within the reach of every child is not the solution of the problems of those educationally excluded children, though it is a major concern. The big questions, then, arises are:

- Does the socio-economic condition of this populace permit them to go to school?
- Do the girl-children continue their schooling like the boys?
- Can these schools be effective enough to hold these children for five hours at a stretch?
- Can the drop out rates be reduced enough in the stipulated time period?
- How can the missing children be included in the schools?
- How can the specially challenged children be accommodated in the schools?
- What methods and instructional systems are to be used for the newly included children?
- How can educationally excluded and neo-literate adults be retained in the new schooling system?
- How can effective teachers' training be developed for these excluded people?
- In the seven years of schooling, will the child be able to gain any thing of significance and value in his/her life?

These are some of the big questions like the tip of the iceberg. These questions can be answered but yet they are remaining unsolved and unanswered after long years of independence. Apathy, negligence, far sighted planning, low investment in these priority sectors etc. are some of the causes for underdevelopment and staggering condition in these areas, Some experts often consider that economic condition of the parents is the primary cause of exclusion and drop out from education. But 'the Public

Report on Basic Education' (The PROBE'. 1999) tells us a complete different story. The Report revealed that only one to five per cent of the out of schools children earn only a significant income. Others actually help their parents in household works.

The PROBE report also indicated that high drop out rate is due to the unattractiveness of schools and teaching-learning methods. It is also found that 'free, compulsory and quality elementary education is related to reduction of child labour (Shrinivasan, 2005).

Identifying the Barriers of Inclusion

According to Lean & Colucci (2010), "Barriers to learning is a temporary or permanent factor, condition, or situation that obstructs or impedes academic progress, resulting in mild to severe effects."

Some of the Barriers to learning are:

- Rigidity of core beliefs, values and assumptions;
- Ineffective communication and information difficulties;
- Failure to recognize similar or identical situations;
- Maladaptation, threat minimization and environmental shifts, cognitive narrowing and event fixation;
- Centrality of expertise, denial and disregard of outsiders;
- Lack of corporate responsibility;
- Communication processes;

The barriers of inclusion in education may be different in different environment, but there is some commonality of exclusion. Environmental barriers may be as follows:

- A physical environment that is not accessible,
- Lack of relevant assistive technology (assistive, adaptive, and rehabilitative devices),
- Negative attitudes of people towards disability,
- Services, systems and policies that are either non-existent or that
- Hinder the involvement of all people with a health condition in all areas of life.

Inclusion in educational institutions does not always work due to several reasons. Several factors are there for non-inclusion but one of the main

reasons is the teacher factor. Untrained and de-motivated teachers can often do more harm than good, especially for specially challenged children. UNESCO (2003) has identified some of these problems:

- Problems in the provision and organisation of education,
- Socio-economic factors which place learners at risk,
- Attitudes,
- Curriculum,
- Environment,
- Language and communication,
- Organisation and governance of the education system,
- Inadequate teacher training and demotivated teachers,
- No proper planning,
- Inadequate and fragmented human resource development etc.

Overcoming Barriers through Inclusive Approaches

The above stated problems and barriers can be resolved properly and better results can be achieved if proper attention is given to the major priority areas. But strategic and specific approaches are to be identified. This can be done with the existing resources and innovative practices in local contexts by examining the barriers to learning, with a specific focus on groups vulnerable to marginalisation and exclusion.

According to the recommendation of the Dakar Framework for Action (2000):

“... In order to attract and retain children from marginalized and excluded groups, education systems should respond flexibly...Education systems must be inclusive, actively seeking out children who are not enrolled and responding flexibly to the circumstances and needs of all learners...”

(The Dakar Framework for Action, 2000)

Some steps may be taken in the following areas:

► *Involvement of grass root level Political system*

So many projects and reports are coming up and they suggest so many ways which develop confusion among the people. But it is essential to use the grass root level people who are actually dealing with the excluded people. For this reason different grass root level organisations, like

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Panchayats etc., and community sectors are to be involved. This requires political will and dedication on the part of the political persons of the locality. Plans and programmes are to be made at grass root level and it must not be a top-down process. Plans and programmes are to be done according to the local needs, demands and climates. Priority should be on 'Local Culture', not on the so-called 'Indian Culture'. This will save money, energy and time. When people will see that the programmes are done for them and local leaders are also extending their hands for them, they will join the activities to make them success.

► *Improvement of Economic Climate*

Another important priority sector is the development of economic climate. Instead of considering large-scale projects and external helps, small projects are to be considered. India's expenditure on education is extremely low (3.5% of GNP) and expenditure on Primary education have decreased from 56% in the First Plan to 24% in 1966-69 and it has gone up to 42% in the 8th Plan, but it is still lower than the First Plan.

► *New Form of Teaching Learning System*

Innovative teaching-learning systems are to be evolved for the people living on the vulnerable side. Flexible methods are to be used so that different heterogeneous learner population can enjoy the joy of learning and find meaning in it.

► *Transparency in Policy and Planning*

To attend the faith and confidence of the local and affected people transparency of the policy and programmes should be made. This may, at the initial stage, develop some minor problems but ultimately will help to process and conduct the programmes of action.

► *Proper Training of Education Personnel*

UNESCO (2001) has recommended some strategies for the preparation of appropriately skilled workforce of teachers for this purpose:

- "Design long-term training plans that take into account all the actors involved and the different models needed to meet different needs;
- Implement training activities directed to both mainstream teachers and specialists so that they share the same approach and are enabled to work in partnership;

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- include the relationship between theory and practice and opportunities for reflection in all training actions;
- Start from the needs felt by the teachers themselves;
- Direct training to the school as a whole whilst retaining an array of strategies and models to achieve different objectives and address different needs;
- Promote self-development, creating opportunities for networking amongst teachers, schools and communities; and
- Encourage teachers themselves to develop new teaching materials.” (UNESCO, 2001).

► *Creativity Development through Curriculum*

Creative inputs should be incorporated and pedagogy is to be developed in the curriculum. This is to be done according to the needs of the communities. Thus learners will also find it interesting and thus they will be able to relate it with their own living environment. Most of the time the governmental agencies, with their traditional views, failed to do this job and thus causing high dropouts and apathy towards the education systems.

Time and again it was pointed out that different community based organisations, education departments of universities and social movement organisations are also to be involved in this work, but this was not properly done.

► *Development of Barrier free Environment*

Excluded and marginalised people always remain out of the societal development and other activities. They are poor and illiterate and hence they try to avoid placing their demands in proper place due to fear of facing other problems.

Again, the problems of specially challenged people are grave, complex and different from others. They face obstacle in carrying out their daily lives. They are even, most of the time, burden in their own families. Even literate and educated persons with disability also face similar problems. The problems are acute for girl-population. Though the National Policy for Persons with Disability was announced in 2006, but these excluded people are yet to get the benefits. The newly adopted National Policy on Persons

with Disability has several limitations. For this population a barrier free environment and inclusive approaches are very important.

There are other factors too which develops exclusion in education. For example problems of migrant people working in mines, salt fields, agricultural fields etc. are to be met by different types of alternative schooling systems and are to be developed through innovative practices.

Conclusion

Joseph ki Zerbo, a noted historian, thinker and teacher, wrote in his thought provoking book 'Educate or Perish' (1990) the Dilemma of the Modern World: "there is no alternative but to educate and do so rapidly and properly."

This is a timely warning to all countries that are lagging in this field. Rabindranath Tagore once said, "...the object of education is to give man the unity of truth...True modernism is freedom of mind, not slavery of taste. It is independence of thought and action."

This new millennium perceives different new innovations and discoveries. Tremendous changes are happening in communication systems. This vast globe is now considered as a village. Men are moving in the air, space and water at their own will and might. But it is painful and shocking that there is still exclusion in different segments of the population like dark patches where there is no light, no air, and no water. Some men like creatures are roaming helplessly for some help from any corner of the cultured society. Is there anybody who lends his helping hand, any society, any government, and any organisations? No, it can not be solved by individuality.

This requires a holistic approach, not fragmented or thoughtless activities, plans or programmes. Otherwise this will only help spending some costly resources, talents and valuable time but not the excluded people. And then the result will be the lagging of this population in the new world in every walk of their lives; and learning society, knowledge society, global village etc. will be a distant dream for these excluded people devoid of all human rights.

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Provision for Academic and Social Support to Children with Diverse Needs in Inclusive Classrooms

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Academic Support to Children with Diverse Needs in Mainstream Classroom

The right to live with dignity and self-respect as a human being leads to a continuous analysis of policies and services aimed at marginalized sections. Internationally, the provision for students with diverse needs is gaining ground. Provision has multiple facets. It includes activities, services, facilities and resources aiming at removing obstacles to learning, and access and entitlement to education. Differentiation and 'not sameness or treating everybody the same' lies at the heart of effective provision. It is applied to all aspects of teaching and learning (e.g., distance learning, examinations and assessments), learning resources (e.g., libraries, computer, building adaptations and equipment), counseling and other support services (e.g., campus orientation, careers services). There is variability in the provision, due to the lack of common and consistent procedures with regard to identifying disability and responding to students' needs effectively. Specifically, there was variability in registering, recording and evaluating students' learning needs, with colleges relying on individual students' accounts and assessment results obtained from outside agencies and professionals. Furthermore, there were not any criteria for assessment/identification agreed upon, with the majority of staff having limited training and expertise on disability issues.

Responding to Diversity in Education: Literature Review

- ❖ Singleton and Aisbitt (2001) conducted a survey on the support services available within higher education available for students with dyslexia. They identified a number of factors that were likely to hinder effective provision, including variability in the provision across institutions; lack of trained tutors; limited awareness of issues related to assessment and identification of dyslexia and its implications for learning among staff and the existence of centralized services rather than support at a departmental level.
- ❖ Previously, in a report on Dyslexia in Higher Education in the UK, Singleton (1999) produced a list of recommendations on supporting students with dyslexia by identifying as immediate priorities the need to establish a policy of dyslexia at a whole-institution level; raise awareness about dyslexia (through professional development activities) for key staff such as admission tutors, examination officers, counselors and career advisers; and implement special examination and assessment arrangements for students with dyslexia.
- ❖ Although the emphasis in Singleton's report was on institutional procedures to respond to students' needs, five years later, Tinklin, Riddell and Wilson found that support was provided mainly at an individual level and not an institutional level (2004). Effective provision for students with disabilities relies on a culture of acknowledging and responding to difference by linking policy with practice at an institution level, rather than engaging in negotiations with individual students about teaching modification and examination concession arrangements. This can be achieved through the development of policies regarding disability and legislative frameworks such as The UK Special Educational Needs and Disabilities Act (2002), to ascertain students' rights by making discrimination on the grounds of disability unlawful in both pre and post sectors. The Act uses a wide definition of disabled persons, including people with physical or mobility impairment, sensory impairment, dyslexia, medical conditions, and mental health difficulties. Discrimination against students with disabilities can take place either by treating them "less favorably" than other people, or failing to make a 'reasonable adjustment' when they are

placed at a “substantial disadvantage” compared to other people for a reason relating to their disability (Disability Rights Commission, 2002).

- ❖ Much of the research on disability and provision has been at an institutional and policy making level. Provision is complex and raises many issues with regard to equality of access, understandings of disability, assessment and identification and availability of resources and expertise.
- ❖ Farmer, Riddick and Sterling (2002) pointed out that participation of students with learning difficulties in higher education should be considered at three levels, namely personal, organizational / institutional and political / ideological. Personal in terms of providing counseling services, adapting the curriculum (electronic and other materials), modifying teaching and other services such as a sign language interpreter or materials in Braille. Organisational in terms of changing standard institutional procedures, training staff and modifying the physical environment. Finally, ideological in terms of debating models of disability and current policies, striving for equality of opportunity and supporting students' access and entitlement to education.

Academic Support Framework for Children with Diverse Needs

Farmer and his colleagues (2002) have suggested the provision for students with disabilities in higher education at individual, organizational and organizational levels.

Academic Support Framework for Children with Diverse Needs		
Individual Level	Organizational Level	Ideological Level

A. Individual Level

- **Identification and recognition of Students with Disabilities:** - At first students with disabilities must be identified at an individual level to provide appropriate academic support services at proper academic environment.
- **Provision:** - Provision for students with disabilities is multi-faceted, involving issues of availability of and access to resources, training for academic tutors and staff, awareness about diversity and areas of

need, effective referral services, as well as emotional and pastoral support for students with SEN to disclose disability and minimize the sense of stigma (Allard 1987; Pacifici and McKinney, 1997; Tinklin and Hall, 1999; Lancaster et al., 2001). With regard to stigma, Allard (1987) found that some students with learning disabilities tend to “hide-out” during their first months at college in that they feel that disclosure of disability is likely to bring disadvantage. Lancaster and his colleagues (2001) investigated provision in students with disabilities in higher education institutions in the USA. The main premise underlying their research was that “the goal of providing course accommodations for students with disabilities is to modify materials or testing procedures in order to help students become as successful as they can be. This should be done in such a way that the rigor of the academic programme is not compromised or without giving the students an unfair advantage” (2001:8). They found that students with disabilities and their tutors generally negotiate teaching modifications and concessions with assignments and examinations including extra time for tests/assignments, extended due dates, scribes and readers for tests, oral tests/reports instead of written, and separate testing rooms. Across colleges, the use of adaptive equipment and technology in particular (e.g., spell-checkers, voice-input software, electronic reading machines, talking calculators, computer-screen readers, specialized keyboards, tape recorders) has become an important aspect of provision.

- **Human Resources and Financial Support:** This includes creating/extending dedicated learning support posts, improving inclusivity of teaching and learning, providing training and/or resources, expanding disability services and providing additional staff (sometimes with a specific faculty perspective). Teaching modification may be done in terms of re-thinking and adapting the learning goals and the curriculum. A study by Tinklin and Hall (1999) found that the quality of provision for students with disabilities in higher education depends on attitudes, experience and awareness about disability among staff and students, rather than the institutional policies alone. Lancaster and his colleagues (2001)

investigated provision in students with disabilities in higher education institutions in the USA. The main premise underlying their research was that “the goal of providing course accommodations for students with disabilities is to modify materials or testing procedures in order to help students become as successful as they can be. This should be done in such a way that the rigor of the academic programme is not compromised or without giving the students an unfair advantage” (2001:8). They found that students with disabilities and their tutors generally negotiate teaching modifications and concessions with assignments and examinations including extra time for tests/assignments, extended due dates, scribes and readers for tests, oral tests/reports instead of written, and separate testing rooms. Across colleges, the use of adaptive equipment and technology in particular (e.g., spell-checkers, voice-input software, electronic reading machines, talking calculators, computer-screen readers, specialized keyboards, tape recorders) has become an important aspect of provision. Faculty level support often (particularly with larger institutions and/or those experiencing large increases in DSA recipients) involves identifying academic staff within faculties/departments with an explicit role – alongside other responsibilities – to support disabled students. A faculty focus helps to ensure subject/discipline issues are taken into account in supporting disabled students. Support at faculty/department level acts to implement individual action plans and operationalise inclusivity practices.

- **Pedagogical changes** including use of technology to ensure learning resources are inclusive, for example providing lecture notes in advance (although some institutions only do it for some students), lecture capture, making course materials available online (often via virtual learning environments (VLEs)) and ensuring these materials are accessible and in a variety of formats, making specialist software available to all students, accessibility-testing software and technology, and offering alternative assessment methods.
- **ICT:** - This includes expanding assistive technologies such as supporting the roll-out of lecture capture and increasing availability

of online resources. Assistive technology (general digital) has a key role in moving towards greater inclusivity and accessibility to help all students. Technology can increase accessibility, by which we mean providing material in a format the student can read or engage with using a screen reader. It can also aid inclusivity which may also involve thinking about the content and examples used, as well as providing content in different forms e.g. text, video, online quizzes, discussion etc. The use of assistive technology (e.g., magnifiers, FM systems, electronic reading machines, specialized keyboards, spell checkers, and tape recorders) for students with disability is another support for children with disabilities. Example, The Head specifically stated “I remember that we had a case of a blind student. We borrowed a touch screen and a Braille machine from the School for the Blind. Of course if a type of technology equipment is needed we can borrow such equipment or rent it. We only had one blind student.”

Changes to design, development and procurement processes to embed inclusive learning into module and programme development and evaluation (over 90% have reviewed or plan to review provision) and to consider inclusion during procurement (e.g. the purchase of hardware, software or texts). The most common form of assistive technology is lecture capture, and the majority of institutions use audio or video recording of lectures (likelihood increases with the size of the provider) for at least some of their lectures – either focusing on specific courses or subjects, with certain academic staff opting in (i.e. tutor discretion), or with only certain buildings/rooms offering the facility. Most of those who do not currently have lecture capture plan to get it in the future (but this may require overcoming staff reluctance). Other common assistive technologies (available in at least two thirds of institutions) are: mind-mapping software and document reading software which tends to be offered to all students, and also speech recognition software which tends to be available to disabled students. Less commonly available software (used in less than one third of institutions) includes note-taking and recording (generally for disabled students only) and also document conversion for all students. Some institutions in UK have staff dedicated to developing and promoting assistive

technologies. Another common step towards ensuring learning resources are inclusive includes staff training and induction. This is recognised as important for providing staff with information, guidance and support about making resources accessible (e.g. using heading style sheet, adding an alt text to images) or encouraging inclusive pedagogical practices.

- **Assignments/Examinations:** - Typically, the examinations modifications offered include extra time and a choice to take both oral and written examinations. Example:-Regarding students with dyslexia, the Heads in seven higher education institutions stated that extra time for assignment was provided on a regular basis, and alternative ways of presentation, e.g., oral rather than written, were allowed in accordance with the Pancyprrian Association of Dyslexia. Moreover, a teacher specifically stated that “these concessions are based on each student’s needs. There was a case in our college of a student with physical disabilities who writes slowly. This person was given extra time for assignments, or, alternatively, is allowed to finish an assignment at home, a study conducted by Kika Hadjikakou and Dimitra Hartas in 2007.” Brailled tests or tests with enlarged font were not available for students with visual impairment; furthermore, students with severe hearing impairment were not provided with sign interpretation or lip-reading of the questions nor were they allowed to use loop systems. Likewise, students with visual impairments were not allowed to use magnifiers during the exams. So, Brailled tests or tests with enlarged font, sign interpretation or lip-reading of the questions, magnifiers during the exams are the additional support services for children with special needs. The Heads in some colleges said that they tend to be flexible with students who are absent due to chronic medical problems. Majority of institutions provide alternative assessment methods for disabled students. Generally alternatives are not offered as standard, or available for all students, rather they are considered on a case by case basis. Most commonly they offer written assignments instead of examinations or presentations; or, the opposite, changing an essay or written assignment into a viva, presentation or oral assignment. Other alternatives include

presenting to a smaller group or the tutor alone, video presentation, additional time in examinations and providing course-work in place of an examination. Many offer guidance for staff on marking work.

- **Counseling Services:** - This includes responding to the rapid rise in students with mental health problems with increased counseling staff and mental health practitioners. At an individual level, the identification and provision for students with disabilities were hindered by students' lack of confidence in disclosing/discussing disability issues (Goode, 2007). There were several reasons to explain this. Students may not know that they were entitled to additional support; they may not perceive themselves as having 'special needs' or disabilities; or they may choose not to disclose disabilities because they believed they will be disadvantaged and stigmatized. Regarding the last reason, some students with disability felt a sense of stigma and shame, resorting in 'hiding' their needs to alleviate social pressure and the implications of being different. In order to support students achieve their potential the issue of compatibility between provision and students' needs is another problem. In nine higher education institutions, generic counseling services (i.e., academic, psychological support, career advice and campus orientation during the first days) were provided for all students. Counseling services mainly focused on career support and orientation by assisting students with writing their CVs, undertaking job-based training and contacting prospective employers at higher education level. Psychologists can also be employed to provide mental health advice and support. In addition to general information and guidelines given to all students, some counseling centers published handouts on teaching practices with regard to dyslexia are provided in some colleges of UK. Thus, in this context, students with disabilities were offered the same support as their non-disabled peers.

In some colleges, counselors were also responsible for providing campus orientation services intended for all students. However, the orientation services were not tailored to the needs of students with disabilities in particular; instead, they focused on introductory lectures, student social life and general issues regarding students' health and

wellbeing. Across colleges, tutors and Heads stressed that students with disability receive help during the registration process in terms of filling registration forms and explaining regulations. For this support to be available however, students with disabilities need to be pro-active and inform the college about their needs before they register for the course. Institutions offer counselling services which are available to all students, and are in high demand (HEFCE, 2015a). A related inclusive agenda of wellbeing activities is also aimed at all students (although wellbeing is still strongly associated with central services rather than a feature of an inclusive curriculum). The majority of providers promote wellbeing activities with their students, often through regular events, workshops and courses focused on particular issues (e.g. stress management), wellbeing weeks and days, and presence on social media. These can tie in with wider national campaigns such as Time to Change. Less common is institutional involvement of their students' union or the use of drop-ins or telephone/online activities.

- **Monitoring and feedback** have also been important aspects of good practice. Setting up committees with representatives from different sectors of educational institutions, e.g., senior management, academic departments, accommodation, welfare, library or computing facilities, to look at disability issues and provision. Awareness-raising campaigns (and services) to promote well-being, the availability of services offered by the library, or learning developers offering general and more focused academic support.

B. Organisational Level: - This includes – an entirely in-house model of support (directly employing their staff) and this is felt to allow students to be fully integrated into the institution, greater flexibility to respond to students' needs, innovative practice, better quality assurance, consistency of practice, and continuity of provision. The majority of disability services are co-located with other student services – creating a one-stop-shop with the ability to triage and signpost to support and provide joined-up services. Day-to-day responsibility for disability services tends to be held by a disability services manager, head of student services or head of wellbeing. These individuals manage their team (including support workers,

disability advisers and officers, tutors, and administrative staff) and internal non-medical helper (NMH) support workers and ensure understanding and compliance with legislation, but also tend to be practitioners, advising staff and students. In-house support for disabled students tends to be provided through a combination of central support (often via a number of discrete/targeted/specialised teams which focus on the student experience) and faculty (or even school or department) level services focusing on academic concerns. In some institutions, a third level of service is provided by individuals with a more personalised pastoral role. However, institutions recognise that supporting disabled students is an organisation-wide responsibility, and staff at all levels and in all roles have an important part to play. Central support can include specialist disability advisers, often with specialisms in mental health and specific learning difficulties (less commonly in visual or hearing impairments), and advisers specialising in academic/literacy/library support or use of technology. Central services lead projects and targeted initiatives, record and monitor provision (delivery and takeup), and ensure promotion of the services available (through a variety of channels and media). Centrally provided services also work closely with academic departments, providing consultancy about disability issues, advice on making reasonable adjustments, guidance on inclusive learning practices and providing training. This collaborative exchange of student service expertise increases the likelihood of academic colleagues being aware of the needs of specific students in relation to learning environments/delivery and in assessments (e.g. how to adapt teaching, learning and assessment), and that students access all relevant information and learning materials in an accessible format.

Under the UK Disability and Discrimination Act, there is a responsibility for higher education institutions and other organisations to make anticipatory adjustments. This means that institutions should consider what adjustments future students or applicants with disability may need, and make them in advance. In this study, Heads and tutors stressed the need for an organizational culture and ethos that is pro-active and anticipatory of students' learning needs, rather than assuming a passive role by relying on

outside agencies and governmental bodies to provide them with a blueprint for provision. To this end, a couple of Heads only were active in organizing in-service seminars, publishing materials on dyslexia and other areas of need and collaborating with other departments, e.g., Guidance Centres, Centre of Academic Issues, and outside agencies (e.g., Cypriot Dyslexia Association) to raise awareness about disability and train teachers and administrative staff to respond effectively, a study conducted by Kika Hadjidakou and Dimitra Hartas in 2007 at Cyprus Ministry of Education and Culture, Cyprus and Institute of Education, University of Warwick, UK.” Moreover, although all colleges had a written policy emphasizing non-discriminatory practice, the knowledge about the legislative framework for SEN and awareness about students' areas of need were limited. Support services such as counseling, campus orientation and ICT facilities were available to all students including those with disabilities, pointing to limited differentiation. In almost all colleges, teaching modification and curriculum adjustment were viewed as being incompatible with the academic programmes regulated by the Ministry for Education and Culture. Corlett (2001) pointed out that, for an organization, being non-discriminatory involves changes in the policy and practice by engaging in differentiation and adjustments. Specifically, she stated that "the concept of adjustment will also require educators to look at some fundamental issues regarding their academic and subject disciplines and the methods used to teach and access them" (p. 6). With this in mind, higher education institutions in Cyprus should re-examine the academic programmes available and make their requirements non-discriminatory and compatible with the needs of students with disability. Under the UK Disability and Discrimination Act, there is a responsibility for higher education institutions and other organisations to make anticipatory adjustments. This means that institutions should consider what adjustments future students or applicants with disability may need, and make them in advance. In this study, Heads and tutors stressed the need for an organizational culture and ethos that is proactive and anticipatory of students' learning needs, rather than assuming a passive role by relying on outside agencies and governmental bodies to provide them with a blueprint for provision. To this end, a couple of Heads only were active in organizing in-service seminars, publishing materials on dyslexia and other areas of need and collaborating with other departments,

e.g., Guidance Centre, Centre of Academic Issues, and outside agencies (e.g., Cypriot Dyslexia Association) to raise awareness about disability and train teachers and administration staff to respond effectively. Changes to administrative processes, for instance monitoring attendance to identify potential well-being issues (generally with academic staff flagging low attendance to student services rather than having an automated system which notifies student services).

- C. Ideological Level:** - Provision is effective when it has the potential to ascertain disabled students' rights. Undoubtedly, students with disabilities present numerous challenges to educators who try to reconcile their needs with the requirements of higher education degrees. There are tensions between notions of equity, opportunity, fairness and high standards to be resolved. For students with disabilities, opportunity, access and entitlement play a significant role in that academic achievement is shaped by support and encouragement, equal opportunity, resources and expertise, as well as staff's awareness of students' needs. Widening participation and offering support for students with disabilities are the cornerstones of inclusive education. Lancaster and his colleagues (2001) listed diversity, quality of life, reaching out to the community and ideological and legal obligations as the main incentives for recruiting students with disabilities in higher education. In this study, a number of Heads stated that they did not actively recruit students with disabilities although they "don't turn them away when they are registered". In certain subjects, such as engineering, it was said that, for safety reasons, students with disabilities were being discouraged from registering, raising issues regarding equality of opportunity and participation of students with disability in education. In addition, almost all staff interviewed stressed the importance of raising awareness about students' needs. One Head in particular commented "we need specialists in dyslexia and deafness. The administrative personnel and the teachers need to get information about each problem and about what needs to be done. Awareness is really important. If we are aware of the students' special problems we can then find proper solutions." Interesting issues were raised with regard to differentiation. Some Heads

expressed the view that students should modify their needs to access the curriculum rather than the institution adapting its practices to remove obstacles to learning. Specifically, it was said that “there is a general rule in our college that we accept all students, as long as their problem does not block their academic attendance. We treat everybody in the same way.” Moreover, the findings from this study suggested that institutions responded to the needs of students with disabilities at an individual basis, making provision reactive rather than pro-active. All ten higher education institutions in this study had institutional policies with regard to students with disabilities. In this context, sameness does not imply equality in the treatment of students with disabilities. Across colleges, the dominant view was that “treating everybody the same” alleviates potential concerns about students with disabilities having an unfair advantage. These views on sameness suggest that removing obstacles to learning can be achieved through assimilation and not through adaptation, going against the very notion of inclusion. Also, the notion of an ‘unfair advantage’ was not justified in that the findings suggested that the students did not perceive the support provided to their fellow students with disabilities as being unfair, especially in a context where students with disabilities earned their degree on the same terms and conditions as did students without disabilities. However, it is imperative they move from a reactive and ad-hoc response to the needs of students with disabilities, towards a more proactive and systematic approach backed up by policy where provision for students with disability is a part of a standard academic practice (Hall and Tinklin, 1998; Goode, 2007). Institutions highlight the importance of bringing about cultural change and getting staff buy-in as they move to greater inclusion. Shifting the culture is about helping/enabling all staff to:

1. think more broadly and to understand and embed inclusive practice;
2. overcome individual (often subject and course-related) fears and reluctance;
3. think beyond making reasonable adjustments for individual students and think about accessibility for all;

4. recognise that inclusive practice is not just a technical issue that is dealt with by someone else but can and should be supported by all; and
5. recognise that changes can be small yet still make a big difference.

Implications for Policy and Practice: - Institutions are expected to do what is 'reasonable', and what is 'reasonable' depends on the circumstances of the individual cases, the financial and other resources of the institution and the practicality and effectiveness of the adjustments required (Shevlin, Kenny & McNeela, 2004). Issues, such as academic standards, health and safety and the wellbeing of other students are also important. Making adjustments that are practical and compatible with the nature and requirements of academic disciplines, uncompromising of other students' needs, and capable of abiding by the principles of inclusion and social justice is a balancing act. Within the Cypriot context, there is a need to rethink and refine policy and practice regarding disability at an institution level, by clarifying issues of entry and admissions; identifying barriers to access and remove them through an equal opportunities legislation; informing applicants about facilities, resources and services; engaging in teaching modification; raising awareness about disability among staff and students; and, last but not least, promoting staff training and professional development.

Moreover, higher education institutions should become pro-active with regard to the identification and assessment of students with disabilities by taking the initiative to conduct assessments within the institution and draw links between assessment and provision that are relevant and practical. This may be achieved by raising issues of fairness in the assessment procedures and promoting equal opportunities for students with disability to demonstrate ability and achieve academically. Finally, the provision of ICT, counseling and career services should be differentiated for students with disabilities, in that providing generic services is less likely to remove obstacles to learning. Higher education institutions are well placed to identify and access appropriate technology to support students with a wide range of difficulties as well as provide training and technical support. Likewise, regarding counseling and career orientation, students with disabilities have different needs and requirements compared to those of

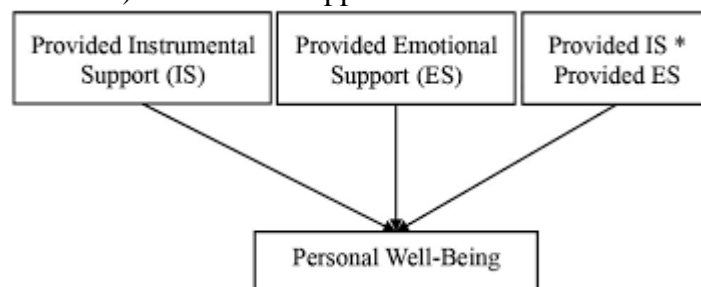
their non-disabled peers. Careers services in particular should take into account the needs of students with disabilities by training career advisors to gain knowledge about policies on disability, equal opportunities and employment. Effective provision for students with disabilities depends to a large extent on an accurate identification of their needs, consistency in availability and access of services and expertise, equality in accessing resources and the existence of an inclusive ethos and culture in higher education institutions (e.g., Vogel, Leyser, Wyland and Brulle, 1999). It also depends upon institutions' capacity and readiness to anticipate students' needs and engage in responsive and inclusive pedagogy.

Provision for Social Support to Children with Diverse Needs in Mainstream Classroom

According to Thompson (1995), “social support consists of social relationships that provide (or can potentially provide) material and interpersonal resources that are of value to the recipient, such as counselling, access to information and services, sharing of tasks and responsibilities, and skill acquisition.” (p.43). Although all humans commonly need help from others to live, the exact types, extent, and degrees of support needs vary from person to person. The support needs of a healthy, independent adult would be naturally different from the needs of a newborn baby or a frail older adult. How about the support needs of the families that have children with disabilities?

The social supports can be divided into the following three categories:

- 1) Instrumental support
- 2) Informational support
- 3) Emotional support



- Children with disabilities and their families can use instrumental support or various types of tangible aid, such as childcare, provision of transportation to therapy sessions or money to pay these services.
- Families may be helped by informational support, or the provision of useful information about disabilities, available services, solutions to problems, or information about the simple fact that there are people out there who are experiencing similar issues. In the era of internet, and digital media, customized informational support can be provided on websites, blogs, pod casts, and DVDs. Yet, some families may feel isolated because their unique needs are not understood.
- Under such circumstances, emotional support from those who have similar experiences or from a disability-specific support group could give families reassurance and a sense of acceptance. Emotional support also includes unconditional love from families, friends and spiritual figures, and positive social interaction with them to have a good relaxed time together. Although the seemingly different types of social support overlap considerably, it may be useful to know the names of the types in order to identify the support needs of each family.

A question may be raised as to how unique the support needs for children with disabilities and their families are with respect to the children's health care, education, and future career development.

Are the parents of children with disabilities often more stressed out than the other parents?

Among the parents of children with developmental disabilities, why do some families seem to get on in life better than others?

Theoretical frameworks could provide useful perspectives in understanding these complex issues.

Buffers of Psychological Stress: Social Support, Coping, and Hardiness

Children with developmental disabilities and their families may be struggling with unique issues surrounding disabilities. The children may have difficulties with daily routines at home and school, lower self-esteem

of the disability domain, such as physical, cognitive, or behavioural domain, and social isolation (Miyahara & Cratty, 2004; Miyahara & Piek, 2006). The parents may be concerned about the uncertain developmental trajectories of their children, the differences from the other families, and social isolation (Weiss, 2002). As a consequence, the parents are prone to stress response syndrome, including fatigue, anxiety, depression, and somatic complaints (e.g., Boyd, 2002). Such potentially harmful effects of psychological stress can be buffered by social support (Thoits, 1986), coping strategies (Cohen & Lazarus, 1979) and psychological hardiness (Kobasa, 1979). Social support can provide the children and their families with a sense of belonging, reassurance, and access to resources, all of which may directly solve problems or modify the perceptions of stressful events (Thoits, 1986). Coping is a term used if the children and the families make efforts to adaptively change the ways they think and behave in order to manage taxing and overwhelming demands (Lazarus & Folkman, 1984). Hardiness is the personality traits of those who 1) make commitment to work through demands without avoiding them; 2) take control of and responsibility for stressful situations without leaving the problems to or blaming others; 3) accept challenges and life changes as the norm rather than exception and also as opportunities for personal growth (Kobasa, 1979). Thus, psychological stress can be reduced by social relationships, adapting thoughts and behaviours, and personal dispositions.

It should be noted that social support is, by no means, a panacea for all stressful events that children with developmental disabilities and their families experience. For example, Kitagawa, Nanakita, and Imashioya (1995) found that highly-stressed mothers of children with disabilities often perceived helpful offers of support as burdensome. People under chronic stress may tend to conserve their resources, including those resources which are required to receive social support, and there is a possibility that people who offer social support cause stress at the same time (Armstrong, Birnie Lefcovitch, & Ungar, 2005). By accepting support, some people may feel humiliated especially if they are unable to reciprocate, and others may think they could be stigmatized if the acceptance of support implies social categorisation and labeling. It is a challenge to understand how support might be offered without negative reactions from the recipients (Thompson, 1995).

The primary reason why we strive to find effective ways of providing social support for children with disabilities and their families is to enhance their quality of life or how well they feel their important needs, goals, and wishes are being satisfied (Crowley & Kazdin, 1998). They may have unique needs related to their children's developmental disabilities, but their goals and wishes may be as variable as those of non-disabled counterparts.

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Policies and Programmes on Inclusive Education: A Global View

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Introduction

Free and compulsory education to all children in the age group 6-14 years is the Constitutional commitment in India. In 1950, the aim was to achieve the goal of Universalisation of Elementary Education (UEE) within the next ten years i.e. by 1960. Subsequently, the target was revised a number of times. From 1950-60, all initiatives were focused on provision of schooling. Other components of UEE, such as universal enrolment and retention, gradually started receiving attention of planners, policy makers and implementers. At present the focus of all programmes relating to elementary education is to ensure the quality of education. Significant efforts have been made for the last sixty eight years to universalize elementary education. Substantial progress has been made in every sphere of elementary education. In 1950-51, there were about 210 thousand primary and 14 thousand upper primary schools. The number increased to 853 thousand and 577 thousand respectively in the year 2012-13. The ratio of primary to upper primary schools over the time has improved which is at present 2:06. More than 70.68 per cent of the total 1303 thousand schools have school buildings. The number of single-teacher primary schools also considerably declined to 11.79 per cent in 2012-13, and at elementary level it is 8.65 per cent.

The number of teachers both at the primary and upper primary levels of education over time has increased many folds. From a low of 624 thousand

in 1950-51 the number of elementary school teachers in 2011-12 has increased to 6687 thousand (NUEPA, 2013). The pupil-teacher ratio is at present 28:1 at the primary and 25:1 at the upper primary level of education. Despite the significant improvement in the number of teachers, the per centage of female teachers is still low i.e. 46.37 at elementary level of education. However, majority of teachers i.e. 78.58 per cent have been trained. Over a period of time, enrolment, both at the primary and upper primary levels of education, has increased significantly. From a low of 19 million in 1950-51, it has increased to about 137 million in 2011-12 at the primary and from 3 to 61.9 million at the upper primary level. At present, the gross enrolment ratio is 105.98 and 82.50 per cent respectively at the primary and upper primary level of education. The net enrolment ratio is 90.78 per cent and 64.24 per cent in primary and upper primary level respectively. The percentage of girls' enrolment to the total enrolment at the primary and upper primary level of education is about 48.36 and 48.77 per cent respectively. The percentage of children with special needs at primary level is 1.18 per cent and at upper primary level is 0.90 per cent. Despite improvement in the retention rates, the dropout rate is still high at 5.62 per cent and 2.65 per cent respectively. The transition from primary to upper primary level is as high as 86.74 per cent. However, the learner's achievement across the country remained unsatisfactory and far below than the expectations. The Government of India initiated a number of programmes and projects to attain the status of universal enrolment. Despite all these fervent efforts and achievements, the goal of universal elementary education remains elusive.

Inclusive Education in Educational Policies

Constitutional Provisions in India

Inclusive education is written in India's constitution as a fundamental right for all citizens. It is important to differentiate between constitutional rights and state policies and their legal implications. Rights are listed in the constitution that is absolute and completely enforceable. State policies are completely subjective from state to state.

Part IX, **Article 45** of the Constitution of India states "The state shall endeavour to provide, within a period of ten years from the commencement of this constitution, for free and compulsory Education for All children

until they attain the age of fourteen years. The significance of **Article 45** was reaffirmed in 1993 with the Supreme Court's Unnikrishnan judgment, also known as the case "Unnikrishnan vs. the state of Andhra Pradesh". In this case, the court ruled that **Article 45** must be read in conjunction with **Article 21** of the constitution, which states that "*No person shall be deprived of his life or personal liberty except according to procedure established by law*". By requiring these two articles to be read in conjunction, elementary education is now considered imperative for life and personal liberty in India. A clause was added to India's constitution to this affect; however, it was not added until December 2002. The 86th Amendment to the constitution, section 21A reads "*The State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine*". The 1960s marked an important change in how special education was organized and funded in India. The Ministry of Education was split, and a new branch called the Ministry of Social Welfare was created. The Ministry of Social Welfare was given the responsibility for the "weak and vulnerable" sections of society. They largely focused on rehabilitation, and not as much on education. Instead of supporting the current education system, the Ministry of Social Welfare began giving out grants to non-profit organization that provided education for children with disabilities, inadvertently preventing inclusion of these children into the public or mainstream sector.

International Declarations and Guidelines on Inclusive Education

Number of initiatives have been taken at international level for providing quality education to all in the context of universalisation of elementary education for children of 6-14 years of age. Some of the important declarations are as follows:

The Universal Declaration of Human Rights in United Nations, 1948

In 1948, the universal Declaration of Human Rights was adopted by United Nations General Assembly vide resolution No. 217 A on Dec. 10, 1948. Some of the articles such as Article 1, 2, 22, and 25 are relevant to the need of Person With Disabilities (PWD).

Declaration on the Rights of Mentally Retarded Persons, 1971

This is the first step towards promoting integration of the differently abled in normal life. The General Assembly of United Nations declared the

Rights of the Mentally Retarded Persons vide its resolution no. 2865 (XXVI) on December 10th, 1971. It provides a framework for protecting rights of the mentally retarded person to the degree feasible, the same rights as other human beings if possible. Mentally retarded person should live with their families or foster parents and should participate in various aspects of community life.

The Universal Declaration on the Rights of the Disabled Persons, 1975

It is one of the most significant commitments on the protection of human rights of differently abled person. This declaration was adopted on 9th December 1975 vide resolution No. 3447 (xxx) in the UN General Assembly. It reiterated the right of the persons with disability to education, medical services, and placement services, to economic and social security, to employment, to live with their families, to participate in social and creative events, to be protected against all exploitations, abuses or dreading behaviours and to avail themselves of legal aids.

The United Nation declared 1981 as “The International Year of Disabled Persons”

Full participation with equality was the theme of this programme. The World Declaration on Education for All and its Framework for Action to meet basic learning needs (1990) states that the learning needs of the disabled demand special attention and steps need to be taken to provide equal access to education to every category of disabled persons as an integral part of the education system.

World Programme of Action Concerning Disabled Persons, 1982

This was formulated as a result of the International year of the Disabled by General Assembly in December 1982 vide Resolution No. 37/52. The World Programme of Action is an international strategy to enhance Disability, Prevention, Rehabilitation and equalization of opportunities, related to full participation of persons with disabilities in social life and national development. It adopted the human rights perspective and the underlying principles of treating person with disabilities within the context of normal community services.

The Economic and Social Commission for Asia and the Pacific (ESCAP), 1992

The Economic and Social Commission for Asia and the Pacific (ESCAP)

1992 declared 1993-2002 as the Asian and Pacific decade for disabled persons. The commission stated that the opportunity for all participants and equalities of people with disabilities, especially in the field of rehabilitation, education, and employment, continues to be far less than those of their non-disabled persons.

Vienna Declaration, 1993

In 1993, the World Conference on Human Rights was held at Vienna, Austria, which was attended by 7000 participants from 171 states and numerous national, international governments and non-government organisations. It states that all human rights and fundamental freedoms are universal and thus unreservedly include Persons with Disabilities. Every person is born equal and has the same rights to life and welfare, education and work, living independently and active participation in all aspects of society. Any direct discrimination or other negative discriminating treatment of a disabled person is, therefore, a violation of his or her rights. The World Conference on Human Rights calls on Governments, where necessary, to adopt or adjust legislation to assure access to these and other rights for disabled persons.

The Salamanca Statements and Framework for Action on Special Needs Education, 1994

The World Conference was jointly organized by the Government of Spain and UNESCO in Salamanca, Spain in 1994. The major thrust of the conference was inclusive education. Five regional seminars were held prior to this, which prepared basic ground for this conference. Representatives of 92 government and 25 international organisations participated in this World Conference on Special Needs Education. The Framework stems from the messages of the **Jomtien World Declaration on Education for All (1990) was reaffirmed in the Dakar Framework of Action (2000)**. The statement being with a commitment to Education for All. It was highlighted by the following statements “School should accommodate all children regardless of their physical, intellectual, emotional, social, linguistic and other conditions”. The statement refers to regular schools with inclusive orientation are the most effective means of combating discriminatory attitudes, building on inclusive society and achieving Education for All. Moreover, they provide an effective education to the majority of children

and improve the efficiency and ultimately the cost-effectiveness of the entire education system.” The World Conference went on to call upon all governments to:

- i) give the “highest policy and budgetary priority” to improve education services, so that all children could be included regardless of differences and difficulties.
- ii) adopt as a matter of law or policy the principles of inclusive education, enrolling all children in regular schools, unless there are compelling reasons for doing otherwise.
- iii) develop demonstration projects and encourage exchanges with countries having experience with inclusive schools.
- iv) ensure that organisations of disabled people, along with parents and community bodies, are involved in planning and decision-making.
- v) put greater effort into pre-school strategies as well as vocational aspects of inclusive education.
- vi) ensure that both initial and in-service teacher address the provision of inclusive education.

The Salamanca Framework for Action provides the best cross-cultural definition of Inclusive Education.

The Salamanca Statements, 1994

The 1994 Salamanca Statement recognises education, a fundamental right of all children, including children with disabilities. It calls for education to be inclusive and designed to take into account the diversity of all children. It states as an underlying belief that: regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving Education for All; moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system.

The Statement also calls on the international community to endorse the approach of inclusive schooling and to support the development of special needs education as an integral part of all education programmes. In particular it calls on UNESCO, UNICEF, UNDP and the World Bank for this endorsement.

It asks for the United Nations and its specialised agencies to 'strengthen their inputs for technical co-operation' and improve their networking for more efficient support to integrated special needs provision. Non-governmental organisations are asked to strengthen their collaboration with official national bodies and become more involved in all aspects of inclusive education.

International Norms and Standards relating to Disability (1998)

The expert group meeting on international norms and standards relating to disability (1998) promulgated detailed specific strategies for implementation at national and international levels. At the national level, several of these could have a significant impact on Inclusive Education. One specific strategy, 'inclusion, representation and participation' states that: "Fundamental to the achievement of the goal of an inclusive society and the development of strategies that reflect the rights and needs of persons with disabilities is the question of process. Persons with disabilities must be full participants in the bodies and procedures by which both general laws and policies, as well as disability-specific ones, are formulated. This is essential for ensuring the responsiveness, legitimacy and effectiveness of such laws and policies, as well as reflecting the rights of persons with disabilities to full participation in the life of the community, including all forms of public decision-making." With respect to projects funded by multilateral assistance and by international funding institutions such as the World Bank, the Expert Group recommends the following:

- i) encourage states to adopt special policies and legislation that promote the full inclusion of persons with disabilities in all aspects of social, cultural and economic life;
- ii) develop and promote minimum standards relating to accessibility and related disability rights issues in connection with the projects they sponsor and fund;
- iii) the United Nations should commission an in-depth study of the effects of globalisation and privatisation on persons with disabilities in various regions of the world;
- iv) encourage and help, facilitate the development of working relationships between disability community advocate groups in different countries, utilizing the networks and partnerships they

have worldwide, thereby encouraging the development of transnational strategies to respond to the problems identified;

- v) disability advocacy groups in countries/regions affected by the operation of trans-national groups should explore such strategies as the filing of litigation against trans-national corporations operating in their countries to enforce the extraterritoriality provisions of disability law in those corporations' home countries.

Recommendations Published by Disability Awareness in Action

- i) Listen to children and empower them.
- ii) Support parents to promote disabled children's rights.
- iii) Promote Inclusive Education and Social Inclusion.
- iv) Challenge prejudice and promote positive attitudes toward disability.
- v) Respect cultural rights.
- vi) Implement structures and policies to respect the rights of disabled children.

Recommendations of the UN-Committee on Rights of the Child

- i) Adequate monitoring and data collection of empirical evidence to challenge the argument of cost-effectiveness used to marginalize disabled children (including cost evaluations of exclusion and lost opportunities);
- ii) Promote the UN Standard Rules as relevant to implementing UNCRC;
- iii) Ensure Inclusive Education is included on the agendas of UNESCO, UNICEF and other relevant agencies meetings, conferences, etc., as an integral part of education debates;
- iv) Produce training materials to promote Inclusive Education (particularly UNICEF);
- v) One significant policy that many proposals have in common is the need to include persons with disabilities and special education needs as full participants in the bodies and procedures by which both laws and policies, and provision of services are formulated, implemented and evaluated. This policy is seen not only as a political and moral imperative, but a cost- effective one as well.

The Dakar Framework for Action, 2000

In Dakar Framework for Action (2000) of the world educators forum resolved to achieve “Education for All” by 2015, to achieve this historical goal for the children with disabilities; all states will be requested to develop or strengthen existing national plan of action. These plans must be transparent, democratic and involving various stakeholders like: community leaders, parents, teachers, civil society and NGOs etc.

Inclusion International - Policy on Inclusive Education, 2006

The UN Convention on the Rights of PWD promotes the goal of full inclusion and guarantees the right of every child to attend the regular school with the supports they require. Inclusive education requires that schools are supported to welcome all students with adaptations made for all special needs.

Inclusion International believes that effective inclusive education requires the regular school system to respect their principles of:

- i) Non-discrimination
- ii) Accessibility
- iii) Accommodation to special needs through flexible and alternative approaches to learning and teaching
- iv) Participation
- v) Support for meeting disability related needs.
- vi) Relevance to preparation for the labour market.

Inclusive Education in Indian Context

Indian democracy believes in equality of rights of all citizens by law of the land. It provides safe constitutional and legal mechanism for enforcement of such laws for the protection of rights and also for the equalization of opportunities. UEE is one of the top priority programmes of the Government of India. In India the number of persons who are differently abled are very large. It is essential to meet the needs of such a large target group which not only requires the resources but also change the attitude of our society. Constitutional provisions and legislations play an important role in increasing access of Persons With Disabilities to various spheres of life to reduce discrimination. The fundamental rights and the directive principles from the core of our constitution reflect the basic principles of

Universal Declaration of Human Rights. Children with special needs of our society should be guaranteed equal opportunities through the elimination of all socially determined barriers like physical, financial, social or psychological.

The constitution of India stands a guarantor of liberty, equality of opportunity and of social justice for all citizens of India without any classification or discrimination. Since independence, India has been making efforts through constitutional directives and appointment of committees, and commissions so as to have National policies and programmes to make good quality elementary education available to all. In its preamble it guarantees to all Indian citizens; justice, liberty of thought, expression, belief, faith and worship, equality of status and opportunity for the individual. The Constitution of India also embodies certain fundamental rights. Such right are meant for everybody irrespective of caste, community, religion and disadvantages such as disabilities. Education for All and All for Education is the motto of our constitution.

The Parliament has power to make any law for the whole or any part of the territory of India for implanting any treaty, agreement or convention with any other country or countries or any decision made at any international conference, association or other body. Considering the unique feature of Indian constitution, many laws and policies have been enforced for education, rehabilitations and equalizations of opportunities for person with disability. GOI constituted many commissions and committee for the better implementation of policy in the country. Some of the important reports of the commissions for facilitating and promoting education of children with special needs are as follows:

Education Commissions (1964-66)

Education Commission (1964-66) suggests that the education of handicapped children has to be organized not merely on humanitarian grounds, but also an aspect of utility. The commission viewed that in spite of constitutional obligation on universal compulsory Education for All, including children with disabilities very little had been done in this regard. The commission emphasised that the education of children with disability should be “an inseparable part of the general education system”. The commission also specifically emphasized the importance of integrated education in meeting this target as it is cost effective and useful in

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developing mutual understanding between Children with and without disabilities.

National Policy on Education, 1968

Government of India formulated National Policy on Education for All Government schools and articulated a need to integrate children with disabilities in regular schools.

Integrated Education for Disabled Children (IEDC), 1974

Consequent on the success of international experiments in placing children with disabilities in regular schools, the Planning Commission, in 1971, included in its plan a programme for integrated education. The Ministry of Social Justice and Empowerment, Government of India initiated the Integrated Education for Disabled Children (IEDC) programme in 1974 to promote the integration of students with mild and moderate disabilities in regular schools. The Ministry of Welfare created the Integrated Education of Disabled Children Scheme (IEDC) in 1974. The programme provided children with disabilities “financial support for books, school uniforms, transportation, special equipments and aids,” with the intention of using these aids to include children in mainstream classrooms. However, the Government of India realized that providing structural changes to the classroom, such as adapted equipments, would not be enough to integrate children with disabilities into the classroom. Although it was encouraged and partly funded by UNICEF, fifty per cent of the funding was supposed to go through the state governments. The responsibility was transferred to the Department of Education in 1992. Despite the fact that this scheme was supposed to be nationwide, it was implemented in only 10 out of 29 of the states in India.

The aim of IEDC is:

- i) to provide educational opportunities to disabled children in regular schools
- ii) to facilitate their retention in the school system; and
- iii) to place children from special schools in common schools.

The scope of the scheme includes pre-school training, counseling for the parents, and special training in skills for all kinds of disabilities. The scheme provides facilities in the form of books, stationery, uniforms and

allowances for transport, reader escort, etc.

In spite of all these facilities, IEDC met with limited success. Only a little more than 10 million disabled children have been covered. However, it was successful in creating awareness on the importance of integrating in the mainstream of education a fact noted in the NPE-1986.

National Policy on Education (NPE), 1986

The National Policy on Education was adopted by Indian Parliament in 1986. The policy emphasizes the removal of disparities and ensuring equalization of educational opportunities under its para 'Education of the Disabled'. The measures may be taken in this regard are:

- i) Wherever feasible, the education of children with locomotor handicaps and other mild handicaps will be common with that of others.
- ii) Special schools with hostel facilities will be provided, as far as possible at district headquarters for the several handicapped children.
- iii) Adequate arrangements will be made to give vocational training to the disabled.
- iv) Teacher's training programmes will be reoriented, in particular for the teachers of primary classes, to deal with the special difficulties of the handicapped children.
- v) Voluntary efforts for the education of the disabled will be encouraged in every possible manner.

Project Integrated Education for the Disabled (PIED), 1987

The next step was another experiment on integrated education in India. There was a shift in strategy; from a school based approach to a composite area approach and in 1987, the Ministry of Human Resource Development (MHRD), Government of India in association with UNICEF and NCERT undertook another experiment, namely, Project Integrated Education for the Disabled (PIED). In this approach, a cluster instead of the individual school approaches was emphasized. A cluster, usually, a block of population is taken as the project area. All the schools in the area are expected to enroll children with disabilities. Training programmes were also given to the teachers. This project was implemented in one administrative block each in

Madhya Pradesh, Maharashtra, Nagaland, Odisha, Rajasthan, Tamil Nadu , Haryana, Mizoram, Delhi Municipal Corporation and Baroda Municipal Corporation. The approach is an improvement over the special schools in many ways and it appears to be the only way towards universalising education of the disabled children. It is more cost effective and easier to organize, since existing school infrastructure is to be made use of.

Under PIED, there has been a significant increase in the number of not only mildly disabled, but also severely disabled children, with the number of orthopedically handicapped children for out stripping other disabled children. All these perform par with non-disabled children; in fact their retention rate is higher than that of nondisabled children and absenteeism is low. PIED also had a positive impact on the attitudes of teachers, the heads of the schools, as well as parents and the community in general. The interaction between the disabled and the non-disabled children was good.

Rehabilitation Council of India (RCI) Act, 1992

The Government of India set up Rehabilitation Council, as a registered society under the Societies Registration Act-1860. Thereafter, this was converted to a statutory body under the Rehabilitation Council of India Act, 1992. The RCI is a statutory body under MOSJ and E set up with twin responsibilities of standardizing and regulating the training of personnel and professionals in the field of rehabilitation and special education. The RCI Act was subsequently amended in 2000, to establish a statutory mechanism for monitoring and standardizing courses for the training of professionals required in the field of special education and rehabilitation of persons with disability. Training of special educators and resource teachers that can offer support services to children with special needs in regular schools is the responsibility of RCI.

This was passed in 1992 for the purpose of constituting the RCI, for regulating the training of rehabilitation professionals and for maintenance of a Central Rehabilitation Register (CRR). It was amended by RCI Amendment Act, 2000 to provide for monitoring the training of rehabilitation professionals and personnel, promoting research in rehabilitation and Special Education as additional objectives of the council.

- i) Recognition of qualification in the field of disability and

rehabilitation granted by institutions, universities etc. in India for rehabilitation professionals.

- ii) Recognition of qualifications granted by institutions outside India under reciprocal system.
- iii) Granting/withdrawal of recognition to institutions on the basis of approved standards.
- iv) Set minimum standards of education/curriculum.
- v) Maintenance of CRR for rehabilitation professionals/ personnel.

The RCI through its linkages with training institutions and universities has been undertaking standardisation of curriculum monitoring and evaluation, assessment of teacher training.

District Primary Education Programme (DPEP), 1994

The District Primary Education Programme (DPEP, 1994) is a centrally sponsored scheme which aims to reduce overall dropout of children enrolled in primary classes, to raise their level of achievement and to provide primary education to all children, including children with disabilities. Integrated Education for the Disabled was formally added in DPEP in 1997 as one of its components. Children with disabilities were enabled to have access to equal educational opportunities in mainstream classrooms by 1998. Many DPEP staff had conducted surveys, assessment camps and evolved strategies to provide resource support to those children with special needs who were enrolled in DPEP schools.

The IED guidelines in DPEP clearly mentions that, “DPEP will fund interventions for IED of primary school going children with mild to moderate disabilities”. Towards this end DPEP supported:

- i) community mobilization and early detection
- ii) in-service teacher training
- iii) provision of resource support
- iv) provision of educational aids and appliances
- v) removal of architectural barriers

Person with Disability (PWD) Act, 1995

The landmark legislation in the history of special education in India is the Persons With Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995. This Act was passed in December 1995 and

came into operation from February 7th, 1996. This Act establishes the responsibility on the appropriate governments and society to provide equal opportunities to persons with disabilities. It also prohibits discrimination on the ground of disability in every sphere. This comprehensive Act covers disabilities namely blindness, low vision, hearing impaired, locomotors impaired, mental illness. Chapter V (section 26) of the Act, which deals with education mentions that the appropriate Governments and the local authorities shall:

- i) ensure that every child with a disability has access to free education in an appropriate environment till he attains the age of 18 year.
- ii) endeavour to promote the integration of students with disabilities in the normal schools.
- iii) promote setting up of special schools in government and private sectors for those in need of special education, in such a manner that children with disabilities living in any part of the country have access to such schools.
- iv) endeavour to equip the special schools for children with disabilities with vocational training facilities.
- v) introduce scheme for non-formal education of children who have discontinued their education after class-V.
- vi) conduct special part-time class for functional literacy in the age group of 16 and above and provide each child, free of cost special books and equipments needed for his/her education in open schools and universities.
- vii) Government shall set up teachers training institutes to run special schools for children with disabilities by trained teachers.
- viii) Government shall present a comprehensive education scheme including transportation, barrier-free environment and grievance redressal forums.

National Trust Act, 1999 and Multiple Disability Act, 1999

This is for the welfare of persons with autism, cerebral palsy, mental retardation and multiple disabilities. This is a landmark legislation in the National Trust Act-1999. This act seeks to protect and promote the rights of persons who, within the disability sector, have been even more marginalized than others. Though the National Trust Act of 1999 does not

directly deal with the education of children with special needs, one of its trust areas is to promote programmes, which foster inclusions and independence by creating barrier-free environment, developing functional skills of the disabled and promoting self-help groups.

The objective of the National Trust Act is to empower families to retain their disabled members within the family and the community. The trust reaches out to disabled persons and their families and provides a range of relief and care services. Such services may be provided through institutional care or in the home in case the families and their disabled members are unable to access the services outside the house.

Sarva Shiksha Abhiyan (SSA), 2002

The SSA is an integrated flagship programme of Government of India to attain Universal Elementary Education, covering entire country in a mission mode. National Mission of Education for All was constituted on 3rd January 2001. Based on this, SSA has been launched in partnership with State Government and Local Self Government. SSA framework for implementation has been approved and circulated for action. The programme aims to provide compulsory free elementary Education for All children in the 6-14 age groups by 2010. The programme lays emphasis on bridging all gender and social category gaps at elementary education level. SSA is retaining all the programmes of District Primary Education Project (DPEP) after its closure in 2001.

SSA and Its Focus on Children with Special Needs (CWSN)

The priority areas of intervention for inclusive education under SSA are:

- i) survey for identification of CWSN
- ii) assessment of CWSN
- iii) providing assistive devices
- iv) networking with NGOs/Government schemes
- v) barrier free access
- vi) training of teachers on IE
- vii) appointment of resource teachers
- viii) curricula adaptation/textbooks/appropriate TLM

Here, it is noteworthy that of the priorities listed, majority of these focus on

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issues of access, and only the last three are associated with classroom based ‘processes’, which in essence are vital in determining the quality of the educational experience. Each of these priority areas has received varied degree of emphasis in planning, and in most cases there is significant lack of information to evaluate the worthiness and success of these initiatives. In the above, these eight priority areas under the broad sub-headings of ‘access’ (incorporating the first 5 points) and ‘processes’ (incorporating the last 3 areas) are clustered to critically examine the focus of government efforts as and where possible and reflect on the realities of practice. It is important to stress here that the lack of empirical evidences in the field makes it very difficult to make any strong claims; however, it is an opportunity to critically examine the underlying principles shaping these efforts. SSA ensures that every child with special needs, irrespective of the kind, category, and degree of disability, is provided meaningful quality education. Hence, SSA has adopted a zero rejection policy. This means that no child having special needs should be deprived of the right to education and taught in an environment, which is best suited to his/her learning needs. These include special schools, EGS, AIE or even home- based education.

There are three major parts of this programme that benefit people with disabilities. The first is an allocation of Rs.1200/- per annum per child with a disability. This money is supposed to go towards assistive devices, materials in alternative learning formats, and anything else that would assist children with a disability is being included in a mainstream classroom. However, the money is funded through the district or school level, and it is therefore, impossible to ensure that it will be spent on the child with a disability. Under SSA, assistive devices are technically a “right” and can be obtained outside of the Rs.1200/- allocation. However, in reality, SSA often provides these devices through collaboration with outside programmes, and many of these outside programmes have their own restrictions on how often a child with disability can obtain assistive devices, making these devices a privilege, rather than a right. For example, one of the programmes that SSA collaborated with, such as ADIP (a programme run by the Ministry of Social Justice and Empowerment), requires that children with disability have a doctor’s note, be in a particular economic bracket, and after the age of twelve can only receive one every three years. In addition, despite the stated importance of this population, less than 1% of the total money

allocated for SSA is being used for purposes of inclusion. The second part of SSA that is designed to include students with a disability is the policy that each district will formulate its own plan for children with disabilities; and the final part is that key institutions will be encouraged to collaborate to further support these students with disabilities. In addition, SSA has a “no rejection” policy, meaning that children between ages 6-14 cannot be turned away from schools for many reasons, including for having a disability. The “no rejection” policy is inclusive, but it directly contradicts the People with Disabilities Act, which calls for the most appropriate environment for the student.

One positive aspect of SSA is the Government of India and World Bank’s attempts to accurately monitor the effectiveness and results stemming from the programme. There are a wide variety of inclusive education indicators that are collected, from quarterly national IE workshops, use of NCERT monitoring tools on attendance and learning achievement of CWSN, joint review missions under SSA, and regular visits by the SSA technical support staff. Although these attempts are seemingly thorough and good intentioned, there are still discrepancies between SSA data on inclusive education and data from other agencies, such as DISE, NSSO and the Government of India census.

National Curriculum Framework (NCF) 2005 and Inclusive Education

The NCF 2005 provides the framework for making syllabi, textbook and teaching practices within the school education programmes in India. The NCF 2005 document draws its policy basis from Government reports on education: NPE 1986, NPE 1992 and Focus Group Discussion. One of the Position Paper is National Focus Group on Education of Children with Special Needs. The paper discusses the issues relating to the provisions, practices and curricular concerns for children with Special Educational Needs (SEN).

The major recommendations of the “Focus Group on Education of Children with Special Needs” are:

1. Making all early education and care programmes (0-6 Years) sensitive and responsive to the special need of children.
2. Making all schools inclusive by enforcing without exception to the

- neighbourhood school policy, removing physical barriers, removing barriers created by admission procedures
3. Building the capacity of teachers to function in an inclusive setting.
 4. Making the curriculum flexible and appropriate to accommodate the diversity of school children including those with disability in cognitive and non- cognitive areas.
 5. Making support services available in the form of technology-learning materials and specialists.
 6. Involving parents, family and community at all stages of education.
 7. Developing the pedagogical skills required in inclusive classrooms.
 8. Correlating the style of teaching to the learning styles of all children.
 9. Mobilise special schools as resource centres that provide support to inclusive schools.
 10. Developing partnerships with institutions of higher learning, governmental organisations, and NGOs to promote participation of children with disabilities in all aspects of education.
 11. Reducing the class size and making the class teacher responsible for all the children in the class.
 12. Developing perspective and skills in all administrators, including school principal for planning and executing programmes based on the philosophy of inclusion.
 13. Developing strengths and abilities of all children rather than highlighting limitations.
 14. Recognising diversity among learners, the medium of instruction should include sign language for children with hearing impairment and Braille for children with visual impairment. So also learning of sign language, Braille, finger Braille etc should be introduced for all children as an optional subject.
 15. Promoting self-reliance and enable children to acquire coping skills. Inculcating independent living skills, critical thinking, decision making, problem solving and articulating their concerns.
 16. Facilitating integrated knowledge in children the single teacher class system up to class V should be adopted.
 17. Inculcating respect for diversity and the concept of an inclusive society the teacher education programmes and the curriculum framework should incorporate human rights education.

18. Enabling each child to overcome perceived difficulties and reject the policy of failing.
19. Making sign language the medium of instruction for HI and Braille for VI in view of the diversities.
20. Introducing sign language, Braille and finger Braille as a 3rd language for all children.
21. Promoting the self-reliance and independent living capabilities among students with SEN, critical thinking, decision making, problem solving and other coping skills are to be inculcated.

National Policies for PWDs, 2006

This recognises that persons with disabilities are valuable human resources for the country and seek to create an environment that provides them equal opportunities, protection of their rights and fuller participation in society. The focus of the policy includes; i) prevention of disabilities; ii) rehabilitation measures; iii) women with disabilities; iv) children with disabilities; v) barrier free environment; vi) issuance of disability certificate; vii) social security; viii) promotion of NGO; ix) research; and x) sports recreation and cultural life.

A number of international and national initiatives have contributed significantly to the movement towards inclusive education in India.

The Right to Education Act, 2010

The Government of India through this historic Act made provision for giving children between the ages of 6-14 the right to a free, appropriate and compulsory education. In 2005, the Right to Education Act was drafted by the Ministry of Human Resource Development. This bill, framed through a “social justice and collective advocacy perspective” rather than through a framework of individual rights, is not disability- specific, but is inclusive of children with disabilities, with specific sections that address the educational rights of students with disabilities. The International Labour Organization says that when students with disabilities are not pinpointed as a separate group with separate needs in policies such as the Right to Education Act, that their specific needs are not addressed and met.

There are several other important clauses in this Act to ensure that students

with and without disabilities are guaranteed an education. The act specifically prohibits schools from charging any type of fee that, if not paid, would prevent children from completing their elementary education. Second, if a child turns six and is not in school, the child will be admitted into an age-appropriate classroom, and will not be admitted into a classroom based on their perceived level of education. The exception to this rule is if children have an intellectual disability they may be placed according to their perceived level of education, which is definitely an anti-inclusive stance. Third, if there is an area where children live that does not have a school, the government will be responsible for creating a school within that area within three years of the enactment of the Right to Education Act, or alternatively, to provide transportation or residential facilities to an adequate school out of the area. Last, both the state and central governments hold joint responsibility for carrying out the responsibilities outlined in the Right to Education Act. In addition to these four important clauses, the act also states that teachers cannot be hired on a contractual, month to month basis, allowing for them to be unqualified, but states that teachers must be hired as permanent staff, giving them full salary and benefits. The bill gave the government five years to implement this change, because of the staggering lack of qualified teachers in India.

The Right to Education Bill was drafted in 2005 and was passed in 2009 which came into full effect in 2010. The Supreme Court upheld the constitutional validity of the act on April 12, 2012. One of the main reasons for this was section 12 (1) (C) which allocated 25% of all seats in private schools to children from Dalit and marginalized sections of society.

The Draft National Education Policy, 2019

The Draft National Education Policy, 2019 highlights about Inclusive Education in the Chapter Equitable and Inclusive Education. The Policy targets to achieve an inclusive and equitable education system so that all children have equal opportunity to learn and thrive, and so that participation and learning outcomes are equalized across all genders and social categories by 2030. The Policy highlights that Inclusive Education will be an integral part of both pre-service and in-service teacher education. The Policy recommends that admission procedures and institutional

processes (including time tables and academic calendars) will reflect the diverse needs of learners and their communities.

The above discussion reveals that Inclusive Education has been highlighted at the National and International Levels by almost all the policies and reports of committees and commission on Education. Inclusive Education is the need of the present day society.

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Disability Law in India

Archana Gadekar

Introduction

A disability is an umbrella term, covering impairments, activity limitations, and participation restrictions. Impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Disability is thus not just a health problem. It is a complex phenomenon, reflecting the interaction between features of a person's body and features of the society in which he or she lives. Overcoming the difficulties faced by people with disabilities requires interventions to remove environmental and social barriers.

The way disability is defined and understood has also changed in the last decade. Disability was once assumed as a way to characterize a particular set of largely stable limitations. Now the World Health Organization (WHO) has moved toward a new international classification system, the International Classification of Functioning, Disability and Health (ICF 2001). It emphasizes functional status over diagnoses. The new system is not just about people with traditionally acknowledged disabilities diagnostically categorized but about all people. For the first time, the ICF also calls for the elimination of distinctions, explicitly or implicitly, between health conditions that are 'mental' or 'physical.'

The new ICF focuses on analyzing the relationship between capacity and performance. If capacity is greater than performance then that gap should be addressed through both removing barriers and identifying facilitators.

Reaching the Unreached: The State of Differently Abled Learners

The new WHO ICF specifically references Universal Design as a central concept that can serve to identify facilitators that can benefit all people.

The WHO defines disability as a contextual variable, dynamic over time and in relation to circumstances. One is more or less disabled based on the interaction between the person and the individual, institutional and social environments. The ICF also acknowledges that the prevalence of disability corresponds to social and economic status. The 2001 ICF provides a platform that supports Universal Design as an international priority for reducing the experience of disability and enhancing everyone's experience and performance.

According to the World Health Organisation, more than one billion people in the world currently experience disability, of which approximately 200 million experience considerable disability in functioning. Such people typically suffer from poor health, lower educational achievements, limited economic opportunities and higher rates of poverty. Hence, initiatives undertaken to improve the lives of people with disabilities, through progressive legislations and/or policies by different local governments and NGOs, are relevant to all corners of the world.

The persons with disabilities have been classified as a separate group. It is because of their disabilities, many times their educational and economic position is also affected. It is therefore necessary to look at this marginalized class with a human rights perspective. In fact, that is new paradigm shift that is observed at the International level. The persons with disabilities are no longer viewed as objects of sympathy. On the other hand today they have become the subject of specific rights. This major shift has taken place in the disability jurisprudence. The United Nations Conventions is a major milestone in the development of this new perspective. This perspective is also reflected in the various judgements of the Courts. In one case, where a disabled rape victim was recommended termination of pregnancy against her will, she approached the Courts, and the Courts took into account the wish of the disabled woman and allowed her to continue with her pregnancy. This can be said to be a new dimension in the development of the rights of the persons with disability.

Reaching the Unreached: The State of Differently Abled Learners

The Constitution of India guarantees equality, freedom, justice and dignity to all its citizens. In fact, Art. 41 states that the State shall make effective provision for mitigation of undeserved want including disablement.

Earlier, India had Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act 1995. However, after India became a signatory to the Convention on the Rights of Persons with Disabilities, there was a demand from the advocates of the rights of the persons with disability to make necessary amendments to the Indian legislation so that it is in line with the Convention. Finally, Rights of Persons with Disability Act, 2016 was brought which has replaced the earlier legislation and has added new categories of Specified Disability. Like, for the first time the Act recognizes, Speech and Language Disability and Specific Learning Disability, dwarfism, victims of acid attacks and many more. Now in all it recognizes 21 kinds of specified disability. The new legislation aims at non discrimination on the basis of disability and promises to ensure equality in opportunity to the persons with disability.

This paper shall discuss the historical background that led to the introduction of the first specific legislation for Persons with Disabilities. The focus of this paper is to discuss the provisions of the Rights of Persons with Disability Act, 2016

Historical Background

In 1992, India adopted the Proclamation on the Full Participation and Equality of People with Disabilities in the Asian and Pacific Region. As a signatory of this proclamation, India's Ministry of Law, Justice and Company Affairs proposed an act to safeguard the rights of Persons with Disabilities (PWD). On 1st January, 1996, the Government of India passed the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act 1995.

The Persons with Disabilities Act, 1995

The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 was enacted in 1995 to give effect to the Proclamation on the Full Participation and Equality of the People with Disability in the Asian & Pacific Region (Beijing, 1992). The aims and objectives of the Act are:

- To spell out the responsibility of the state towards the prevention of disabilities, protection of rights, provision of medical care, education, training, employment and rehabilitation of persons with disabilities;
- To create a barrier free environment for person with disabilities in the sharing of development benefits, vis-a-vis non disabled persons;
- To counteract any situation of abuse and exploitation of persons with disabilities; and
- To make special provision of the integration of persons with disabilities into the social mainstream.

Convention on the Rights of Persons with Disabilities

The Convention on the Rights of Persons with Disabilities is an international human rights treaty of the United Nations intended to protect the rights and dignity of persons with disabilities. It is the first comprehensive human rights treaty of the 21st century and is the first human rights convention to be open for signature by regional integration organizations. Parties to the Convention are required to promote, protect, and ensure the full enjoyment of human rights by persons with disabilities and ensure that they enjoy full equality under the law. The Convention has served as the major catalyst in the global movement from viewing persons with disabilities as objects of charity, medical treatment and social protection towards viewing them as full and equal members of society, with human rights.

The General Assembly adopted the first new human rights treaty of the twenty-first century today, marking the culmination of nearly two decades of work on protecting and promoting the rights of persons with disabilities and a major shift in the way the world treats its 650 million disabled people. The Convention follows decades of work by the United Nations to change attitudes and approaches to persons with disabilities. It takes to a new height the movement from viewing persons with disabilities as “objects” of charity, medical treatment and social protection towards viewing persons with disabilities as “subjects” with rights, who are capable of claiming those rights and making decisions for their lives based on their free, and informed consent as well as being active members of society.

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The Convention is intended as a human rights instrument with an explicit and social development dimension. It adopts a broad categorization of persons with disabilities and reaffirms that all persons with all types of disabilities must enjoy all human rights and fundamental freedoms. It clarifies and qualifies how all categories of rights apply to persons with disabilities and identifies areas where adaptations have to be made for persons with disabilities to effectively exercise their rights and areas where their rights have been violated, and where protection of rights must be reinforced.

There are eight guiding principles that underlie the Convention and each one of its specific articles:

1. Respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons
 2. Non-discrimination
 3. Full and effective participation and inclusion in society
 4. Respect for difference and acceptance of persons with disabilities as part of human diversity and humanity
 5. Equality of opportunity
 6. Accessibility
 7. Equality between men and women
 8. Respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities.
- The Convention on the Rights of Persons with Disabilities and its Optional Protocol (A/RES/61/106) was adopted on 13th December, 2006 at the United Nations Headquarters in New York, and was opened for signature on 30th March, 2007. There were 82 signatories to the Convention, 44 signatories to the Optional Protocol, and 1 ratification of the Convention. The Convention entered into force on 3rd May, 2008.

In October 2007, India ratified the United Nations Convention for Rights of Persons with Disability. Since then advocates of PWD rights have been calling for an amendment of the PWD Act so that it is more in tune with the provisions of the Convention.

The Rights of Persons with Disabilities Act, 2016

"The Rights of Persons with Disabilities Act, 2016" has replaced the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 PWD Act, 1995, which was enacted 21 years back.

Salient Features

- i. Disability has been defined based on an evolving and dynamic concept.
- ii. This types of disabilities have been increased from existing 7 to 21 and the Central Government will have the power to add more types of disabilities. The 21 disabilities are given below:-
 1. Blindness
 2. Low-vision
 3. Leprosy Cured persons
 4. Hearing Impairment (deaf and hard of hearing)
 5. Locomotor Disability
 6. Dwarfism
 7. Intellectual Disability
 8. Mental Illness
 9. Autism Spectrum Disorder
 10. Cerebral Palsy
 11. Muscular Dystrophy
 12. Chronic Neurological conditions
 13. Specific Learning Disabilities
 14. Multiple Sclerosis
 15. Speech and Language disability
 16. Thalassemia
 17. Hemophilia
 18. Sickle Cell disease
 19. Multiple Disabilities including deaf blindness
 20. Acid Attack victim
 21. Parkinson's disease
- iii. Speech and Language Disability and Specific Learning Disability have been added for the first time. Acid Attack Victims have been included. Dwarfism, muscular dystrophy have been indicated as separate class of specified disability. The New categories of disabilities also included three blood disorders, Thalassemia, Hemophilia and Sickle Cell disease.
- iv. In addition, the Government has been authorized to notify any other category of specified disability.

- v. Responsibility has been cast upon the appropriate governments to take effective measures to ensure that the persons with disabilities enjoy their rights equally with others.
- vi. Additional benefits such as reservation in higher education, government jobs, reservation in allocation of land, poverty alleviation schemes etc. have been provided for persons with benchmark disabilities and those with high support needs.
- vii. Every child with benchmark disability between the age group of 6 and 18 years shall have the right to free education.
- viii. Government funded educational institutions as well as the government recognized institutions will have to provide inclusive education to the children with disabilities.
- ix. For strengthening the Prime Minister's Accessible India Campaign, stress has been given to ensure accessibility in public buildings (both Government and private) in a prescribed time-frame.
- x. Reservation in vacancies in government establishments has been increased from 3% to 4% for certain persons or class of persons with benchmark disability.
- xi. The Bill provides for grant of guardianship by District Court under which there will be joint decision – making between the guardian and the persons with disabilities.
- xii. Broad based Central & State Advisory Boards on Disability are to be set up to serve as apex policy making bodies at the Central and State level.
- xiii. Office of Chief Commissioner of Persons with Disabilities has been strengthened who will now be assisted by 2 Commissioners and an Advisory Committee comprising of not more than 11 members drawn from experts in various disabilities.
- xiv. Similarly, the office of State Commissioners of Disabilities has been strengthened who will be assisted by an Advisory Committee comprising of not more than 5 members drawn from experts in various disabilities.
- xv. The Chief Commissioner for Persons with Disabilities and the State Commissioners will act as regulatory bodies and Grievance Redressal agencies and also monitor implementation of the Act.
- xvi. District level committees will be constituted by the State Governments to address local concerns of PWDs. Details of their

- constitution and the functions of such committees would be prescribed by the State Governments in the rules.
- xvii. Creation of National and State Fund will be created to provide financial support to the persons with disabilities. The existing National Fund for Persons with Disabilities and the Trust Fund for Empowerment of Persons with Disabilities will be subsumed with the National Fund.
 - xviii. The Bill provides for penalties for offences committed against persons with disabilities and also violation of the provisions of the new law.
 - xix. Special Courts will be designated in each district to handle cases concerning violation of rights of PWDs.

Specific Provisions

The Act is divided into Seventeen Chapters. Chapter one deals with various definitions. The Act defines “person with disability” means a person with long term physical, mental, intellectual or sensory impairment which, in interaction with barriers, hinders his full and effective participation in society equally with others. This Act has brought private establishments within its ambit. The definition of private establishment under the Act includes companies, firms, co-operative or other societies, associations, trusts, agencies, institutions, organizations, unions and factories.

Chapter Two is dealing with Rights and Entitlements. This Act recognizes the following rights of the persons with disability.

- Equality and Non-Discrimination
- Protection and Safety
- Reproductive Rights
- Home and Family
- Accessibility in Justice
- Accessibility in Voting
- Protection from abuse, violence and exploitation
- Limited Guardianship

Equality and Non-discrimination

The Act imposes an obligation on the appropriate government to ensure that the persons with disability enjoy a life of human dignity, equality and non-discrimination. There is an obligation on the appropriate government

to utilize the capacity the persons with disability by providing a suitable environment. The Act also states that no person with disability shall be discriminated on the ground of disability, unless it is shown that the impugned act or omission is a proportionate means of achieving a legitimate aim. The Act also provides that no person shall be deprived of personal liberty on the ground of disability. The Act also directs that appropriate Government shall take necessary steps to ensure reasonable accommodation for persons with disabilities.

Legal Capacity

The appropriate Government shall designate one or more authorities to mobilize the community and create social awareness to support persons with disabilities in exercise of their legal capacity. The authority designated under sub-section (1) shall take measures for setting up suitable support arrangements to exercise legal capacity by persons with disabilities living in institutions and those with high support needs and any other measures as may be required.

Chapter Three of the Act deals with Education. This Act imposes duty on the educational institutions to provide equal opportunities to the children with disability. It also imposes an obligation on the appropriate government appropriate measures to promote and facilitate inclusive education. Section 17 of the Act elaborately throws light on the measures to be taken by the appropriate government.

- (a) to conduct survey of school going children in every five years for identifying children with disabilities, ascertaining their special needs and the extent to which these are being met;
- (b) to establish adequate number of teacher training institutions
- (c) to train and employ teachers, including teachers with disability who are qualified in sign language and Braille and also teachers who are trained in teaching children with intellectual disability;
- (d) to train professionals and staff to support inclusive education at all levels of school education;
- (e) to establish adequate number of resource centres to support educational institutions at all levels of school education
- (f) to promote the use of appropriate augmentative and alternative modes including means and formats of communication, Braille and

sign language to supplement the use of one's own speech to fulfill the daily communication needs of persons with speech, communication or language disabilities and enables them to participate and contribute to their community and society;

- (g) to provide books, other learning materials and appropriate assistive devices to students with benchmark disabilities free of cost up to the age of eighteen years;
- (h) to provide scholarships in appropriate cases to students with benchmark disability;

Chapter Four of the Act deals with skill development and employment. This Chapter mandates the appropriate government to formulate schemes for the promotion of skill development and employment of the persons with disability. It states that the schemes must provide the following:

- (a) inclusion of person with disability in all mainstream formal, non-formal, vocational and skill training schemes and programmes;
- (b) to ensure that a person with disability has adequate support and facilities to avail specific training;
- (c) exclusive skill training programmes for persons with disabilities with active links with the market, for those with developmental, intellectual, multiple disabilities and autism;
- (d) loans at concessional rates including that of microcredit;
- (e) marketing the products made by persons with disabilities; and
- (f) maintenance of disaggregated data on the progress made in the skill training and self-employment, including persons with disabilities

It provides for establishment of a Grievance Redressal Officer who shall look into the matters of non-compliance of provisions of S. 20 which deals with non discrimination in the matters of employment.

Chapter Five of the Act deals with Social Security, Health and Recreation. Chapter Six deals with persons with benchmark disability and Chapter Seven deals with persons with disability with high support needs. Chapter eight deals with the duties of the appropriate governments. It shall be the duty of the government to conduct awareness campaign to:

- (a) promote values of inclusion, tolerance, empathy and respect for diversity;
- (b) advance recognition of the skills, merits and abilities of persons with disabilities and of their contribution to the workplace, labour market and professional fee;
- (c) foster respect for the decisions made by persons with disabilities on all matters related to family life, relationships, bearing and raising children;
- (d) provide orientation and sensitisation at the school, college, University and professional training level on the human condition of disability and the rights of persons with disabilities;

The Central government shall lay down the standards of accessibility to transport, technology etc. Also, no new building plans will be approved which are not disable friendly. Chapter nine deals with Registration. Chapter ten deals with Certification of Specified disabilities. This chapter lays down the guidelines and the procedure for the certification of specified disabilities. Chapter Eleven deals with the Constitution and functions of Central and State Advisory Boards on Disability and District Level Committee. Chapter twelve deals with the appointment and functions of Chief Commissioner and State Commissioner for Persons with Disabilities. Chapter thirteen provides for setting up of Special Court to try the offences under this Act. And there shall be Special Public Prosecutor for each Special Court. Chapter fourteen deals with the creation of National Fund for the Persons with Disability while chapter fifteen deals with the State Fund for the Persons with Disability. Chapter Sixteen deals with Offences and Penalties. This Chapter prescribes punishments for Offences by Companies, for failure to furnish information, for offences against atrocities etc. Chapter Seventeen is a miscellaneous chapter wherein provisions relating to power to make rules etc is discussed. The Schedule deals with Specified Disability. This Act has increased the specified condition of disability from 7 to 21. It has included three kinds of blood disorders, speech and language disability, victims of acid attacks etc.

Issues

Although, the focus of the Act has been to provide equal opportunities to the persons with disability and non discrimination, allows discrimination in cases of achieving a legitimate aim. Sec. 3(3) of the Act states, 'No person

with disability shall be discriminated on the ground of disability, unless it is shown that the impugned act or omission is a proportionate means of achieving a legitimate aim". This clause has been termed as regressive by the disability rights activists. Especially because the Act nowhere defines what is a legitimate aim.

Conclusion

The Convention was an "opportunity to reaffirm the universal commitment to the rights and dignity of all people without discrimination" that could likewise provide the much-needed impetus for wider cultural changes in the world's perception of disabled people. This Convention marked the shift from object of sympathy to subject of rights. This rights based approach towards the persons with disability was adopted by India, first by becoming a signatory to the Convention and later on by bringing the new legislation of 2016. This is definitely a welcome approach by the legislature as this legislation attempts to incorporate equal opportunity in education and employment for the persons with disability and a non discriminatory approach. Although, this legislation is a laudable exercise, the champions of the rights of persons with disability demand that a Constitutional Amendment be brought and this non-discrimination should be made a ground in Art. 15 and Art. 16. The idea behind this is that once the non discrimination on the ground of disability is recognized as a fundamental right, it shall become transcendental and beyond the purview of amendment by the Parliament. This can be said to be an integrated piece of law and a much awaited step towards building an inclusive society.

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Conceptual Framework of Learning Disability (LD)

Maganlal S. Molia

Introduction

Individuals with LD have a neurological impairment that mixes up signals between the brain and the senses (Winebrenner, 2006). Students with Learning Disability (LD) may have an average or above-average intelligence. LD affects approximately five per cent of students (American Psychiatric Association, 2000). Learning something new is thus difficult and frustrating for students with LD. Students hear the sounds, but their brains may mix up the signals. For example, the sentence, “The train goes fast” may look to students with LD like, “The rain goes fast.” They may omit just one letter, totally changing the context. Words may be blurred so that they are hard to read. Students with LD may also have problems with long-term memory. Nearly 40 per cent of students with LD drop out of school (American Psychiatric Association, 2000). Children with LD are a heterogeneous group. For example, one child with a learning disability may experience significant reading problems, while another may experience no reading problems whatsoever, but has significant difficulties with written expression. LD may also be mild, moderate, or severe. Students differ too, in their coping skills.

Concept of LD

Lerner (2000) defines LD as a dynamic and expanding condition that makes it difficult for one to absorb, retain and bring back to memory what is absorbed. The United States of America's Public Law 94-142 for instance defines “Specific learning disability” as a disorder in one or more of basic

psychological processes involved in using spoken or written language, which may manifest itself in an imperfect ability to listen, think, speak, read, write, and spell or to do mathematical calculations. The term “LD” however, does not include learning problems, which are primarily the result of visual, hearing or motor handicaps, mental retardation, emotional disturbance, or the term “LD” however, does not include learning problems, which are primarily the result of visual, hearing or motor handicaps, mental retardation, emotional disturbance, or environment, cultural, or economic disadvantage (Lerner, 2000). When this definition was proposed it was seen as vague and unacceptable to many professionals. Second, the definition's reference to children alienated adults with LD. Professionals expected a clearer statement that LD can exist with other disabilities but the condition cannot be the result of those disabilities. The National Joint Committee of LD (1991), which comprised the professionals and parents of children with learning difficulties therefore proposed the definition that describes LD as “a generic term that refers to a heterogeneous group of disorders that manifested as significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities”. Westwood argues that the best known form of specific learning disability is dyslexia – a disorder that manifests through difficulty in learning to read despite receiving conventional instruction, having adequate intelligence and socio-cultural opportunity. Other forms of learning disability have been identified as dysgraphia (problems with writing), dysorthographia (problems with spelling) and dyscalculia (problems with arithmetical calculation). Some definitions of LD are presented in Table-1.

Table 1
Definitions of LD

No.	Authors	Definitions
1.	Individuals with Disabilities Education Act (1977)	The term “specific learning disability” means those children who have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include a

		learning problem that is primarily the result of visual, hearing, or motor handicaps; of mental retardation; of emotional disturbance; or of environmental, cultural, or economic disadvantage.
2.	Association for Children with LD (1986)	Specific LD is a chronic condition of presumed neurological origin that selectively interferes with the development, integrations, and/or demonstration of verbal and/or nonverbal abilities. Specific LD exists as a distinct handicapping condition and varies in its manifestations and in degree of severity. Throughout life, the condition can affect self-esteem, education, vocation, socialization, and/or daily living activities.
3.	Interagency Committee on LD (1987)	LD is a generic term that refers to a heterogeneous groups of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, mathematical abilities, or social skills. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Even though a learning disability may occur concomitantly with other handicapping conditions (e.g., cultural differences, insufficient or inappropriate instruction, psychogenic factors), and especially attention-deficit disorder, all of which may cause learning problems, a learning disability is not the direct result of those conditions or influences.
4.	National Joint Council on LD (1997)	LD is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, are presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perceptions, and social interactions may exist with LD but do not by themselves constitute a learning disability. Although a learning disability may occur concomitantly with other disabilities (e.g., sensory impairment, mental retardation, or serious emotional disturbance) or with extrinsic influences (such as cultural differences or insufficient/ inappropriate instruction), it would not be a result of those conditions or influences.

Characteristics of LD: A variety of characteristics or symptoms have been attributed to children with learning disabilities. Bryan and Bryan (1978) have determined the ten most frequently cited characteristics which are presented in Table-2.

Table-2
Characteristics of LD

No.	Characteristics	Descriptions
1.	Disorder of attention	Either distractibility – (paying attention to what one should not) or perseveration – (concentrating on something for too long.)
2.	Disorder of memory or thinking	Difficulty in recalling materials that should have been learned and failure to understand abstract concepts. A child with learning disability may also have difficulty in remembering sounds, letters, or words that have been learned. This disorder also affects comprehension. The child may distort the sequence of sounds or letters in words for example, may write 'stop' for 'tops' or 'pots'.
3.	Disorders in Speech and hearing	Have difficulty in understanding or remembering spoken language, deficits in articulation, difficulties in expressing oneself verbally and using the correct vocabulary.
4.	Emotional liability	Emotional outbursts that observers consider unreasonable in the light of a situation or a child's immediate past history. Often there is an identifiable cause for these emotional ups and downs — a bad day at the office, worry over bills or a deadline, or perhaps not enough sleep the night before.
5.	Equivocal neurological signs	A child with learning disability may show signs of neurological impairment; may display behavioral signs of brain damage which include lack of fine motor coordination, poor balance, clumsiness and poor speech.
6.	General coordination deficits	Clumsiness or awkwardness. A child with learning disability may have difficulty in activities like cutting, buttoning, lacing shoes, copying from the chalkboard, and sorting out objects according to shapes and sizes.

7.	Hyperactivity	A hyperactive child runs excessively, cannot stay seated for long and does things quickly without thinking.
8.	Impulsivity	Describes actions that occur without careful thought and deliberation.
9.	Perceptual-motor impairments	Difficulty in coordinating a visual or auditory stimulus with a motor act, such as difficulty in recognizing, interpreting and understanding external stimulus.
10.	Specific LD	Inability to learn reading, spelling, writing, understanding, comprehension, and arithmetic computations.

Classification of LD

As LD is concerned with difficulties in learning some things or subjects, the classification of LDs is done according to the degree of learning difficulties. Adima (1989) lists them as presented in Table-3.

Table 3
Classification of LD

No.	Classification	Discretions
1.	Mild learning difficulties	This is the level of LD which is not severe. Learners with mild LD can be successfully integrated in the general education classroom where delivery of education services will be shared between the general and special educationist. If this condition is neglected, it may become worse. Even though this is not regarded as serious, it is serious enough to attract the attention of the parents and teachers.
2.	Moderate learning difficulties	This level is between the Mild and the Severe LD. This condition is serious and it requires intensive assistance to enable the child to succeed. Learners with moderate LD require remedial instruction in a resource room. At the resource room, learners have an opportunity to receive specific instruction while remaining integrated with their friends in the school. In addition to the programmes being flexible to fit the level of the learner, resource rooms have a variety of materials.
3.	Severe LD	The child at this level cannot learn without special materials, special method, and individualized educational programme (IEP). Severe Learning disability, being a very delicate state of difficulty in learning, learners

		require intensive and comprehensive intervention, which ideally can be offered in a separate class within the school or a separate school. While in a separate class, such learners appear to have a better self-concept than in regular classrooms possibly because regular class competition sets achievement criteria that these learners cannot meet.
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Identification of LD

According to Gulliford (1971) and California Association for Neurologically Handicapped Children (1980) identification of LD is done as presented in Table-4.

Table 4
Identification of LD

According to Gulliford (1971)	According to California Association for Neurologically Handicapped Children (1980)
<ul style="list-style-type: none"> • Association difficulties such as in associating speech sounds with their symbols in reading and writing. 	<ul style="list-style-type: none"> • Difficulties in expressing thoughts.
<ul style="list-style-type: none"> • Difficulty in spatial orientation—they bump into things, and cannot estimate distances. 	<ul style="list-style-type: none"> • Guessing constantly when reading.
<ul style="list-style-type: none"> • Distinguishing left from right, up and down, front and back. 	<ul style="list-style-type: none"> • Short attention span: easy distractibility.
<ul style="list-style-type: none"> • Perceptual and language weaknesses. 	<ul style="list-style-type: none"> • Trouble understanding or following instructions.
<ul style="list-style-type: none"> • Severe difficulties in reading, writing, spelling and arithmetic. 	<ul style="list-style-type: none"> • Trouble understanding time and distance.
<ul style="list-style-type: none"> • Some clumsiness in hand and eye tasks. 	
<ul style="list-style-type: none"> • Speech-sound difficulties in synthesizing words from their component sounds; in relating words to meanings. Most of these children show a history of late or slow speech development often with continuing minor articulator defects and hesitancy in verbal expression. 	
<ul style="list-style-type: none"> • Visio-spatial difficulties in recognizing and distinguishing written symbols; in reproducing letters or groups of letters correctly; confusing or reversing letters. 	

Causes of LD

According to Westwood (1997), there is seldom a single cause for LD and sometimes, it is impossible to identify any predisposing factors. Though in most cases the causes of a child's LD remain unknown, the possible causes can be classified into four broad categories namely; educational, environmental, psychological and physiological. These categories are presented in Table 5.

Table 5
Causes of LD

S.No.	Causes	Discretions
1.	Educational Factors	These are factors within the educational system that may cause LD. These include inadequate and inappropriate teaching, use of poor teaching methods, lack of motivating or stimulating activities, use of materials and curriculum that is too difficult for the children to learn, frequent absence from school as a result of illness, lack of encouragement from parents or guardians, and financial problems (Westwood, 1997).
2.	Environmental Factors	Environmental factors, which affect learning include poor nutrition, lack of emotional and social security, lack of security, witchcraft, accidents, love, warmth and acceptance at home, lack of harmony at home such as single parenting, child abuse, alcoholic parents or drug abusive parents, quarrels among siblings, inconsiderate step mother/step father, overwork, and inadequate sleep (Westwood, 1997).
3.	Psychological Factors	These refer to an interference with senses that are used to transfer information leading to disorders in functions like receiving and recalling information (Westwood, 1997). Children with LD exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language.
4.	Physiological Factors	These include genetics and trauma as explained here. Genetics. Pringle (1974) as cited in (RASUGU, 2010) indicates that LD are hereditary and tend to run in families. When one identical twin has a reading disability, the other one is also likely to

		<p>have reading disability (but not the case with fraternal twins).</p> <p>Trauma. Trauma interferes with the normal learning process. A significant number of children with learning problems do have a history of traumas that may include prolonged labour, absence of oxygen, prematurity and injury from medical instruments such as forceps.</p>
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Techniques to Manage Students with LD

Lewis and Doorlag (1983) assert that if learning difficulties are suspected, the teacher should refer students for special education assessment. Parents are notified of the reasons for referral and presented with an assessment plan prepared by the educational team. There are a number of intervention strategies for children with LD. An overview of the techniques that have been discussed by Lerner (1976), Wallace and Mc Loughlin (1975), and Wallace and Kauffman (1973), and other authors have been presented in Table 6.

Table 6
Techniques to Manage Students with LD

S.No.	Techniques	Discretions
1.	Administration of Drugs	Hyperactive children are constantly in motion, restless and impulsive. Physicians tend to treat these characteristics by prescribing drugs to calm them. Though some caution has to be taken in the treatment of hyperactivity, drugs have nonetheless been found to produce substantial academic and behavior improvements.
2.	Behaviour Modification	This is an effective measure in remediating learning problems, eliminating undesirable behaviors and establishing desirable ones. In addition to these techniques that are to be used in class, there are other interventions, which can be administered outside the school.
3.	Dietary Management	Another controversial approach used in the treatment of hyperactivity is the management of diet (Feingold, 2000). Some chemicals found in food, including additives and food coloring, cause children to become hyperactive. However, Cott (1990) cast some doubt that diet management can reduce hyperactivity in the child.

4.	Precision Teaching	Developed by Lindsley (1964), this technique uses a chart on which the teacher records the progress in the child's behavior in relation to the desired or targeted behavior. The graph is called <i>The Class Behavior Chart</i> . The child's daily progress on a given task is recorded and also the rate of performance. This style of teaching is effective when adaptive instructions are issued on students with Learning Difficulties.
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Conclusion

Students with LD may have an average or above-average intelligence. LD affects approximately five per cent of students (American Psychiatric Association, 2000). Students with LD may also have problems with long-term memory. Children with LD are a heterogeneous group. Characteristics of LD are Disorder of attention, Disorder of memory or thinking, Disorders in speech and hearing, Emotional liability, Equivocal neurological signs, General coordination deficits, Hyperactivity, Impulsivity and Perceptual-motor impairments. Classification of LD are as Mild learning difficulties, Moderate learning difficulties and Severe LD. Causes of LD are as Educational Factors, Environmental Factors, Psychological Factors and Physiological Factors. Techniques to Manage Students with LD are as administration of drugs, behaviour modification, dietary management and precision teaching.

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Impact of Strategic Intervention on Learners with Dyslexia and Dysgraphia: A Study

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Introduction

Child's needs and rights are synonymous in the context of education and education is both a basic need and fundamental right. National programmes like DPEP and SSA have been launched for Universalisation of Elementary Education and RMSA for Universalisation of Secondary Education. But the focus of the educational programmes is to provide quality education to the students through satisfactory inputs to help realise learning achievement by all children. Here "all" includes children of 6-14 years of age group belonging to SC/ST, girls, differently abled children and marginalized children. The sole purpose of the National Programmes is to mainstream these children in the formal schools running in inclusive setup. It is observed that the learning achievement of some children who are living with learning difficulties are not up to mark for which planning of learning programme need to be particularly designed for those categories of children. After enrollment of the child in the schools, mostly they fall under four categories viz. Dyslexia, Dysgraphia, Dyscalculia and Dyspraxia. Their attendance must be regular in school. In spite of academic interventions the classroom scenario is yet to be changed to enhance the learning achievement of the learners with learning difficulties.

RTE Act 2009 has specially focused on the quality education for all children at school level. National Achievement Survey Reports reveal that

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the achievement of the learners is not upto the mark. For example: Annual Status of Educational Report (ASER) 2014 found that “over 75% of all children in class 3, over 50% in class 5 and over 25% in class 8 could not read text meant for the class 2 level. At the all-India level, the number of children in rural schools in class 2 who could not even recognize letters of the alphabet increased from 13.4% in 2010 to 32.5% in 2014. In the last year of their primary education in class 5, almost 20% of children could only read letters or were not literate even at this level; 14% could read words but not sentences; and 19% could read sentences but not longer texts”. In the light of the above report of ASER it is imperative that the classroom scenario of Indian schools needs to be revamped.

The researchers in course of their monitoring of the primary schools, got evidences of low performance of the students studying at elementary level. The Right to Education Act, 2009 states that all children should have quality education with satisfactory learning achievement. A class consists of three categories of learners like high achievers, mediocre and low achievers and needs of one category differ from the other. In an inclusive setup, the education of the differently abled learners who have their schooling take their education with normal children and their learning needs are different from the normal children. The differently abled children constitute Hearing Impaired (HI), Visually Impaired (VI), Cerebral Palsy (CP), Mentally Retarded (MR), Locomotive Impaired (LI) and Learning Disabled (LD). Learning Disability (LD) refers to a group of disorders that affect a broad range of academic and functional skills including the ability to speak, listen, write, spell, reason and organize information. Children with learning disability are different from other categories in respect of their educational needs. “Learning difficulties are not prescription for failure with the right kinds of assistance, guidance and support. There are no limits to what individuals with LD can achieve”. Certain skills are badly required for responding and interacting.

The study conducted by Helland and Kaasa (2004) was on Dyslexia in English as second language. The study revealed that there were significant differences between the two groups in the areas of morphology, syntax, semantics and orthography. Since, dyslexia affects these linguistic areas in L1 (Mother Tongue) production, it would undoubtedly affect L2 (English).

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Frederickson and Frith (1998) in their study found that English I.Q. tests, commonly used as an assessment tool for such learning deficiencies in children, cannot offer the same degree of knowledge and understanding.

Characteristics of Learning Disability

- Persistent academic difficulties in one or more areas
- Discrepancy between the student potential and actual performance
- Difficulties in both reading and writing language
- Poor language performance in the areas of handwriting, spelling, expression etc
- Difficulties in oral expression, listening and comprehension, Mathematics performance, calculation reasoning, memory and meta-cognition

Learning Disability (LD) is mainly of three types namely Dyslexia, Dysgraphia and Dyscalculia

Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with word recognition, pronunciation and reading comprehension. These difficulties typically result from a deficit in the phonological component of language that hinders cognitive abilities.

Characteristics of students with Dyslexia / Reading Problems

- The first and the foremost characteristic of a student with reading problems is that he/she is not able to read.
- He/She is prone to faulty pronunciation.
- He/She is poor in reading and comprehension.
- A dyslexic student does not read willingly and fluently.
- A student with a reading problem cannot use written material to improve his/her learning.

Dysgraphia relates to students facing difficulties with spelling, poor handwriting and trouble putting thoughts on paper.

Characteristics of Dysgraphia

A student with writing disorders, i.e. dysgraphia:

- Has problems explaining the sequence of activities. For example, what is happening in the story picture?

- Has problems in dealing with questions like, “How are they alike?” or “How do they differ?” (i.e. compare and contrast)
- Cannot understand through writing.
- Dislikes/avoids written work in the classroom.
- Intermingles/mixes letters frequently.
- Shows inadequate sentence structures in written work.
- Has no idea of paragraph formation.
- Has untidy written work.

Rationale of the Study

The Researchers in course of monitoring the classroom process observed that some students were deficient in reading and writing in English. When the reasons were sought the teachers stated that those children had comprehension, handwriting and spelling problems. So the researchers decided to conducted a study with the following objectives:

- i. To identify the children having reading and writing problems in English.
- ii. To examine the efficacy of Individual Education Programmeme (IEP) through self-developed learning materials.
- iii. To study the effects of intervention on developing reading and writing skills of the students in English.

Hypothesis

The intervention will bring about considerable improvement in the reading and writing skills of the students with Learning Disability.

Delimitation of the Study

The study was delimited to pronunciation, spelling, reading and reading comprehension in second language (English) of class VII students.

Methodology

Sample

22 children of class VII of students of odisha were identified through a diagnostic test and thus purposive sampling technique was adopted for the selection of the sample.

Tools

The following tools were used for the study:

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- Diagnostic Test
- Observation schedule
- Checklist
- Work sheets
- Package on Learning Disability

Design of the study

It was a single group pre-test post-test design with the strategy “test-teach-test”

Procedure of the Study

1. Administering a Diagnostic Test

The researchers administered a diagnostic test to the children of class VI to know their real problems based on reading, writing and pronunciation in English. Problems were found in respect of total 22 students pertaining to pronunciation. Out of 22, reading comprehension problems were identified in case of 10 students. 12 students were identified poor in pronunciation skill.

2. Classroom Management Techniques

Cooperative learning, peer assisted learning, ability grouping were some of the strategies followed during classroom transaction. Under co-operative learning strategies Think-pair-share (TPS), Pair-think-share (PTS) and Group-think-share (GTS) were followed for better interaction among students. Drill card method and joint oral reading method were followed. Under drill card method a flash card containing one letter only was shown to the students. The researchers pronounced the sound represented by a letter. Subsequently the students followed pronouncing all the words corresponding to the sounds of the letters. In case of reading aloud and recitation of rhymes joint oral method was followed. In this way the intervention was extended for one month after which evaluation was done in order to know the progress and elimination of learning problems.

Activities Conducted During Intervention

Activity 1: Pronunciation and Writing

So far as reading is concerned, words having common sounds like ground, found, round, bound and rough, tough and cough were grouped separately to help the learners to pronounce the words with *ou* and *gh*. Some silent

letters in a word like wa(l)k, ta(l)k, cha(l)k, (k)nife, com(b), ca(l)m, pa(l)m, shou(l)d, cou(l)d, wou(l)d etc. were grouped together so that the learner can easily catch the specific words during pronunciation and writing. In all the above words, letter “l” was silent.

Activity 2: Spelling

So far as writing is concerned, rolled handwriting papers were supplied to the students with a model sentence indicating the words to be placed in the upper part, middle part and the bottom part in a four lined rolling paper. For spelling activities, spelling games, exchange of cards with correction, “spelling bees”, arrange the jumbled letters, fill in the missing letters were some of the strategies to develop spelling skills in the learner.

Activity 3: Card Game (Pair Work)

Students can learn pronunciation and spelling both through this game. (Writing a number of words in group such as sit, bit, fit, hit, pit). Distribute the cards in small groups. First demonstrate how to use the cards. The teacher pronounces the word ‘sit’ and the students pronounce in chorus. Then the students sit in pairs. One shows a word, his partner pick up other words having same pronunciation and spelling with focus on the “vowel” written in the middle of the word. Another word ‘beat’ can be grouped to similar words like seat, heat, meat etc.

Activity 4: Rhyming Game (Group work)

At first the teacher sings the rhyme and the students follow him in chorus. They are asked to clap when two word rhyme with each other.

“This is my kite

This is my kite

I fly it left

I fly it right

Enjoy the sight

This is my kite

It has two colors

White and brown

Sometimes it goes up

Sometimes down”.

The students are asked to write the rhyming pairs with correct spelling. The underlined words are corresponding with rhyming words.

Activity 5

The purpose of the multiple activities is to develop the vocabulary, spelling skill and pronunciation. Choose the words from the bracket to fill in the blanks.

(Crowd, goggle, swarn, bauquet, bucket, shoal,)

- A group of bees is called-----
- A group of fish is called-----
- A group of flowers is called-----
- A group of lions is called-----
- A group of people is called-----
- A group of geese is called-----

Activity 6

Pronunciation drill is to overcome Articulation problem. A package containing pronunciation, spelling and vocabulary was used in the class during intervention. After three weeks of treatment based on individualized instruction, the students were administered a post –test.

Results and Discussion**Annexure****Table 1****Performance of the Students in Pronunciation**

Selected Problematic Sounds	N	Pronounced well	%
Pair of vowels making new sound ai (train, paint) ea (leaf, dream) ee (sheep, been) oo (look, good) ou (ground, out)	22	11	50%
Vowel changed by a consonant ar (car, park) er (her, verse) ir (bird, shirt) or (short, or) ur (turn, purple) ow (town, show, low)	22	4	25%
Parts of consonants making new sound th (unvoiced) three, thanks th (voiced) this, mother sh (she, short) ch (which, chicken) ph (phone, elephant) gh (laugh, enough, high, although)	22	4	25%

Table 2
Reading Comprehension

Test	N	Mean	S.D	't' value
Pre-test	10	8.0	2.2	1.94
Post-test	10	10.0	2.4	

*Significant at 0.01 level

The comprehension questions were oral. Questions of 5 W's – what, who, where, when, why, how and then the students were asked to write the answers in their note books. At first the topic was divided into SGPs, then oral discussion was done. The students were asked to guess and tale using the clues provided to them. Peer correction was done then and there. Individualized instruction was adopted to facilitate individuals' learning.

Table 3
Spelling

Test	N	Mean	S.D	't' value
Pre-test	12	8.0	2.6	7.66
Post-test	12	18.0	3.2	

*Significant at 0.01 level

Stress was given on recognizing minimal parts like same, shame, cattle, kennel and pronounce the words in pairs. It was observed that the students who could pronounce the two words wrongly learnt the correct pronunciation in the group, and teacher's personal effort through individualized instruction helped the learners to overcome their problems pertaining to spelling. Speaking game conducted in group proved an additional benefit for the students.

The assessment on pronunciation was purely oral in nature and it was assessed using a check-list. It revealed that the difficulties of the students were eliminated to the extent of 25%. This was positive because some difficult sounds created problem for them to follow. Most of the students didn't know how to pronounce a word with s and z. Besides, silent letters were wrongly pronounced by them in a word which was corrected later on. In case of reading aloud they didn't use pause and intonation before but as a result of intervention they knew where to use pause and intonation. So far as spelling is concerned there was substantial improvement due to the treatment based on techniques like spelling bee, exchange of word cards

and arrange the jumbled letters. So in respect of spelling at the pre-test stage, the mean score was 8.0 but at the post-test stage it was raised to 18 and it was found significant at 0.01 level. So far as reading comprehension is concerned, the pre-test score was 8.0 and post-test score was found 10 and the improvement was found significant at 0.01 level as a result of intervention using the package. Thus the intervention proved effective.

Findings

Pronunciation skill is concerned with the critical sounds which could not be mastered by majority of the students. Only 25% of students out of the total students were able to pronounce the words in English because of rigorous pronunciation drill. Grouping words having similar sound and peculiar sounds were identified by them and which helped them in improving their pronunciation skill. (Table 1).

With regard to reading comprehension in English it was up to mark so far as assessing answers to WH questions of objective type, global, local, inferential and evaluative. Locating specific information in the text through scanning facilitated their comprehension ability. (Table 2).

So far as spelling is concerned there was a sustainable improvement because of the spelling techniques like arrange the jumbled letters, fill in the missing letters, spelling bee, word within a word, delete the first letter of a word and get a new word and doubling of letter were some of the activities which helped in enhancing their spelling ability. (Table 3).

Conclusion

Bringing about the changes in the reading and writing skill of the children with learning disability requires adequate time. Constant monitoring of classroom process is also required. The teacher dealing with the children having reading and writing disorders should be careful. Co-operative learning strategies and peer assessment learning should be strengthened while dealing with those children. Relevant materials and worksheets are also required to acquaint the students with various techniques that will help them to learn through self practice and peer learning.

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Differently Abled Children and Inclusive Education in India: Initiatives and Challenges

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Introduction

Traditionally differently-abled children and those with special needs have experienced exclusion, discrimination and segregation from the mainstream of education. Inclusive education, which has its origin in special education, originally set out to meet the needs of learners who were being traditionally excluded from the school or were otherwise marginalized within the classroom. Inclusive education stands for improvement of schools in all dimensions to address the educational needs of all children. The major support for inclusive education came from the 1994 World conference on Special Needs Education in Salamanca, Spain which emphasized that: Schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. Although the Govt. of India over the years initiated and implemented a number of programmes such as Integrated Education for Disabled Children (IEDC), Project on Integrated Education for Disabled (PIED) funded by UNICEF and govt. by NCERT, DPEP, Janshala, SSA etc which have led to increase in enrolment and retention but only a miniscule of children with disabilities have been integrated in mainstream institutions. But marginalization and exclusion of these pupils result in the growth of inferiority complexes among them and their parents/guardians. This leads the vision of “Inclusive Education”. Inclusive Education aims at integrated development of children with special needs and normal children through mainstream schooling.

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In India special education as a separate system of education for disabled children outside the mainstream education system evolved way back in 1880s. The first school for the deaf was set up in Bombay in 1883 and the first school for the blind at Amritsar in 1887. In 1918 a special school for the mentally disabled was started in Kurseong, in the Darjeeling region of North Bengal and in 1931 another similar one was started in Travancore in Kerala. To develop curriculum for special education and its inclusion in general teacher preparation programmes, Rehabilitation Council of India (RCI) made a historic collaboration with National Council for Teacher Education (NCTE) on January 19, 2005. Inclusive education is a strategy to make education universalized irrespective of any disability within the learner and to maintain equity in the society. It emphasises that children with special need can be included in general school system without any demarcation and differentiation. India is one of the few countries in the world where the education of children with special needs doesn't fall within the purview of human resource development ministry. It is generally the burden of the Ministry of social justice and empowerment, the prime focus of which is rehabilitation, not education. In fact, till today it does not have education as part of its agenda and the issue of education of children with disabilities remains imperceptible, hidden from the public domain, a private problem for families and NGOs to deal with.

Several obstacles and challenges have been observed in the path of inclusive education in India, especially for differently-abled children. Problems such as lack of well educated and competent teachers, curriculum, resources, inadequate infrastructural facilities, awareness, positive attitude, plans, policies etc are creating hurdles for achieving inclusive education in India. Considering all these problems and challenges, this study has been undertaken. The objectives of the paper are to highlight the existing educational setting for the differently-abled children in India and to explore the challenges in the field of inclusive education in India with special reference to differently-abled children.

Policy and Practices for Special Education

In 1974, the centrally sponsored scheme of Integrated Education for Disabled Children (IEDC) was introduced to provide equal opportunities to children with disabilities in general schools and facilitate their retention.

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The government initiatives in the area of inclusive education can be traced back to National Educational Policy, 1986, which recommended, as a goal, 'to integrate the handicapped with the general community at all levels as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence'.

The World Declaration on Education for All adopted in 1990 gave further boost to the various processes already set in the country. The Rehabilitation Council of India Act, 1992 initiated a training programme for the development of professionals to respond to the needs of students with disabilities. The National Policy for Persons with Disability, 2006, attempts to clarify the framework under which the state, civil society and private sector must operate in order to ensure a dignified life for persons with disability and support for their caretakers.

Most recent advancement is the Right of Children for Free and Compulsory Education (2009) which guarantees right to free and compulsory education to all children between ages six to fourteen. For education of a child with disability, the act has to be read in conjunction with Chapter V of the Persons with Disability Act, 1995. Chapter V of the PWD Act ensures that every child with disability is entitled to a free education up to the age of 18 years. Keeping this in view, Government of India had accelerated the new scheme of Inclusive Education to achieve the target of Education for All (EFA) by 2010.

The Government of India is constitutionally committed to ensuring the right of every child to basic education. The Government of India has created numerous policies around special education. In 1999, the Government of India passed the National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act for the economic rehabilitation of people with disabilities. The preamble to the SSA clearly provides for inclusion of children with disabilities in the normal educational programmes. On the other hand, in 1987, the government has shifted its strategy from school-based approach to a merged-area approach, which is known as Project for Integrated Education for the Disabled (hereinafter referred to as PIED), where all regular schools were expected to enrol special children along with the teachers training

programmeme designed especially for training special children to acquire their normal growth.

District Primary Education Programmeme (hereinafter referred to as DPEP), which was launched in 1994, also had a substantial role to play in amalgamating special children in mainstream schools. The main advantages of DPEP are identification, assessment and enrolment of special children in regular schools with resource support, teacher training and parental counseling. Later, Sarva Shiksha Abhiyan was implemented by the Government of India in 2000-2001 with the goal of universalising elementary schooling for special children of the age group of 6-14 by 2010 at the district levels. It provides learning aids and tools, mobility assistance and support services to special children. However, Section 12(1) (c) of RTE Act, 2009 binds public and private schools to reserve 25% of seats for children, including special children, from socially and economically disadvantaged sections. National Policy for Persons with Disability of 2006 had also acknowledged the self-esteem of special children and, furthermore, it created a milieu that provided protection of their basic rights and freedoms which help them to partake in society. Sections 20 to 27 of the said policy highlight the requirements for mainstreaming regular schools through inclusive education policy for all. Lastly, the Twelfth Five Year Plan of 2012 to 2017 clearly emphasises that States and NGOs must work closely with Rehabilitation Council of India for an individualised educational plan and inclusive educational placement of special children in general schools. Moreover, it also highlights the engagement of resource teachers, volunteers and caregivers to cater to the special needs of these children. Therefore, these are some of the policies and practice taken up by the government for implementing inclusive education for the special children. But unfortunately, even after the implementation of the above-mentioned policies, the ground reality has not changed much.

National Legal Framework in Respect of Inclusive Education for Special Children

The new RPD Act was passed by the parliament on 16 December, 2016, replacing the PWD Act, 1995. Section 2(m) of RPD, Act 2016 defines inclusive education as “a system of education wherein students with and without disability learn together and the system of teaching and learning is

suitably adapted to meet the learning needs of different types of students with disabilities.” Section 31 requires that special children are provided free education until the age of 18, thereby surpassing the benchmarks in The Right of Children to Free and Compulsory Education Act, 2009 popularly known as Right to Education (RTE) Act, 2009. It was observed by the respective courts that the state is bound to bestow 3% reservation of the total seats in educational institutions for the special children. Unfortunately, the uniformity in the teaching standards for special children has not been found in the country.

Training of special educators and resource teachers that can offer support services to special children in regular schools is the responsibility of RCI Act 1992. It also states that children with special needs will be taught by trained teachers. National Trust Act–1999 had provided for the establishment of institutions for the protection of interest of special children suffering from autism, cerebral palsy, mental retardation and multiple disabilities after the death of their parents so as to enable them to live independently within the community to which they belong. The Mental Health Act- 1987 had presumed that mentally ill children respond differently in the educational institutions because they ought to have parallel human rights as enjoyed by normal children. Project Integrated Education for the Disabled (PIED) has aimed to enable teachers to meet the needs of children with special educational needs more effectively. This project was initiated by the National Council of Educational Research and Training (NCERT) and received financial support from the Ministry of Human Resource Development (MHRD) and UNICEF. The National Policy on Education, 1986 (NPE, 1986), and the Programme of Action (1992) stresses the need for integrating children with special needs with other groups. The objective to be achieved as stated in the NPE, 1986 is "to integrate the physically and mentally handicapped with general community as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence".

The Persons with Disabilities (Equal Opportunities, Protections of Rights and Full Participation) Act, 1995 stresses the need to provide free of cost education to all children in an appropriate environment till they are 18 years old and further emphasize their right to measures like restructuring

the curriculum for benefit of students with hearing impairment to facilitate them to take only one language as part of their curriculum, suitable modification in the examination system to eliminate purely mathematical questions for the benefit of blind students and students with low vision, the grant of scholarship to students with disabilities; the supply of books, uniforms and other materials to students with disabilities attending school, the removal of architectural barriers from schools, colleges or other institutions imparting vocational and professional training, and transport facilities to the students with disability or alternative financial incentives to parents or guardians to enable their students with disabilities to attend schools.

The National Trust Act (National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disability), 1999 aims to provide total care to persons with mental retardation and cerebral palsy and also manage the properties bequeathed to the trust. India was a signatory to the Salamanca Statement. In this perspective the Human Resource Development Minister of India Sri Arjun Singh on 21st March 2005 assured in the Rajya Sabha that MHRD has formulated a comprehensive action plan for the Inclusive Education of Children and Youth with Disabilities. The government is committed to provide education through mainstream schools for children with disabilities in accordance with PWD ACT, 1995 and all the schools in the country will be made disabled friendly by 2020. Rupees 10 billion have been outlaid to fulfil the needs of disabled persons between the ages of 14 and 18 years through a revised plan for Inclusive Education of Children and Youth with Disabilities (IECYD). In 2005-06, the Project Approval Board has allocated an amount of Rs.187.79 crores under this component for a total 20.14 lakh Children With Special Needs (CWSN) identified. The commitment of the Government of India to Universalisation of Elementary Education (UEE) cannot be fully achieved without taking care of special educational needs of the physically and mentally challenged children.

A zero rejection policy has been adopted under Sarva Shiksha Abhiyan, which ensures that every Child with Special Needs (CWSN), irrespective of the kind, category and degree of disability, is provided meaningful and quality education. It covers the following components under education for children with special needs:-Early detection and identification, functional

and formal assessment, Educational Placement, Aids and appliances, Support services, Teacher training, Resource support, Individual Educational Plan (IEP), Parental training and community mobilization, Planning and management, Strengthening of special schools, Removal of Architectural barriers, Research, Monitoring and evaluation, Girls with disabilities. SSA provides up to Rs.1200/- per child for integration of disabled children, as per specific proposals, per year.

Various Schemes for Promoting Educational Status of Special Children

National Overseas Scholarship for Students with Disabilities providing scholarship to students with disabilities to pursue programmes in Higher education outside India. The scheme provides financial assistance to students with disabilities who are finally selected for pursuing Master's level course and Ph.D. abroad in Engineering, Management, Pure Science, Applied science, Agricultural science, Medicine, Commerce, Accounting, Finance, Humanities, Social science and Fine arts etc. The scheme covers all children studying in classes IX to XII in Government, local body and Government-aided schools, with one or more disabilities as defined under the Persons with Disabilities Act (1995) and the National Trust Act (1999). The type of disabilities range from blindness, low vision, leprosy cured, hearing impairment, locomotor disability, mental retardation, mental illness, autism and cerebral leprosy, speech impairment, learning disabilities etc. Girls with disabilities are provided with special attention to help them gain access to secondary education, information and guidance for developing their potential. Moreover, the scheme envisages to set up model inclusive schools in every state.

Analysis and Discussion

In this section, various analysis related to the State-wise total disabled population as per census 2011, enrolment of children with special needs in different school education, percentage of disabled students based on the nature of disabilities, class-wise and region-wise enrolment of children with disability, disabled literates by educational level and type of disability and states/union territories-wise number of scholarships disbursed and amount released by National Handicapped Finance and Development Corporation (NHFDC) for Students With Disabilities (SWDS) have been made for exploring the existing educational setting for the differently-abled children in India and to highlight the challenges in the field of inclusive education in India with special reference to differently-abled children.

Table 1
State-wise Total Disabled Population as Per Census, 2011

Sl. No.	States	Total Disabled Population
1	Andhra Pradesh	12,19,785
2	Arunachal Pradesh	26,734
3	Assam	4,80,065
4	Bihar	23,31,009
5	Chhattisgarh	6,24,937
6	Delhi	2,34,882
7	Goa	33,012
8	Gujarat	10,92,302
9	Haryana	5,46,374
10	Himachal Pradesh	1,55,316
11	J&K	3,61,153
12	Jharkhand	7,69,980
13	Karnataka	13,24,205
14	Kerala	7,61,843
15	Madhya Pradesh	15,51,931
16	Maharashtra	29,63,392
17	Manipur	58,547
18	Mizoram	15,160
19	Meghalaya	44,317
20	Nagaland	29,631
21	Odisha	12,44,402
22	Punjab	6,54,063
23	Rajasthan	15,63,694
24	Sikkim	18,187
25	Tamil Nadu	11,79,963
26	Telangana	10,46,822
27	Tripura	64,346
28	Uttar Pradesh	41,57,514
29	Uttarakhand	1,85,272
30	West Bengal	20,17,406
31	Andaman & Nicobar Islands	6,660
32	Chandigarh	14,796
33	Daman & Diu	2,196
34	Dadra & Nagar Haveli	3,294
35	Lakshadweep	1,615
36	Puducherry	30,189
Total		2,68,14,994

Source: Census of India 2011, Govt. of India

Table 1 reveals that Maharashtra, Bihar, Uttar Pradesh and West Bengal have disabled population above 20,00,000. Dadra & Nagar Haveli, Lakshadweep, Daman and Diu, Andaman & Nicobar Islands have disabled population below 10,000. Lowest disabled population was found in Lakshadweep i.e. 1,615 and highest disabled population was found in Uttar Pradesh i.e. 41,57,514. As per the Census 2011, total disabled population in all over India was 2,68,14,994.

Table 2
Enrolment of Children with Special Needs (CWSN) in Different School Education

State/UT	Elementary	Secondary	(In Percentage)
			Higher Secondary
Andaman & Nicobar Islands	71.98	17.00	11.02
Andhra Pradesh	85.61	14.39	0.00
Arunachal Pradesh	86.50	7.78	5.72
Assam	94.81	4.74	0.45
Bihar	95.14	4.31	0.55
Chandigarh	73.99	20.27	5.74
Chhattisgarh	92.88	5.28	1.85
Dadra & Nagar Haveli	76.07	19.46	4.47
Daman & Diu	84.86	13.51	1.62
Delhi	66.81	20.84	12.35
Goa	87.09	10.84	2.06
Gujarat	88.19	9.59	4.22
Haryana	82.53	12.41	5.06
Himachal Pradesh	76.48	16.75	6.76
Jammu & Kashmir	88.85	8.10	3.05
Jharkhand	95.38	3.66	0.96
Karnataka	87.32	11.97	0.71
Kerala	81.78	13.19	5.03
Lakshadweep	83.10	11.03	5.86
Madhya Pradesh	90.36	7.08	2.56
Maharashtra	83.67	13.35	2.98
Manipur	94.41	4.99	0.60
Meghalaya	95.08	4.22	0.70
Mizoram	87.74	10.76	1.50
Nagaland	83.86	14.11	2.02
Odisha	91.77	7.96	0.26
Puducherry	75.19	17.81	7.00

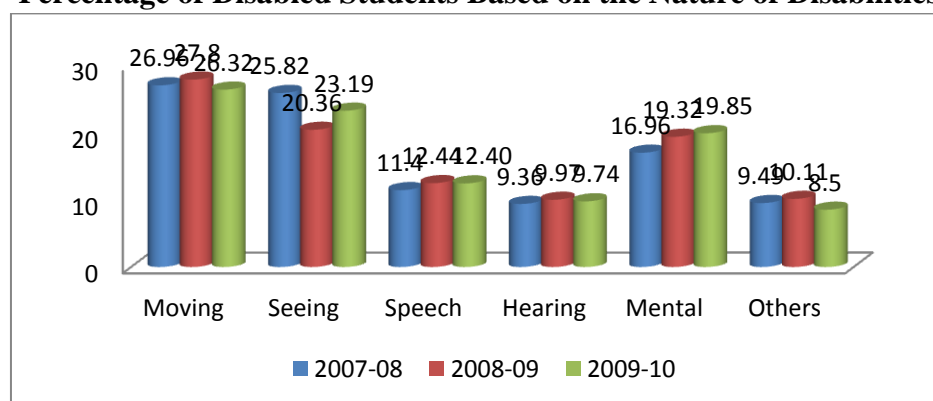
Punjab	89.27	7.32	3.41
Rajasthan	93.45	4.49	2.06
Sikkim	88.62	8.17	3.21
Tamil Nadu	91.80	5.96	2.24
Telangana	88.32	11.23	0.44
Tripura	82.81	14.02	3.17
Uttar Pradesh	95.96	2.36	1.62
Uttarakhand	83.83	10.75	5.42
West Bengal	84.58	11.46	3.97
Total	89.11	8.52	2.37

Source: School Education in India, NIEPA, New Delhi

Table 2 shows that in states like Bihar, Assam, Chhattisgarh, Jharkhand, Madhya Pradesh, Manipur, Meghalaya, Odisha, Rajasthan, Tamil Nadu, and Uttar Pradesh above 90 per cent disabled children were enrolled in elementary education. Among them, Uttar Pradesh had highest numbers of disabled children enrolment and Delhi had lowest number of disabled children enrolment in elementary schools. But in Delhi, highest CWSN were enrolled in secondary schools and lowest in Uttar Pradesh. Similarly, in Delhi, highest CWSN were enrolled in higher secondary level and lowest in Andhra Pradesh. In all over India, the highest percentage i.e.89.11% of CWSN were enrolled in elementary level due to universalization of elementary education. However very less percentage of CWSN were enrolled in secondary (8.52%) and higher secondary level (2.37%). The govt. should consider these issues seriously.

Figure-1

Percentage of Disabled Students Based on the Nature of Disabilities



Source: School Education in India, NIEPA, New Delhi

In the above figure the nature of disability has been categorised on the basis of moving, seeing, speech, hearing, mental and other problems. The analysis shows that moving disabled students were highest in percentage during 2007 to 2010 as compare to other disabled students. Highest percentage of moving disabled students were in 2008-09 i.e. 27.8 % and lowest were in 2009-10 i.e. 26.32%. Highest percentages of seeing disabled students were in 2007-08 i.e. 25.82% and lowest were in 2008-09 i.e. 20.36. Highest percentage of speech disabled students were in 2008-09 i.e. 12.44% and lowest were in 2007-08 i.e. 11.4%. Highest percentage of hearing disabled students were in 2008-09 i.e. 9.97% and lowest were in 2007-08 i.e. 9.96%. Highest percentage of mental disabled students were in 2009-10 i.e. 19.85% and lowest were in 2007-08 i.e. 16.96%.

Table 3
Class-wise and Region-wise Enrolment of Children with Disability (2005-06 to 2009-10)

Grades	All Areas			Rural Areas			Urban Areas		
	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total
2005-06									
I-V	512993	723898	1236891	448097	634527	1082624	64611	88949	153560
VI-VII/VIII	152684	227281	379965	120026	184052	304078	32568	43085	75653
I-VII/VIII	665677	951179	1616856	568123	818579	1386702	97179	132034	229213
2006-07									
I-V	434606	609300	1043906	373332	527971	901303	61208	81225	142433
VI-VII/VIII	161397	219531	380928	117809	169220	287029	43520	50200	93720
I-VII/VIII	596003	828831	1424834	491141	697191	1188332	104728	131425	236153
2007-08									
I-V	486745	669131	1155876	428523	590400	1018923	58222	78726	136948
VI-VII/VIII	168344	230131	398475	134747	188798	323545	33594	41332	74926
I-VII/VIII	655089	899262	1554351	563270	779198	1342468	91816	120058	211874
2008-09									
I-V	421780	584980	1006760	367952	510813	878765	31394	22431	53825
VI-VII/VIII	160544	216717	377261	129146	177325	306471	70776	57205	127981
I-VII/VIII	582324	801697	1384021	497098	688138	1185236	102170	79636	181806
2009-10									
I-V	420371	579014	999385	361891	497961	859852	58480	81053	139533
VI-VII/VIII	175617	227815	403432	138066	182075	320141	37551	45740	83291
I-VII/VIII	595988	806829	1402817	499957	680036	1179993	96031	126793	222824

Source: U-DISE, NIEPA, New Delhi

Table 3 shows that in rural areas, highest disabled girls were enrolled in 2005-06 in classes from I-VIII i.e. 568123 and highest disabled boys were enrolled in 2005-06 i.e. 818579. In urban areas, highest disabled girls were enrolled in 2008-09 in classes from I-VIII i.e. 102170 and highest disabled boys were enrolled in 2005-06 i.e. 132034. In all areas, highest disabled girls were enrolled in 2005-06 in classes from I-VIII i.e. 665677 and highest disabled boys were enrolled in 2005-06 i.e. 951179. Total enrolment of children with disability in all areas was 1616856 in 2005-06, in rural areas it was 1386702, and in urban areas it was 229213 in 2005-06 years. Total enrolment of children with disability in all areas was 1402817 in 2009-10, in rural areas it was 1179993 and in urban areas it was 222824. It shows that the enrolment of disabled students has decreased from 2005-06 to 2009-10.

Table 4
Disabled Literates by Educational Level and Type of Disability, 2011 (In Millions)

Type of Disability	Literate	Below Primary	Primary But Below Middle	Middle But Below Matric/Secondary	Matric/Secondary But Below Graduate	Graduate and Above
Seeing	2.66	0.55	0.65	0.43	0.61	0.24
Hearing	2.89	0.55	0.69	0.47	0.71	0.27
Speech	1.16	0.24	0.28	0.18	0.27	0.11
Movement	3.27	0.53	0.81	0.61	0.84	0.28
Mental Retardation	0.62	0.17	0.17	0.09	0.10	0.03
Mental Illness	0.35	0.07	0.09	0.07	0.08	0.02
Any other	2.96	0.53	0.69	0.50	0.73	0.28
Multiple Disability	0.70	0.19	0.19	0.10	0.12	0.03
Total	14.62	2.84	3.55	2.45	3.45	1.25

Source: Census of India 2011, Govt. of India

Table 4 reveals the educational level of disabled literates on the basis of their type of disability. As per the Census data 2011, educational level of disabled under literates category were 14.62 millions, under below primary level were 2.84 millions, under below middle level were 3.55 millions,

under below matriculation level were 2.45 millions, under below graduate level were 3.45 millions and only 1.25 millions have qualification above graduation and above. The analysis also revealed that highest numbers of disabled in movement disability category were educated and mentally disabled were least educated.

Table 5
States/UTs-wise Number of Scholarships Disbursed and Amount Released by National Handicapped Finance and Development Corporation (NHFDC) for Students with Disabilities (SwDs) from 2014-15 to 2016-17

Sl. No	State/UT	2014-15 (In Number)	2014-15 Amount (In Rs.)	2015-16 (In Number)	2015-16 Amount (In Rs.)	2016-17 (In Number)	2016-17 Amount (In Rs.)
1	Andhra Pradesh	145	9802501	189	14108309	127	9835612
2	Andaman and Nicobar Islands	0	0	0	0	0	0
3	Arunachal Pradesh	0	0	1	81560	2	196776
4	Assam	26	1472569	25	1811649	9	726337
5	Bihar	332	23270609	297	24030723	183	15092964
6	Chandigarh	0	0	0	0	0	0
7	Chhattisgarh	36	2183274	34	2291024	32	2538699
8	Dadra and Nagar Haveli	0	0	0	0	0	0
9	Daman and Diu	0	0	0	0	0	0
10	Delhi	81	6967878	80	7436300	61	6160882
11	Goa	1	112203	1	109610	2	166865
12	Gujarat	55	3636321	55	4088920	34	2816935
13	Haryana	75	5946819	73	6609561	27	2033732
14	Himachal Pradesh	8	493508	7	552452	6	475053
15	Jammu and Kashmir	30	1794031	25	1796407	8	589119
16	Jharkhand	93	5784343	80	5944605	53	5644571
17	Karnataka	141	10292647	134	10707976	71	6868765
18	Kerala	76	5928980	99	7583067	33	2432556
19	Lakshadweep	0	0	0	0	0	0
20	Madhya Pradesh	109	7311249	102	8002296	110	9206617
21	Maharashtra	125	10925393	130	12261073	58	4637593
22	Manipur	5	255189	4	260366	4	348279
23	Meghalaya	0	0	1	25044	0	0
24	Mizoram	0	0	0	0	0	0

25	Nagaland	0	0	0	0	0	0
26	Orissa	76	5017844	65	4973212	41	3388839
27	Pondicherry	3	124250	2	131081	2	130356
28	Punjab	20	1382305	18	1450633	5	570696
29	Rajasthan	44	2636521	55	4108513	54	4174864
30	Sikkim	0	0	0	0	0	0
31	Tamil Nadu	245	15437668	242	17788369	139	11039579
32	Tripura	1	69454	2	160918	3	164631
33	Uttar Pradesh	633	44962156	650	51497779	674	63639679
34	Uttarakhand	28	2581857	26	2532695	13	2308055
35	West Bengal	112	6827660	103	6935363	113	8902382
Total	Total	2500	175217229	2500	197279505	1864	164090436

Source: Ministry of Social Justice and Empowerment, Govt. of India

Table 5 shows that highest number of scholarships have been disbursed to students with disabilities in the Uttar Pradesh state during the period from 2014-15 to 2016-17 i.e. 633, 650 and 674 respectively. Uttar Pradesh has also given highest amount of funding from 2014-15 to 2016-17 i.e. Rs. 44962156/-, Rs. 51497779/- and Rs. 63639679/- respectively which were released under National Handicapped Finance and Development Corporation for SwDs. States and Union Territories like Dadra and Nagar Haveli, Daman and Diu, Sikkim, Lakshadweep, Chandigarh, Meghalaya, Mizoram and Nagaland have not given any scholarship to SwDs. It has also been found that very less amount of scholarship were disbursed to Tripura, Pondicherry, Himachal Pradesh, Arunachal Pradesh, Goa and Manipur during the period from 2014 to 2017.

Challenges of Inclusive Education in India with Reference to Differently-Abled Children

Students with disabilities face particular challenges in different education sectors not only in terms of gaining physical access to buildings, but also in relation to much wider access issues concerning the curriculum adaptation and accommodation, teaching, learning and assessment. These reasons become the eligibility criteria to scrutinize the ability of different education to include a diverse range of learners. This has led to the emphasis on initiatives to widen access to different education to individuals with disabilities. In this section, we have discussed the various challenges faced by the disabled students in getting equal educational opportunities as par with the normal students in India.

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Physical Inaccessibility: Students with disabilities continue to encounter physical barriers to educational services, such as a lack of ramps and/or elevators in multi-level buildings, heavy doors, inaccessible washrooms, and/or inaccessible transportation to and from institution.

Accommodation Process: Students with disabilities often encounter delays at many stages of the accommodation process. They have difficulties in the processing of claims for scholarships and concessions. Many of the times professional assessments are not carried out on time. Delay in the provision of special education programmes and services are also observed.

Lack of Individualization: Some funding schemes rely on pre-set categories and labels, and emphasize student "weakness" rather than strength. Suspension and expulsion policies are at times rigidly applied and do not take into account a student's individual circumstances. At all levels of education, their needs to be a greater recognition of the context in which discrimination occurs.

Negative Attitudes and Stereotypes: Students with disabilities continue to face negative attitudes and stereotypes in the education system. Lack of knowledge about and sensitivity to disability issues on the part of some educators, staff and students can make it difficult for students with disabilities to access educational facilities.

Improper Curriculum Adaptation: For practicing inclusive education, curricular adaptations suited to special and unique needs of every learner, including children with disabilities, are necessary. Concepts like 'Universal Instructional Design' are to be properly developed and incorporated into the curriculum. However, needed curricular adaptations are either missing altogether or are improper.

School Environment Including Difficulties in Physical Access: School environment needs accommodations for truly practicing inclusive education. However, such accommodations are not there in majority of the schools. Facilities like ramps, lifts, and directional cues etc. are mostly absent in schools.

Support Services: For implementing inclusive education in all educational institutions, at all levels, we need strong support services. Their strength

should be both quantitative and qualitative. But, existing support services are scarce and inadequate.

Family Collaboration: Keeping in mind the nature of Indian society and culture, it can be safely stated that family has a very important role in implementing inclusive education in India. Family is considered having sole responsibility for their children in India. Hence, inclusion can only be realised by motivating and involving family in the process.

Insufficient and Improper Pre-service Teacher Education: The pre-service teacher education programmes being run in the country are failing to sensitize and equip prospective teachers in inclusive education practices. Modifications are needed to make these teacher education programmes more effective. Currently, teacher education programmes producing special teachers are controlled by Rehabilitation Council of India whereas these producing general teachers are controlled by National Council for Teacher Education. These two apex bodies need to collaborate and devise measures for producing skilled teachers capable of implementing inclusive education.

Negative Self-perceptions of Children with Disabilities: For practicing inclusive education, negative self-perceptions of children with disabilities pose a great challenge. These negative perceptions are often strengthened by neighbours, peers, and teachers. Without wiping out these negative self-perceptions, true inclusion of such children is not possible.

Availability of ICT and Related Competencies: Present age is the age of Information and Communication Technology (ICT). ICT is providing great help in almost all endeavours of human life including education and training. A number of ICT-enabled pedagogical and assistive devices are available for children with disabilities. Their use can ease and expedite inclusive education. These should be made available and competencies for their use should be developed among all stakeholders.

Improper Policy Planning and Lack-luster Implementation: Government of India claims that it has implemented inclusive education everywhere and at all levels. However, the policy planning is improper and measures to assess the degree of implementation have not been developed. Furthermore, implementation of inclusive education in private sector has not been enforced and ensured.

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Expenses Involved: For a huge and diverse country like India, implementation of inclusive education at all levels requires a lot of money. The government does not seem willing to incur this huge expenditure. Being a developing country, the apprehensions of the government can be very well understood. The barriers mentioned here do not form an exhaustive list but authors believe that not much are left out.

Conclusion and Suggestions

Inclusive Education lays the foundation to an inclusive society accepting, respecting and celebrating diversity. Various studies reveal that children do better academically and socially in inclusive setting. Thus teachers, parents and teacher-educators have to facilitate the implementation of inclusive education not only as a programme but also as an ideology. The present paper found that differently abled students are facing lots of problems in physical access to buildings, curriculum adaptation and accommodation, teaching, learning and assessment. The management of the educational institutions are not giving special focus on the disabled students like providing separate toilet, learning accessories and materials, and secure accommodation to them, all these creating hurdles for achieving the goal of inclusive education. The study suggests that the school authority should take individual initiative from their side to implement programmes of inclusive education for differently-abled children to moderate disabilities in their classrooms and the schools have to give special focus on infrastructure, curriculum structure, teaching methodology, teachers training and evaluation procedures that can be adapted to suit children with special needs. The government at centre and state level should take appropriate policy measures for removing all obstacles of differently-abled school going children and ensure inclusive education for all in each and every school of India.

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**Cognitive Functioning, Adjustment and Academic
Achievement of Visually Impaired Children
Studying in Special Schools and Integrated
Settings**

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Introduction

In the present day society, the realization is growing that the rehabilitation of the visually impaired is unthinkable without education. This calls for a constant re-examination of the practices in the field of education for the Visually Impaired. As a consequence, many innovative measures are being suggested and introduced. One such innovation is what is often termed as Integrated Education i.e. educating visually impaired children along with sighted children. While this practice gained popularity in several developed countries, its acceptance and effective implementation in India and other developing countries have been rather slow. It is interesting to note that this special programme of education for the visually impaired has been given different labels. Educating 'handicapped' and 'non-handicapped' together is described as 'integration' in the United Kingdom, 'mainstreaming' in the United States of America, 'normalisation' in Canada and the Scandinavian countries and 'inclusive education' in India and other countries at present. The objective of this programme is, however, transcendental to give the handicapped an opportunity of 'self-fulfillment' and 'uninhibited' participation in everyday activities. The Snowdon Working Party of the United Kingdom describes the practice in the following words: "Integration

for the disabled means a thousand things. It means the absence of segregation. It means social acceptance. It means being able to be treated like everybody else. It means the right to work, to go to cinemas, to enjoy outdoor sport, to have a family life and a social life and love life, to contribute materially to the community, to have the usual choices of association, movement and activity, to go on holiday to the usual places, to be educated up to university level with one's unhandicapped peers, to travel without fuss on public transport.....”

It is presumed that in integrated settings disabled learners develop to their optimum level mentally, physically, socially, emotionally, and academically as compared to their counterparts who study in segregated settings i.e. in special schools. The National Policy on Education (1986) therefore, lays special emphasis to integrate the physically and mentally handicapped in general community as equal partners. The National Policy on Education (1986) has envisaged that whenever it is feasible the education of the children with motor handicaps and other mild disabilities will be common with that of others. The National Council of Educational Research and Training (NCERT) has undertaken the responsibility of integration of disabled children in normal schools under the scheme of Integrated Education for Disabled Children. The growing importance of education of the disabled children has resulted in the inception of special education as an independent discipline. This has offered a new area of research to the researchers in the field of education in India.

Very few studies are available to evaluate the efficacy of integrated settings. The Council for Social Development (1982) has critically evaluated the centrally sponsored scheme of Integrated Education for Disabled Children and suggested for proper implementation of the scheme. De Noronha (1985) compared integration with segregation and concluded that apart from exorbitant cost of main streaming residential schools, students in integrated programme achieve more academically, physically and socially.

Review of related literature in this area reveals nonavailability of comprehensive studies with regard to educational, mental and psychosocial developments of visually impaired children studying in special schools as

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compared to their counterparts studying in integrated settings. Thus, the need of the present study is to investigate empirically the effect of integrated settings on cognitive functioning, adjustment and academic achievement of visually impaired children.

Objectives of the Study

The following are the objectives of the present study

1. To study the independent effect of school setting (special schools vs integrated settings) on cognitive functioning of visually impaired children.
2. To study the independent effect of sex on cognitive functioning of visually impaired children.
3. To study the interactive effect of school setting (special schools vs integrated settings) and sex on cognitive functioning of visually impaired children.
4. To study the independent effect of school setting (special schools vs integrated settings) on adjustment (emotional, social and educational) of visually impaired children.
5. To study the independent effect of sex on adjustment (emotional, social and educational) of visually impaired children.
6. To study the interactive effect of school setting (special schools vs integrated settings) and sex on adjustment (emotional, social and educational) of visually impaired children.
7. To study the independent effect of school setting (special schools vs integrated settings) on academic achievement of visually impaired children.
8. To study the independent effect of sex on academic achievement of visually impaired children.
9. To study the interactive effect of school settings (special schools vs integrated settings) and sex on academic achievement of visually impaired children.

Hypotheses of the Study

The following are the hypotheses of the study

1. There exists significant independent effect of school setting on cognitive functioning of visually impaired children.
2. There exists significant independent effect of sex on cognitive functioning of visually impaired children.

3. There exists significant interactive effect of school setting and sex on cognitive functioning of visually impaired children.
4. There exists significant independent effect of school setting on adjustment of visually impaired children.
5. There exists significant independent effect of sex on adjustment of visually impaired children.
6. There exists significant interactive effect of school setting and sex on adjustment of visually impaired children.
7. There exists significant independent effect of school setting on academic achievement of visually impaired children.
8. There exists significant independent effect of sex on academic achievement of visually impaired children.
9. There exists significant interactive effect of school setting and sex on academic achievement of visually impaired children.

Method

The research method used in the present study is Causal Comparative method. Since the present study has been designed to study both independent and interactive effects of independent variables such as school setting and sex on dependent variables such as cognitive functioning, adjustment and academic achievement of visually impaired children, so Causal-Comparative method was employed. Employing causal-comparative method, the cognitive functioning, adjustment and academic achievement of visually impaired children belonging to both the sex, and studying in special schools and integrated settings have been compared.

Sample

The sample consisted of 120 visually impaired children studying in Classes VI to VIII in special schools and integrated settings of Odisha. The sample was selected following multi-staged sampling technique. In the first phase, all the special schools and integrated settings imparting education of the visually impaired children in the state of Orissa were listed out separately. Out of the total number of schools, four special schools and ten integrated settings were selected randomly using Table of Random Number (Fisher and Yates, 1963).

In the second phase, all the visually impaired children studying in classes from VI to VIII in those sample special schools and integrated settings

were listed out. From each special school, fifteen visually impaired children were selected randomly. Similarly, six visually impaired children studying in those sample integrated settings were selected randomly.

Thus, the sample of the present study consisted of 120 visually impaired children, out of which sixty were selected from special schools and sixty were selected from integrated settings. The sample was selected so carefully that it consisted of equal number of male and female children. Therefore, the sample of the study consisted of 60 boys and 60 girls out of which 30 each were studying in special schools and integrated settings.

Tools Used

In order to collect data from the following tools were used.

- i. Cognitive Functioning Test developed by the investigators.
- ii. Adjustment Inventory for School Students of Sinha and Singh (1983) (adapted and translated into Oriya by the investigators).
- iii. Total marks secured by each visually impaired child under study in the last three consecutive annual examinations were collected from the school records and were averaged for academic achievement score of each child.

Main Findings

A. Findings Based on the Independent and Interactive Effects of School Setting (Special Schools vs Integrated Settings) and Sex (Boys vs Girls) on Cognitive Functioning of Visually Impaired Children

1. There found independent effect of school setting (special schools vs integrated settings) on cognitive functioning of visually impaired children. It was found that visually impaired children studying in integrated settings achieved significantly better scores on cognitive functioning test in comparison to their counterparts studying in special schools.
2. There found no significant difference between visually impaired boys and visually impaired girls on the test of cognitive functioning. Both visually impaired boys and visually impaired girls performed in similar line on the cognitive functioning test.
3. There found no interactive effect of school setting (special schools vs integrated settings) and sex (boys vs girls) on cognitive functioning of visually impaired children. It was found that both

school setting and sex did not have any significant interactive effect on the cognitive functioning of visually impaired children.

B. Findings Based on the Independent and Interactive Effects of School Setting (Special Schools vs Integrated Settings) and Sex (Boys vs Girls) on Adjustment of Visually Impaired Children

1. There found significant independent effect of school setting on social, emotional and educational adjustment of visually impaired children. Visually impaired children studying in integrated settings were better adjusted socially, emotionally and educationally than their counterparts studying in special schools.
2. There was significant difference between visually impaired boys and visually impaired girls on social, emotional and educational adjustment. It was found that visually impaired boys were better adjusted as compared to visually impaired girls.
3. There found no significant interactive effect of school setting (special schools vs integrated settings) and sex (boys vs girls) on social, emotional and educational adjustment of visually impaired children. It was found that school setting and sex did not have any significant interactive effect on adjustment of visually impaired children.

C. Findings Based on the Independent and Interactive Effects of School Setting (Special Schools vs Integrated Settings) and Sex (Boys vs Girls) on Emotional Adjustment of Visually Impaired Children

1. There found significant independent effect of school setting (special schools vs integrated settings) on emotional adjustment of visually impaired children. It was found that visually impaired children studying in integrated settings were emotionally better adjusted than their counterparts studying in special schools.
2. A significant independent effect of sex on emotional adjustment has been noticed among visually impaired children. It was found that visually impaired boys were emotionally better adjusted than visually impaired girls.
3. There found no significant interactive effect of school setting (special schools vs integrated settings) and sex (boys vs girls) on emotional adjustment of visually impaired children. School setting and sex did not have any significant interactive effect on emotional adjustment of visually impaired children.

D. Findings Based on the Independent and Interactive Effects of School Setting (Special Schools vs Integrated Settings) and Sex (Boys vs Girls) on Social Adjustment of Visually Impaired Children

1. There was significant independent effect of school setting (special schools vs integrated settings) on social adjustment of visually impaired children. It was found that visually impaired children studying in integrated settings were socially better adjusted than their counterparts studying in special schools.
2. There found significant independent effect of sex (boys vs girls) on social adjustment of visually impaired children. It was found that visually impaired boys were socially better adjusted than visually impaired girls.
3. There found no significant interactive effect of school setting (special schools vs integrated settings) and sex (boys vs girls) on social adjustment of visually impaired children. It was found that both school setting and sex did not have any significant interactive effect on social adjustment of visually impaired children.

E. Findings Based on the Independent and Interactive Effects of School Setting (Special Schools vs Integrated Settings) and Sex (Boys vs Girls) on Educational Adjustment of Visually Impaired Children

1. There found significant independent effect of school setting (special schools vs integrated settings) on educational adjustment of visually impaired children. It showed that visually impaired children studying in integrated settings were educationally better adjusted than their counterparts studying in special schools.
2. There found significant independent effect of sex on educational adjustment of visually impaired children. It was found that visually impaired boys were educationally better adjusted than visually impaired girls.
3. There found no significant interactive effect of school setting (special schools vs integrated settings) and sex (boys vs girls) on educational adjustment of visually impaired children. School setting and sex did not have any significant interactive effect on educational adjustment of visually impaired children.

F. Findings Based on the Independent and Interactive Effects of School Setting (Special Schools vs Integrated Settings) and Sex (Boys vs Girls) on Academic Achievement of Visually Impaired Children

1. There found significant independent effect of school setting (special schools vs integrated settings) on academic achievement of visually impaired children. It was found that academic achievement of visually impaired children studying in integrated settings was better than their counterparts studying in special schools.
2. There found no significant independent effect of sex on academic achievement of visually impaired children. It was found that both visually impaired boys and visually impaired girls performed in the similar line on academic achievement.
3. There found no interactive effect of school setting (special schools vs integrated settings) and sex (boys vs girls) on academic achievement of visually impaired children. It was found that school setting and sex did not have any interactive effect on academic achievement of visually impaired children.

Educational Implications

Each and every child has right to receive education and to contribute to the progress and prosperity of mankind. Our efforts should be to find out 'children at risk' and normalize their life and education. Universal Declaration of Human Rights -1984 (Reported in Levin, 2002) proclaims that everyone has right to education.

On the basis of the findings of the present study, it is postulated that a child with visual impairment who can be educated in general schools with integrated settings needs to be educated there only. A visually impaired child, who is placed in special school initially, be shifted to regular school when he/she develops communication skills, daily living skills and basic academic skills. The World Conference on Special Needs Education-The Salamanca Statement reaffirms education for all and recognizes the necessity and urgency of providing education to disabled children with visual impairment in the regular education system.

All educational policies at different levels should stipulate that a child with visual impairment should attend the nearby school, the school that he/she

would have been attending if he/she did not have any disability. In exceptional case, special schools may meet educational needs of the visually impaired child. In these special schools, however, the child's education should not be entirely segregated. Part time attendance in regular schools should be encouraged. Special attentions need to be given to the varied needs of visually impaired children having multiple disabilities. Appropriate communications arrangements should be made in special schools and integrated settings.

Child centered approach ensuring the successful schooling of visually impaired may be emphasized. A flexible system, responsible for fuller development and taking care of general and special educational needs of visually impaired children need to be developed. Trained resource teachers need to be available in each and every general school.

It may be remembered that visual functioning is more important than visual acuity. Programmes for increasing visual efficiency and use of low vision aids are to be encouraged in integrated settings.

Due to lack of vision, visually impaired children are experientially retarded and their mobility is restricted. In integrated settings, it is recommended that they may be exposed to various auditory, tactual and gustatory experiences so as to enable them to utilise full of their remaining sense organs. Attempt should also be made to ensure their free movement in the schools.

Education of the visually impaired girls appears to be more neglected. Due to sex stereotype in the society, a visually impaired girl often remains confined to the four walls of her house throughout her life. In this situation, she confronts either indifference or over-protectiveness. Furthermore, a visually impaired child belonging to a lower caste may, at times, face discrimination in the matter of educational opportunities.

Often parents are more interested in schooling of their visually impaired sons and less interested on visually impaired daughters. Some parents consider the birth of a visually impaired child to them as a curse for their immoral actions. On account of these socio-cultural beliefs and myths,

visually impaired girls in schools are likely to be much lower. Furthermore, these socio-cultural beliefs and myths of parents result in overprotection and rejection of their visually impaired daughters, for which they might face adjustment problems in the schools. So, it is recommended that suitable guidance and counselling programme may be planned for the education of parents of visually impaired children.

Having accepted the goal of universalisation of elementary education for all children, it is imperative that visually impaired children do not get excluded from its purview. The national policies and resolutions adopted by the Government of India in the last three decades have repeatedly stressed the need of extending educational benefits to visually impaired children. Judged from the point of view of performance, their achievement too has not been less satisfactory than the others. Visually impaired children, therefore, have right to education like other children in the country. Current research brings out the fact that they have potentialities to cognize things, achieve academically and adjust successfully only in appropriate educational setting i.e. integrated settings. So, it is recommended that steps may be taken to strengthen integrated setting by improving its quality.

It is necessary for a media campaign for the parents for highlighting the relevance of education for the visually impaired, and availability of service facilities and opportunities of education in the community.

Visually impaired children studying in integrated settings performed better than those studying in special schools on adjustment inventory. From the findings of the present study, it appears that social interaction is more important than the school setting. Regardless of the programme in which a visually impaired child happens to be placed, his/her progress needs to be largely determined by the opportunities for optimum social interaction ensuring cognitive, psycho-social and educational development.

Visually impaired children in villages and towns may be encouraged to attend schools along with the sighted children in integrated settings. Incentives for visually impaired girls need to be provided by the State Government. Besides this, interaction between the sighted and the visually impaired children needs to be expanded and intensified. Therefore, co-

curricular activities, Work Experience and National Service Scheme required to be gainfully utilized.

Implementation of National Policy on Education with regard to the integrated education for the visually impaired children needs to be augmented, evaluated and followed up continuously. Steps need to be taken for allocation of more finance in national budget on education in this regard. Information regarding different types of disabled children including visually impaired children benefited under the scheme of IEDC, aids and equipments supplied to them for effective integration in common schools etc. may be carefully maintained. Proper linkage need to be established with the Ministry of Education, Ministry of Welfare, Ministry of Women and Child Development and Ministry of Health for successful implementation of the scheme of integrated education for the visually impaired children. The NGOs and semi public agencies may be roped in. Special efforts may be made to elicit community support for education of all visually impaired children.

Lastly, it is recommended that the problem of educating the visually impaired children needs much research following qualitative and quantitative paradigms. By doing these, the country would not only free itself from a social obligation but also make an investment for a brighter tomorrow by educating the visually impaired children.

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Problems Faced by Special Education Teachers of Mentally Retarded Children: A Study

Rajalakshmi Das

Introduction

A Mentally Retarded child may be markedly different from the children next door, in some ways. Teacher working with those children face a number of problems. These problems include planning and organization of the educational services within the school, teaching and training of mentally retarded children, guidance and counseling provided to the parents, community and mentally retarded children to cope with psychological problem.

A voluntary organization named as “Jewel International” was established at Bhubaneswar in the year 1977 to perform social activities and conduct Mass Education Programmes. The organization was registered under the Societies Registration Act No. XXI of 1860, by the Register of Societies, Cuttack, on 27th July, 1977. In the year 1985, the organization decided to work for the welfare of the Mentally Retarded Children. The same resulted in the establishment of an institution named Chetana Institute for the Mentally Handicapped (CIMH) in June, 1986.

The Bhubaneswar Branch of Chetana Institute of Mentally Handicapped provides day care facility and hostel facility to Mentally Retarded Children. There are 113 students enrolled in residential programme. For the purpose of education and training, the students are grouped into five classes based on their age, functional ability and the level of mental retardation.

Reaching the Unreached: The State of Differently Abled Learners

Review of Related Studies

The major findings of the study conducted by **France et.al (2001)** revealed that techniques such as constant time delay, peer tutoring, time trials, and direct instruction proved beneficial in improving mathematics skills of Mentally Retarded Children. Further, students with mental retardation learned to employ cognitive strategies successfully when these techniques were included. The study conducted by **Karen et al. (2003)** revealed that the most common problems of special education teachers were related to insufficient curricular material, handling student behaviour and obstacles in collaboration with general educators. **Reddy (2004)** found that the normal schools and special schools were not adequately equipped with the required infrastructure facilities needed for the education of children with disabilities, thereby causing stress and strain to the teachers. The study conducted by **Reddy (2006)** revealed that organizational structure, professional training, interpersonal and professional interactions, instructional assignments and arrangements were the major sources of stress for special education teachers working in the schools for different abilities.

The major findings of the study conducted by **Jain and Gunthey (2007)** was that in order to provide and expand a systematic vocational training and placement for the persons with mentally retardation, there is a need to pay attention to vocational climate, full complement of vocational phases in the vocational training centres, more beneficial functional training for employment success in the special schools. **Balabaskar (2010)** found that (i) special educators working for children with mental retardation experienced more occupational stress when compared to other groups of special educators; (ii) “Role ambiguity,” “Role Conflict” and “Intrinsic Improvement” domains were reported by special educators working with the mentally retarded was a highly significant factor for occupational stress; (iii) special educators working with the mentally retarded and physically handicapped reported ‘responsibility for persons’ as a central factor for occupational stress, when compared to others.

Hussain, Jindal and Kanwar (2010) found that behavioural problems among autistics were significantly higher than the mentally challenged and the social maturity among the mentally challenged were significantly better

than the autistic children. **Lal (2010)** reported that intellectual disability is a preferred term to describe the disability which till recently been refereed as mental retardation. It describes the same population who were diagnosed with mental retardation. The findings of the study conducted by **Swarnakumari and Turin Martina (2010)** were: (i) the mentally retarded children in the age group of 5-9 years were more interested in indoor games and activities, but female children with mental retardation were more interested in craft work. Basically girls were more interested in Art Craft work compared to the boys. **Leelavathi (2012)** found that a higher level of achievement in learning red and yellow colour was seen in students of experimental group who had received competitive based play way method of instructions than control group who had received conventional method of instructions. Review of related studies reveal that hardly any study has been conducted on problems of teachers of Mentally Retarded Children of Chetana Institute for the Mentally Handicapped. Hence the study was undertaken.

Objectives of the Study

1. To study the problems faced by Special Education Teachers of Mentally Retarded Children of Chetana Institute for the Mentally Handicapped with regard to:
 - Planning and organization of different curricular and co-curricular activities.
 - Teaching and Training
 - Guidance and counseling
2. To study the problems of Head of the Institution regarding the management of the institution.
3. To suggest measures to improve the facilities for mentally retarded children of Chetana Institute for the Mentally Handicapped.

Method

Case study method was used in the present study.

Sample

The sample of the study was selected purposively. Chetana Institute for Mentally Handicapped, Bhubaneswar was taken as the institution for the study. The Head of the Institution and all teachers providing instruction in

secondary classes of the institute were taken for the study. The sample consisted of Head of the Institution and 9 teachers of the Institute.

Tools Used

The following tools were developed and used by the investigator for the collection of data:

1. Interview Schedule for Head of the Institution
2. Questionnaire for Teachers

Main Findings

The following were the main findings of the study:

- Almost all teachers (100 per cent) and Head of institution mentioned that psychological tests were available in their school to identify the mentally retarded children.
- Head of institution and almost all teachers (100 per cent) stated that they had adequate infrastructural facilities like classrooms, library, hostel, laboratory, play ground, games and sports materials, and computer facilities to teach mentally retarded children with different degrees of disabilities.
- Almost all teachers (100 per cent) stated that mentally retarded children showed different types of behaviour such as violent behaviour, destructive behaviour, lack of problem solving skills, inability to learn and lack of life skills.
- Mentally retarded children had problems such as adjustment problems, low self-esteem, intolerance, aggressiveness etc.
- Chetana Institute of Mentally Retarded, Bhubaneswar had flexible arrangements to teach the mentally retarded children.
- Head of institution stated that they had collaboration with speech therapist, occupational therapist, psychologists, experts of special education and social workers. Furthermore, more than 43 per cent of teachers stated that they had collaboration with social workers and speech therapists and psychologists for the benefit of Mentally Retarded Children...
- Almost all teachers (100 per cent) had organized co-curricular activities such as song, music, dance, one act play, drawing, painting, indoor games dance etc. for the mentally retarded children.
- All teachers (100 per cent) stated that they had competency to organize suitable cultural activities for mentally retarded children.

- Conference, seminars, workshops, and training programmes were organized for the teachers working in Chetana Institute of Mentally Handicapped...
- More than 20 per cent teachers of the school had attended seminar, dance therapy and computer training programmes. However, all teachers had participated in the programme of curriculum development.
- The institute had organized parent teacher meeting in planning and organization of educational programmes for mentally retarded children. However, all parents of mentally retarded children were not involved in the educational programmes.
- Head of the Institution reported that the parents sometime created problems in the school due to their illiteracy, ignorance and lack of awareness of the problems of mentally retarded children.
- There was provision of maintenance of Cumulative Records and Academic Records in the school.
- The Chetana Institute for Mentally Handicapped at secondary level promotes a better learning programmes for mentally retarded children like social skill education, work based learning, life skill education and vocational training
- Head of the institution stated that special B.Ed. training course is enough for the development of competencies and skill of the teachers to handle mentally retarded children. Furthermore, teachers need in-service training like orientation course and refresher course to handle mentally retarded children.
- Head of the institution stated that teachers had the skills for the development of Individual Educational Programmes for mentally retarded children, such as perceptual skills, motor co-ordination, cognitive skills, meta-cognitive skills, social skills, personal skills and vocational skill training.
- The institute organized Individual Educational Programme, development of life skills, development of social skills, and vocational training programmes for teachers.
- Almost all teachers (100 per cent) and head of the institution mentioned that they followed cooperative learning, peer tutoring, group learning, play way method, task analysis and story-telling

methods, to teach the mentally retarded children. However, 33 per cent teachers reported that they followed teleconferencing and individual training programme to teach the mentally retarded children. 80 per cent teachers mentioned that they faced problems in using hearing aids, appliances and other assistive devices.

- About 60 per cent of teachers and the head of institution mentioned that they had knowledge and expertise in group counseling techniques.
- Though invited, all community members did not participate in the educational programme of mentally retarded children.
- The teachers and Head of the Institution had the skills to provide community guidance and counseling to parents and other community members develop positive attitude towards mentally retarded children.
- About 56 per cent of teachers faced problems due to non-completion of the task by students, lack of concentration and classroom disturbances and undesirable behaviour by the mentally retarded children. About 44 per cent teachers and head of the institution also mentioned that they faced problems in school due to illiteracy and ignorance of the parents.
- The Head of the institution and the teachers suggested for the Integration of ICT in the classroom, improvement of individual training programme, organization of vocational training and cultural activities, inclusive education, early intervention and no segregation to improve the status of Chetana Institute of Mentally Retarded Children.

Educational Implications

On the basis of findings, the following suggestions may be given to solve the problems of teachers of Mentally Retarded Children of Chetana Institute for Mentally Handicapped, Bhubaneswar.

- Orientation programme and refresher courses need to be organised regularly for teachers working in this institution.
- Teachers need to develop proficiency to use multisensory materials for mentally retarded children.
- Adequate information on career and vocational guidance need to be provided to the teachers.

- Teachers need to develop expertise in group counseling.
- Adequate Reference books need to be available in the Library...
- Financial support and community support may be provided for the improvement of the institution.

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Teacher Preparation for Inclusive Education in the Context of Education of Children with Special Needs: Past, Present and Future

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Introduction

Inclusive education has been internationally recognized as a philosophy for attaining equity, justice and quality education for all children, especially those who have been traditionally excluded from mainstream education for reasons of disability, ethnicity, gender or other characteristics. The development of inclusive education demands wide-ranging changes involving the whole of the education system. It is important, therefore, that the move towards inclusive education is not undertaken in isolation. It needs to be seen as a means of improving the quality of education for all learners in order to avoid the danger of inclusion being seen as something that does not concern the wider education system. Inclusive education cannot become practice in the absence of adequate teaching and learning strategies, and committed and competent teachers. Both learners and teachers are constantly faced with keeping the right balance between 'common' requirements and the diverse needs of learners.

Hence, teachers need training about inclusive principles and the basics of disability to ensure that their attitudes and approaches do not prevent children with special needs from gaining equal access to the curriculum. Training should be ongoing provided in short courses (or modules) and should take place within a local school environment preferably their own

school. Training should take place at both pre-service and in-service stages. The effective implementation of inclusive education depends on the high quality of professional preparation of teachers at pre and in-service levels to equip them for and update their knowledge and skill in meeting the needs and aspirations of a diverse school population. Preparation of special teachers in India has many problems which need to be addressed. Winter (2006) suggests that universities re-evaluate their teacher preparation courses to ensure that they are meeting the needs of preparing teachers for more inclusive schooling practices. Educating students with disabilities alongside their peers in general education classrooms has increased dramatically over the past decades, affecting all aspects of schooling (Ainscow & César, 2006; Cook, Cameron, & Tankersley, 2007).

Currently, many children with special needs are instructed in separate educational settings, but professionals and parents are calling for more equitable inclusive education for these children. It is imperative that inclusion in schools (including children with special needs with nondisabled peers in educational settings) takes place to promote equity of students with disabilities in society's settings. To this end, Indian schools should work collaboratively with parents and other community leaders to prepare productive citizens. This can generate an understanding of an inclusive society that can support the social value of equity and to minimize the stigma of disability for students who are served in separate special schools. Since school is one of the main contributors to the society, it is important to develop a knowledge, and understanding of the existence of the term Inclusion or, inclusive education in Indian society. In addition to many other requirements, implementation of inclusive education immensely requires positive attitudes towards inclusion and disability among teachers, administrators and policy planners. However, negative attitudes are still persisting among these in many cases. This is adversely affecting inclusive education scenario in India.

Pre-service preparation is a critical factor in helping teachers formulate their beliefs about inclusion as well as affecting their ability to teach students with special needs. Cook (2002) stated: If pre-service teachers do not possess the knowledge and skills to implement inclusion appropriately, the included students with disabilities in their future classes will certainly

have diminished opportunities to attain desired outcomes regardless of teachers' attitudes toward inclusive reforms. Without a coherent plan for teacher training in the educational needs of children with special needs, attempts to include these children in the general education classroom become extremely difficult. In order for inclusion to be considered successful it is important that teachers are prepared and have the confidence and the skills to teach in inclusive settings by providing instruction to every student (winter, 2006).

Inclusive Education in the Context of CWSN

The implementation of inclusion into classrooms today requires a lot of time, energy, and commitment on the part of the teachers, administration, and parents. In an inclusive education system all teachers need to have positive attitudes towards learner diversity and an understanding of inclusive practices, developed through both initial training and on-going processes of professional development. For this, the government of India is constitutionally committed to ensuring the right of every child to basic education. The Government of India has created numerous policies on special education since the country's independence in 1947. The Kothari Commission (1966) highlighted the importance of educating children with disabilities during the post-independence period (Pandey, 2006). In 1980s the Ministry of Welfare, Govt. of India, realized the crucial need of an institution to monitor and regulate the HRD programmes in the field of disability rehabilitation. The National Policy on Education, 1986 (NPE, 1986), and the Programmeme of Action (1992) stresses the need for integrating children with special needs with other groups. The Government of India implemented the District Primary Education Project (DPEP) in 1994–95. In late 90s (i.e. in 1997) the philosophy of inclusive education is added in District Primary Education Programmeme (DPEP). A zero rejection policy has been adopted under SSA, which ensures that every Child with Special Needs (CWSN), irrespective of the kind, category and degree of disability, is provided meaningful and quality education. National Curriculum Framework (NCF), 2005 has laid down a clear context of inclusive education. In 2005, the Ministry of Human Resource Development implemented a National Action Plan for the inclusion of children with special needs.

Policies on Teacher Preparation in the Context of CWSN

It is clear that education policy in India has gradually increased the focus on children with special needs, and that inclusive education in regular schools has become a primary policy objective. The Constitution of India (26 November, 1949), clearly states in the Preamble that everyone has the right to equality of status and of opportunity. The Article 45 & (86th Amendment) Act, 2002 makes it mandatory for the government to provide free and compulsory education to “all children of the age of 6-14 years”, with its preamble clarifying that “all” includes children with special needs as well. The National Policy on Education, 1986 (NPE, 1986), and the Programme of Action (1992), Integrated Education for Disabled Children (IEDC) scheme, District Primary Education Programme (DPEP) & National Curriculum Framework, 2005 stresses the need for integrating the physically and mentally handicapped children with general community as equal partners, to prepare them for normal growth and to face life with courage and confidence”.

The Rehabilitation Council of India Act, 1992 initiated a training programme for the development of professionals to respond to the needs of students with disabilities. The National Policy for Persons with Disability, 2006, which attempts to clarify the framework under which the state, civil society and private sector must operate in order to ensure a dignified life for persons with disability and support for their caretakers.

However, there is not enough research or policy direction on how this can be achieved. For any such change to occur at the national level, it is critical that the peak teacher education organisations (e.g. the National Council for Teacher Education and University Grants Commission) demonstrate an understanding that providing high-quality education to children with disabilities needs to be seen as an issue of high-quality education provided to all, rather than one of education for some children. Currently, graduate teachers completing teacher education programmes are exposed to education of children with disabilities through one or two theory-based subjects. Anecdotal evidence has suggested that such subjects are offered as optional subjects (often with very poor enrolments). This situation is perhaps an indication that within teacher education programmes, education of children with disabilities is not seen as the primary responsibility of the

regular school teacher. One can argue that most teacher education programmes unintentionally are preparing teachers for exclusion rather than inclusion.

Present Status

The Government of India has demonstrated that it is committed to equalizing educational opportunities for all children, including those with disabilities. Inclusive education is a new approach towards educating the children with special needs with that of normal ones within the same roof. This is possible only in flexible education system that assimilates the needs of diverse range of learners. In this regard, the government is committed to provide education through mainstream schools for children with disabilities in accordance with PWD ACT, 1995 and all the schools in the country will be made disabled friendly by 2020. Enrolment and retention of all children with disabilities in the mainstream education system should be ensured providing need based educational and other support to these children in order to develop their learning and abilities. The special interventions and strategies like pedagogic improvement and adoption of child centered practices are focused on the children with disabilities. Different kinds of teacher training programmes are being implemented under SSA to orient elementary teachers towards Inclusive Education. Most recent advancement is the Right of Children for Free and Compulsory Education (2009) which guarantees right to free and compulsory education to all children between ages six to fourteen. One of the earliest formal initiatives undertaken by the GOI was the Integrated Education for Disabled Children (IEDC) scheme of 1974 (NCERT, 2011). The objectives of this scheme included the retention of children with disabilities in the regular school system, pre-school training for children with disabilities and 100% financial assistance as per pre-scribed norms for education of children with disabilities. This implied that the scheme would provide financial assistance to schools to cover expenses relating to educating students with disabilities in their mainstream classrooms.

Challenges

Lack of adequate teacher preparation has been identified as a major barrier to inclusive education in India. In India teacher training in special education is imparted through both face-to-face and distance mode. The teacher training course curriculum of general pre-service training

programmes neither fully equips the teachers and teacher educators to deal with the CWSN nor it equip them to manage the mild and moderately disabled children in general classrooms. The separate teacher education programmes for regular and special education do not equip teachers with an integrated knowledge of the expected roles, functions and responsibilities to meet the diversity of learning needs in the classroom.

Today, special education teacher preparation has lost focus, and there is enormous heterogeneity among programmes (Goe, 2006). Redefining special education teacher preparation is difficult, especially when the need to do so occurs as serious questions are being raised about the effectiveness of teacher education generally, and when, for students with disabilities, successful teaching has been redefined to mean satisfactory progress in the general education curriculum.

Teachers are faced with the everyday challenges of having to teach to several different learning styles. The lack of additional support staff and resources in the classroom make it difficult to ensure that each child's individual needs are being met. Teachers who support inclusion identified critical problems with its implementation. They are feeling ill equipped to teach in an inclusive setting because they feel that they did not receive appropriate training or professional development to properly implement inclusion into their classrooms. According to Smith, Tyler, and Skow (2003), many general and special education teachers feel that they were not prepared to plan and make adaptations for students with disabilities. Researchers have found that inclusion is inadequately addressed and often neglected in teacher training. The uniqueness of special education was not being achieved in most inclusive settings. Because general educators are not trained to provide differentiated instructional methods or are able to cope with the needs of diverse learners (Cook, 2002). In a comprehensive evaluation of inclusive settings, Cook (2002) concluded that, "there was almost no specific, directed, individualized, intensive, or remedial instruction for students who were clearly deficient academically".

Future Direction

Currently, political pressures on teachers and schools to provide high-quality education for all students have intensified as a result of federal

mandates and widespread criticism of teachers and their preparation. Pre-service programmes at degree and post-graduate levels are necessary to improve the quality of teacher training and to promote research and development activities in the field of inclusive education. Periodic evaluation of the training programmes and constant updating to meet the challenges of changing trends in special education should be part of the planning of teacher preparation. All universities should have a department of special education to promote education of children with special needs. In order to build human resources in the field of education, training must be done both at the pre-service and in-service levels. Ideally, inclusive education should be a compulsory subject for all teacher candidates and an integral part of teacher training curricula. Fundamental knowledge and skills of inclusive education, such as understanding needs and abilities of children with special needs and pedagogic skills such as instructional accommodation and activity differentiation, should be provided widely to teacher candidates.

In-service training includes professional development for teachers who are already working in the classroom. In addition to developing the skills of professionals before entering the workforce, it is essential that teachers already teaching be provided skills and techniques for inclusive education. Keeping in view the diverse needs of children with special needs and the different models of service delivery systems, there is a need for reorienting the existing pre-service programmes in general education from pre-school to university levels and to plan in-service and pre-service programmes in special education at all levels. To implement the current concept of inclusive education, teachers should have in-service training on disabilities, and future training courses should include education of children with special needs.

The curriculum for each of the above programmes should be carefully developed by an expert group which includes practising special teachers. The feedback from the teachers is imperative in making the correct decisions about the content. Train teachers by equipping them with the appropriate skills and materials to teach diverse student populations and meet the diverse learning needs of different categories of learners through methods such as professional development at the school level, pre-service

training about inclusion, and instruction attentive to the development and strengths of the individual learner. Support the strategic role of tertiary education in the pre-service and professional training of teachers on inclusive education practices through, inter alia, the provision of adequate resources. Encourage innovative research in teaching and learning processes related to inclusive education. Equip school administrators with the skills to respond effectively to the diverse needs of all learners and promote inclusive education in their schools. Integrate knowledge about the benefits of inclusive education into initial training programmes for student teachers in colleges and universities. A need is being felt for a new paradigm for the preparation of teachers. There exists the need for teacher educators of regular and special education at all levels of teacher education to develop a "whole faculty approach" in facilitating an inclusive pre-service teacher education curriculum embedded across all discipline areas (Sexena, 2008).

Focusing on the Pre-school and Primary School Levels

The earlier life that children with special needs receive educational support, the more successful their schooling will be in later years, and the higher their quality of life as adults. If possible, inclusive strategies should begin at the preschool level (age 3 to 6) in order to assist children earlier in life. In addition to the clear benefits of early intervention, preschool and primary school are logical starting points due to feasibility of application and implementation in the field. Usually, preschool and primary school teachers receive general training in the key subjects of language, mathematics, and natural and social sciences, while training for secondary teachers requires more in-depth specialized knowledge of a variety of specific academic disciplines. Preschool and primary school children are usually taught by a single teacher or a small group of teachers and teaching assistants. Students therefore spend more time with their teacher and have a greater number of interactions with that one instructor. Children at junior and senior secondary levels receive instruction from a much greater variety of teachers. Therefore, in order to have a wider reach, pre-service teacher training programmes for inclusive education should target preschool and primary school teachers first before expanding to higher educational levels.

Conclusion

Teacher preparation is an essential element to cater the needs of children with special needs and it is vital for successful inclusion. Preparing teachers

with essential knowledge and skills for inclusive education requires the commitment of all actors. When desired policies are not yet in place in a country, these actors should explore different and alternative approaches to achieve the ultimate goal of providing quality education for all children. Preparing teachers does not simply mean providing prospective teachers with inclusive education skills; it is important to provide training and support for existing teachers as well. Building the capacity for inclusive education must include awareness raising activities as well as integrated pre-service and in-service teacher training programmes to ensure that teachers are aware, ready and willing to bring inclusive education into action. To improve special education teacher quality and preparation, policy makers and educators must address longstanding concerns about shortages of special education teachers and the inadequate preparation of general education teachers. For inclusive education to succeed, it is vitally important that teachers, principals and other education stakeholders maintain a positive attitude towards inclusion. As the Indian school system is one of the largest in the world and number of CWSN are very high, the prevailing situation of pre-service teacher training in special education needs to be strengthened or elaborate alternative mechanism for incorporating the elements of special education in general teacher training programmes needs to found out. Clearly, special education teacher educators must rethink what makes a quality special education teacher, and that process should be informed by the field's history and by the trends in policy, service delivery, and research that have shaped special education and teacher education practice.

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Challenges Faced by Visually Impaired Students and Quality Assurance in Higher Education

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Introduction

Visual Impairments refer to Loss of Vision, even when an individual person wears corrective lenses. According to Keefe (1999), visual impairments are the reduced vision caused by Eye diseases, accidents or eye conditions present from birth. Visual impairment is categorized into the blind and the low vision. The loss of vision imposes limitations upon students. Learners with visual impairments are the heterogeneous group having different types of problems and challenges that require adequate attention in the implementation of curriculum and instructional systems in order to achieve a good academic performance. Now-a-days the number of visually impaired students is increasing in different colleges and universities. The students attend mainstream lectures (inclusive education) and are examined on the same subject content with their peers. Inclusion of blind and low vision children in mainstream education is beneficial not only to the blind and low vision child but all other students in schools because it enhances social integration (Anne, 2004). It helps to change the negative attitude and misconceptions of people have of the blind and low vision and it is an opportunity to prepare them for their future role in society. The blind and low vision children interact with other children in regular school settings –playing and sharing things and ideas. It helps to appreciate each others' strength and limitations.

The visually handicapped children face a lot of challenges in different stages of their life. Many studies have discussed the difficulties that face

the handicapped in the educational environment. Hodges and Keller (1999) made a study aimed at recognizing the extent to which students perceive the process of inclusion of handicapped students in the university. The result indicated that there were many problems that the visually impaired students faced especially in the area of transport and developing social relationships with their peers. Hougann (1999) conducted a study on identifying the challenges faced by socially handicapped students in higher education institutions. The result revealed many problems such as the absence of counseling services, few Braille printed books, lack of visual readers, the difficulty of adjustment with University life, teachers' neglect their special needs and the problem of taking examinations were the most important. Fuller et al. (2004) also studied obstacles that faced the handicapped at university. The results of the study indicated that there were many obstacles such as the fast rate of the teachers' speech during the lectures, and difficulty in participating in the discussion and answering the questions. There was a lack of suitable computer programmes. Ibrahim (2001) studied the problems of visually handicapped students in the University level. The results of the study revealed the existence of problems such as using the library, transport, difficulties in teachers' understanding about their needs. Ndururno (1993) asserts that learners with loss of sight in mainstream schools experience a number of difficulties. The learners find themselves in a strange world where they seem to be strangers among their sighted peers who in most cases are the majority and lack awareness on visual impairment. In most cases, the blind learners are largely obliged to learn by listening and occasionally by touch. According to Barraga (1993), Learners with visual loss are also faced with a problem of reading suitable textbooks and writing in Braille which is their media of reading and writing.

However, Blindness can be caused by things like genetics, infection, disease or injury. To be legally blind means that someone has vision that measures 20/200 or worse. For example, someone with 20/200 vision sees an object from 20 feet that a person with 20/200 vision is able to see from 200 feet. Becoming familiar with the challenges that blindness creates, can help sighted people understand what people with no, or severely restricted vision, face each day.

Reaching the Unreached: The State of Differently Abled Learners

Types of Challenges Faced by the Visually Impaired Children

1. **Environmental Challenges:** Pupils who are completely blind or have impaired vision usually have a difficult time navigating outside the spaces that they are accustomed to. In fact, physical movement is one of the biggest challenges for blind people, explains world Access for the blind. Traveling or merely walking down a crowded street can be challenging. Because of this, many people with low vision will prefer to travel with a sighted friend or family member when navigating unfamiliar places. Blind pupils must memorize the location of every obstacle or item in their home environment. Objects like beds, tables and chairs must not be moved without warning to prevent accidents. If a blind person lives with others, each member of the household has to be diligently about keeping walk ways clear and all items in their designated locations.
2. **Social Challenges:** Blindness can cause significant social challenges, typically because there are activities in which blind pupils cannot easily participate. Frequently, blindness impacts a person's ability to perform many job functions, which can limit their career options, according to the World Health Organization. This may adversely affect their finances and their self-esteem. Blindness may also cause difficulties when participating in activities outside of the workplace, such as sports and recreational activities. This can limit the blind person's ability to socialize and meet new people, affecting their emotional health.
3. **Technological Challenges:** Blindness can make it difficult to use the internet for research, recreation, social media and shopping. For example, someone who is blind cannot directly read the information on a web page. Total blindness can make it necessary to rely on screen reading software to have the information read as audio. This can make surfing the web a slow and cumbersome process. Instead of seeing a picture, someone who is blind must rely on a description of what the picture shows. Pupils who have very poor vision will typically need special equipment or software that can enlarge screen images, so they are easier to see. The small touch screens of many tablets and smart phones may be particularly difficult for the

visually impaired, because their small size limits how large an image can be magnified.

4. **Academic Challenges:**

(a) **Reading and Writing challenges:** Visually impaired students must learn reading, with the primary purpose to improve their knowledge, and writing skills are enhanced to reflect one's knowledge. However, reading and writing skills are the skills that involve the use of visual abilities to acquire them. Students with visual impairment experience many challenges in learning these skills. They read slower than their sighted peers as they usually categorize words at a letter level instead of a complete word level, which makes them pause frequently while reading. Moreover, students experience difficulties in sentence structures and organizing ideas in essays and their writing task tends to be as the spoken texts (Ghafri, 2015).

(b) **Listening and Speaking Challenges:** There is nearly an overall agreement among researchers that students with visual impairment do not have any serious problems associated with listening and speaking English skills. In fact, listening is the primary learning method for blind students and a strong helpful tool for visually impaired students. These students significantly rely on auditory data, so they are required to become skillful listeners to surface listening and speaking skills to analyze the incoming data including facts, figures, structures, forms and details. Speaking is also an important skill that allows them to request the information needed and even transfer the information to others (Ghafri, 2015).

(c) **Language Challenges of Visually Impaired Students:** There is lack of material in the area of second language acquisition for visually impaired learners. Specially, the blind are well prepared to learn a foreign language regarding their hearing sense, which is an essential concept of learning a second language with less or no relation to vision.

(d) **Lack of knowledge:** In visually impaired students the knowledge regarding various concepts and areas is limited. They face problems in improving their academic performance.

Lack of knowledge is a major challenge for the visual impaired students.

- (e) **Difficulty in Perception and Concept Formation:** Visually impaired children may suffer from delay in cognitive development, especially in perception and concept formation. This difficulty will prevent them from consolidating their perceptual experiences into concepts. They have to obtain information through other sensory modalities e.g. auditory, tactile, olfactory, etc. and the information obtained may be limited and confusing.
- (f) **Challenges in regular schools:** Ndinda (2005) in her study quoted the work of Saad Nagi (1965) in her disablement theory and that of International Classifications of Impairment, Disabilities and Handicaps, WHO (1980). Free movement around school is an essential part of successful school experiences. Orientation and mobility training helps students accomplish this goal. Koenig (1996) stated that such training “promotes safe, efficient, graceful, and independent movement through any environment, indoor and outdoor, familiar and unfamiliar.”

It is well known that Education is an instrument of national development. The formation of ideas (that is contemporary educational programmes) such as inclusive philosophy, integration of such ideas and interaction of persons and ideas are aspects of education geared towards national development (Umunna, 2007).

Higher education refers to a level of education that is provided by universities, vocational universities, community colleges, liberal arts colleges, institutes of technology, and other institutions such as vocational schools, and trade schools that awards academic degrees of professional certifications (Wikipedia, 2009). The aim is to provide academic excellence that would have positive impact on individuals and the global society. The higher educational institutions as the apex in the educational career are expected to play leadership role in the nation, providing people with special qualifications and motivation. They are also to equip the individual with the maximum intellectual and physical skills which he requires to be an innovative, creative, self reliant member of the society, able to cope with

the economic and cultural demands of the society. Higher education is a stepping stone as it stands to pave way to job opportunities for the graduate to enable them to contribute their quota to nation building.

Quality Assurance

The rise of initiatives aimed at promoting the internationalization and globalization of higher education, in particular the rapid development of cross border higher education have underlined an increasingly urgent need to establish robust frameworks for quality assurance and the recognition of qualifications. UNESCO's action in this area focus on providing information and capacity to empower higher education stakeholders for better informed decision-making in the new world of higher education.

This initiative aims to provide information to protect students from inadequate learning resources, low-quality provision and also provide decision-makers at the governmental and institutional levels with information and skills necessary to better navigate in the new higher education space. Following the trend in general education and the initiatives of UNESCO towards ensuring qualitative education at the tertiary level, it is solicited that these initiatives should be extended to produce for the intellectual potentials of the visually impaired and promote the overall welfare of such persons all over the globe.

The world is undergoing dramatic and unprecedented changes in the age of globalization (Philip and Todd, 1999). The knowledge and information technology revolution as well as many growing social and economic trends have changed our lifestyles. At present a country's competitiveness and development potentials depends on several factors, including availability of knowledge resources such as human capital, an incentive system to provide economic policies and institutions that permit efficient mobilization and allocation of resources, innovation in utilizing global knowledge, a modern and adequate information infrastructure and refurbishment of physical facilities, and the provision of adequate library resources in the higher educational institutions. Education at these levels plays a major role in increasing a country's development and competitiveness. Academic systems and institutions have faced pressures of increasing number of students and demographic changes, demand for accountability, reconsideration of the social and economic role of higher education.

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While all these issues need to be addressed in order to meet the educational challenges, the education of the visually impaired requires more human and material resources like personnel development, provision of talking books, optical aids, optacon, Perkins brailers, writing frame, type writers and embossed Braille machine. Another issue to be considered in the education of the visually impaired is the assurance of a conducive and serene atmosphere and a plane learning environment free from architectural barriers and environmental degradation. Adequate mobility services and devices such as guide dogs for the blinds, the laser cane, white cane, the path sounders, the sonic guide are crucial in educating the visual impaired.

In view of the challenges of education highlighted so far, it is pertinent to note that they can only be met if the peculiar problems identified in the process are given prior attention and are resolved holistically and drastically to make way for quality in our educational system.

Conclusion

Quality assurance in educating the visually impaired in different institutions of learning is fundamental to a good national outlook. Intellectual potentials of the visually impaired which are developed through higher education makes them contributors not only to the national but the global economics like their sighted counterparts of the same qualifications. The integration of the visually impaired into the higher education system will no doubt create a lot of benefits. Their contributions as scholars, lawyers, journalists, braillists and otherwise will have a lot of impact on some of the global educational problems as indentified in this paper. The visually impaired students have a lot of educational problems. Therefore, Government, (NGOs), well to do individuals and well wishers should join hands to work out modalities that will be beneficial in solving the educational needs of the visually impaired across the globe.

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Schooling Provisions for Differently Abled: Facts from Elementary Education in India

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Introduction

Over the past several decades, Government of India (GOI) along with the state/Union Territory (UT) governments has been striving to achieve the goal of Universal Elementary Education (UEE), which includes universal enrollment, universal completion, gender equality and improvement of the quality of elementary education. The renewed thrust on UEE in India, however, has been made with the implementation of the national flagship programme Sarva Siksha Abhiyan (SSA) in 2001. In subsequent period, the goal of UEE has been facilitated by the 86th Amendment Act (2002) of the Constitution that enshrined the 'Right to Education' as a Fundamental Right for all children aged between 6 – 14 years. This 'Right to Education Bill' was approved by the Parliament on 4th August, 2009, and on 26th August, 2009 it was notified as the children's Right to Free and Compulsory Education (RTE) Act.

Both the 86th Amendment of the Constitution (2002) and the RTE Act (2009) have given additional stress on the inclusion of children with special needs (CWSN) in schools, as without the inclusion of CWSN in schools, the goal of UEE cannot be achieved. Accordingly, the approach towards Inclusive Education (IE), i.e., educating children with disabilities and learning difficulties, has garnered new attention in country's elementary education policies and resources. As for example, there has been a provision of up to Rs. 3000 per child for the inclusion of children with

disabilities and learning difficulties in schools, and Rs. 1000 for the engagement of special teacher (resource teacher) for educating those children under SSA.

With the continuous efforts towards IE, India has made considerable progress in pulling disable children into schools specially belonging to vulnerable and socio-economically disadvantaged families. Now, along with efforts to include differently abled in schools and with limited public resources for social sector development in developing countries like India, one of the important, but less researched, issues is: whether India has been able to deliver schooling provisions for differently abled, or more specifically, to what extent India has been able to deliver schooling provisions for differently abled. The authors attempt to analyze this issue with the computation of a composite index. The finding of the study will be helpful for the government to identify areas where intervention is utmost necessary or more effective in attaining the goal of IE. The rest of the paper has been divided into five sections. Section 2 provides an overview of the IE in India. In section 3, discussion has been done about the data source and variables used for the analysis. The detail of the methodology has been given in section 4. Section 5 summarizes the results and discussions of the study. The final section gives concluding remarks.

Inclusive Education in India: Strategies and Growth

The role of education in economic growth and development has been extensively studied after the emergence of human capital theories in 1950s (Solow 1956, Schultz 1961, Becker 1964). Alongside, there is increasing evidence that elementary education matters for all-round growth and development especially in developing and/or low-income countries (Jamison and Lau 1982, World Bank 1990 and 1995, Rosenzweig 1995, Mehrotra 1998, Murgai et al. 2001, Baker et al. 2011, Smith et al. 2012, Naito and Nishida 2014). Given the perceptions regarding the higher contribution of elementary education in developing and/or low-income countries, elementary education has garnered new attention in government policies and resources in such countries. Indeed, the goal of UEE has been reiterated in many national and state specific education policies and programmes in such countries. At the international platform too, from the time of Universal Declaration of Human Rights in 1948, requirement of

education (elementary) to be universal has never been hesitated. The Jomtein Conference (1990), the Dakar Framework (2000), and the second and third Millennium Development Goals (MDGs) (2000) have promised to deliver good quality education to all children. In the mean time, to achieve the goal of UEE, the World Conference on Special Needs Education: Access and Quality (1994) in Spain has adopted the principle of IE. The principle of IE was further supported by the Dakar Framework (2000).

However, the concept of IE in India is not new, although little stress was given on this aspect during British colonial rules and immediately after the independence, but the adoption of the central government's scheme of Integrated Education for Disabled Children (IEDC) in 1974 and the National Policy on Education (NPE) in 1986 [revised as a Programmeme of Action (POA) in 1992] have given an extra impetus towards IE in the country. Accordingly, since the implementation of the NPE, 1986 there has been a rapid expansion of schooling provisions for CWSN and by the year 2000, the number of special schools for CWSN in the country stood at around 3000 (Department of Education, 2000).

In the early 2000s, the national flagship programmeme of SSA (2001) came up with a variety of interventions for differently abled such as making barrier free access to CWSN, appointment of special teachers for educating CWSN, zero rejection policy for all children, making home-based education for CWSN, etc. The zero rejection policy entails that no child having special needs should be excluded from the fruit of elementary education and this policy includes the idea of setting up of special schools or home-based education system for CWSN. The data reveal that till 2009-10, nationally around 91.50 per cent (27.8 lakh) of CWSN covered by schooling facilities under SSA, where a total of 1.38 lakh students were covered under home-based education system and around 0.52 lakh were covered under EGS/AIE. In 2012-13, total CWSN enrollment reduced to 23.47 lakh and in 2016-17 it has declined to 20.95 lakh (Analytical Report of DISE, various issues).

One of the reasons of the decline in CWSN enrollment over time may be the gradual fall in the number of disabled children in the country. At the other end, nationally a total 0.13 lakh resource teachers were appointed under SSA in 2009 for educating the disable children. In case of providing

barrier free access, states like Kerala (100 per cent), Delhi (100 per cent), Assam (86 per cent), West Bengal (86 per cent), and Maharashtra (80 per cent) have made considerable progress, while in hill states like Jammu & Kashmir (J & K) (8.5 per cent), Sikkim (4 per cent), and Meghalaya (14.88 per cent) progress is not satisfactory.

Table 1 summarizes the share of CWSN enrollment (category-wise) to total enrollment in India during 2012-13 to 2016-17. We see that in most of the cases category-wise share of enrollment to total enrollment has declined over time leading to a decline in total share of CWSN enrollment. Among all categories, the share of enrollment having low vision, mental retardation, and locomotor impairments are relatively higher than the other categories of CWSN enrollment.

Table 1
Category-wise Share of CWSN Enrollment in India

Year	Class/ Category	Blindness	Low vision	Hearing Impairment	Speech Impairment	Locomotors Impairment	Mental Retardation	Learning Disability	Cerebral Palsy	Autism	Multiple Disability
2012-13	I	0.05	0.12	0.14	0.14	0.19	0.25	0.10	0.04	0.01	0.08
	II	0.04	0.15	0.13	0.14	0.2	0.26	0.14	0.03	0.01	0.07
	III	0.05	0.17	0.15	0.14	0.25	0.27	0.17	0.03	0.01	0.06
	IV	0.05	0.19	0.16	0.13	0.22	0.26	0.17	0.03	0.01	0.06
	V	0.06	0.24	0.13	0.11	0.22	0.23	0.14	0.02	0.01	0.05
	VI	0.06	0.28	0.13	0.11	0.22	0.17	0.11	0.02	0.01	0.04
	VII	0.06	0.31	0.12	0.11	0.21	0.15	0.10	0.02	0.01	0.04
	VIII	0.06	0.30	0.10	0.07	0.2	0.12	0.08	0.01	0.01	0.03
2016-17	I	0.03	0.10	0.10	0.10	0.12	0.20	0.07	0.03	0.01	0.06
	II	0.03	0.14	0.11	0.11	0.16	0.24	0.11	0.03	0.01	0.06
	III	0.03	0.16	0.12	0.12	0.18	0.27	0.14	0.03	0.01	0.07
	IV	0.03	0.19	0.12	0.12	0.19	0.29	0.15	0.03	0.01	0.07
	V	0.04	0.23	0.13	0.11	0.20	0.29	0.15	0.03	0.01	0.08
	VI	0.04	0.26	0.12	0.09	0.18	0.24	0.12	0.03	0.01	0.06
	VII	0.03	0.30	0.12	0.09	0.19	0.23	0.12	0.02	0.01	0.05
	VIII	0.03	0.31	0.10	0.07	0.18	0.21	0.10	0.02	0.01	0.04

Source: Analytical Report 2012-13 and 2016-17, DISE

The All India School Education Survey (AISES) provide some information about infrastructural facilities in schools for differently abled. The 8th AISES reported that nationally there were around 0.83 lakh primary

schools with handrail facilities in 2009. The same figures for ramps, adapted laboratory and adapted lavatory were 3.39 lakh, 0.25 lakh, and 0.54 lakh respectively. The number of upper primary schools having such facilities was almost half of the number of primary schools.

Table 2 provides information about the share of elementary schools having various infrastructural facilities for students with disabilities in some selected states of India in 2009. On an average, all states have relatively higher share of schools having ramp than schools having other facilities like handrails, adapted laboratory, and adapted lavatory. All UTs and states like J & K, Andhra Pradesh, and North-Eastern (NE) states except Assam (all are not shown in the Table) were lagging far behind the national average in providing infrastructures in schools for disabled.

Table 2
Share of Elementary Schools having Infrastructural Facilities for Disabled Children

States/Facilities	Handrails	Ramps	Adapted Laboratory	Adapted Lavatory
Andhra Pradesh	1.07	5.96	0.70	0.84
Assam	9.95	32.89	1.01	1.52
Bihar	5.26	52.74	3.50	4.80
Chhattisgarh	3.32	26.76	1.97	1.88
Gujarat	4.73	69.24	2.58	2.75
Haryana	5.92	37.15	4.83	8.95
Himachal Pradesh	8.28	30.37	0.70	1.67
Jammu & Kashmir	0.31	3.99	0.27	0.31
Jharkhand	5.34	27.24	0.96	3.01
Karnataka	6.56	46.81	4.34	5.78
Kerala	20.14	48.39	2.27	9.06
Madhya Pradesh	3.41	43.49	0.92	2.74
Maharashtra	24.66	59.45	4.18	30.24
Punjab	13.36	34.26	3.83	10.21
Rajasthan	4.93	31.17	1.23	4.59
Tamil Nadu	5.31	41.37	1.73	3.31
Uttar Pradesh	19.92	54.70	8.75	11.22
West Bengal	10.48	41.83	0.88	1.50
All India	9.33	39.62	3.01	6.49

Source: Authors' calculation based on secondary data

Dataset and Variables

To compute the extent of schooling provisions for differently abled, the data of all 36 states and UTs for the year 2015-16 and 2016-17 were considered.¹ Based on the availability of data, we considered 9 indicators from DISE to compute the extent of schooling provisions for differently abled (see Table 3). Indicators were divided into different dimensions based on their nature and type. Two dimensions of schooling provisions for differently abled were used namely access to schooling and infrastructure in schools. The first dimension, i.e., access to schooling includes indicators related to coverage of schooling for disabled in terms of numbers (share of special schools), area (sq km), and number of special schools per thousand CWSN enrolled, and thus adjusted for area as well as population density. Alongside, we also include the share schools that are approachable by all weather roads were also included. The second dimension, i.e., infrastructure in schools comprises of indicators relating to the availability of infrastructural facilities in schools for differently abled. Additionally, the availability of teaching-learning materials (TLM) in schools was considered as in most cases the availability of various TLM is important to educate the CWSN.

Table 3
Indicators and Dimensions of Schooling Provisions for Differently Abled Index

Indicators	Dimensions	
1. Average no of special schools per ten sq km 2. % of special schools 3. Number of special schools per thousand CWSN enrolled 4. % of schools approachable by all weather roads	Access to schooling index (ASI)	Schooling provisions differently abled index (SPDI)
1. % of schools with ramp where needed 2. % of schools where ramps are required 3. % of schools having CWSN friendly toilet facility 4. % of school received teaching-learning materials (TLM) grant* 5. Average teaching-learning materials (TLM) grant per school (in Rs)*	Infrastructure in school index (ISI)	

Note: * use as proxies for the availability of teaching-learning material (TLM) in schools

¹ Unfortunately, data on schooling provisions for differently abled prior to 2015-16 are not adequate. We, thus, restrict our analysis to only two years (2015-16 and 2016-17).

Statistical Method

To assess the extent of schooling provisions for differently abled, we compute Schooling Provisions for Differently Abled Index (SPDI) using methodology similar to the computation of Sustainable Livelihood Security Index (SLSI) proposed by Swaminathan (1991b). The method for calculating SPDI is as follows. Let $SPDI_{ij}$ be the index for the i^{th} dimension of SPDI related to j^{th} state/UTs and X_{ij} be the value of the indicator representing the i^{th} dimension of SPDI related to j^{th} state/UTs. We use the formula given in equation 1 to calculate the index. The formula will be reversed if an indicator is negative.

$$SPDI_{ij} = \frac{X_{ij} - \min_j X_{ij}}{\max_j X_{ij} - \min_j X_{ij}} \quad \begin{cases} i = 1, 2, \dots, I \\ j = 1, 2, \dots, J \end{cases} \quad (1)$$

where X_{ij} is the observed value of an indicator and $\max_j X_{ij}$ and $\min_j X_{ij}$ are all time maximum and minimum values of the indicator respectively. After calculating $SPDI_{ij}$ for all the components and for all states/UTs, the final index $SPDI_j$ is calculated by taking the weighted average of all dimension indices.² The formula is –

$$SPDI_j = \frac{\sum_{i=1}^I w_{ij} SPDI_{ij}}{I} \quad (2)$$

where, w_{ij} weight given to i^{th} dimension of SPDI of j^{th} state/UTs and $w_{1j} + w_{2j} + \dots + w_{ij} = 1$; I is the total weight.

Result and Discussion

Table 4 shows the values of SPDI and relative ranks for all states/UTs. From the index values it is revealed that India has not been able to provide adequate schooling provisions for differently abled. On an average, access to schooling is relatively higher than infrastructure facilities in both periods. However, overtime there has been a slight improvement in the provisions for differently abled. But, this improvement is not sufficient as compared to the number of CWSN enrollment. Table 4 also reveals the scenario about how states/UTs have suffered from poor schooling provisions for differently abled in recent years.

² If a given dimension index contains two or more indicators, then the index can be formed by using average of the indicators of the representative index.

Table 4
Schooling Provisions for Differently Abled Index

States/Indices	2015-16				2016-17			
	ASI	ISI	SPDI	Rank	ASI	ISI	SPDI	Rank
A & N Islands	0.176	0.191	0.184	35	0.174	0.212	0.195	36
Andhra Pradesh	0.399	0.213	0.296	18	0.403	0.225	0.304	18
Arunachal Pradesh	0.198	0.244	0.224	31	0.238	0.245	0.242	30
Assam	0.169	0.311	0.248	28	0.175	0.282	0.234	32
Bihar	0.342	0.307	0.323	13	0.352	0.339	0.345	13
Chandigarh	0.473	0.294	0.374	9	0.491	0.429	0.456	3
Chhattisgarh	0.330	0.320	0.325	12	0.343	0.263	0.299	19
Dadra & Nagar Haveli	0.299	0.410	0.361	10	0.305	0.412	0.364	11
Daman & Diu	0.246	0.295	0.273	22	0.246	0.240	0.243	29
Delhi	0.431	0.437	0.434	4	0.456	0.415	0.433	6
Goa	0.592	0.222	0.386	6	0.612	0.221	0.395	8
Gujarat	0.291	0.294	0.292	19	0.304	0.428	0.373	10
Haryana	0.249	0.363	0.313	16	0.258	0.297	0.280	23
Himachal Pradesh	0.242	0.259	0.251	26	0.261	0.247	0.253	27
Jammu & Kashmir	0.221	0.273	0.250	27	0.244	0.236	0.240	31
Jharkhand	0.148	0.250	0.205	34	0.167	0.253	0.215	35
Karnataka	0.393	0.265	0.322	14	0.397	0.303	0.345	14
Kerala	0.613	0.293	0.435	3	0.619	0.672	0.649	1
Lakshadweep	0.145	0.206	0.179	36	0.159	0.465	0.329	15
Madhya Pradesh	0.565	0.257	0.394	5	0.593	0.307	0.434	5
Maharashtra	0.475	0.313	0.385	7	0.488	0.318	0.394	9
Manipur	0.194	0.240	0.220	32	0.204	0.234	0.221	34
Meghalaya	0.195	0.223	0.210	33	0.273	0.250	0.260	26
Mizoram	0.262	0.282	0.273	23	0.270	0.199	0.231	33
Nagaland	0.304	0.248	0.273	24	0.413	0.251	0.323	16
Odisha	0.235	0.311	0.277	21	0.244	0.314	0.282	22
Pondicherry	0.550	0.251	0.384	8	0.564	0.274	0.403	7
Punjab	0.322	0.380	0.354	11	0.331	0.267	0.296	20
Rajasthan	0.282	0.216	0.246	29	0.298	0.239	0.265	25
Sikkim	0.698	0.234	0.440	2	0.740	0.224	0.453	4
Tamil Nadu	0.352	0.256	0.299	17	0.363	0.277	0.315	17
Telangana	0.269	0.216	0.240	30	0.279	0.217	0.244	28
Tripura	0.311	0.272	0.289	20	0.333	0.256	0.290	21

Uttar Pradesh	0.679	0.267	0.450	1	0.696	0.285	0.468	2
Uttarakhand	0.408	0.252	0.321	15	0.471	0.256	0.352	12
West Bengal	0.259	0.278	0.269	25	0.275	0.268	0.271	24
All India	0.342	0.276	0.305		0.362	0.295	0.325	
Coefficient of Variation	0.443	0.200	0.246		0.426	0.317	0.290	

Source: Authors' calculation

It was seen that ASI is relatively higher in states like Uttar Pradesh, Kerala, Madhya Pradesh, Sikkim, etc. At the other end, infrastructural facilities are relatively higher in Kerala, Maharashtra, Gujarat, etc. In 2016-17, Kerala holds the top position in terms of SPDI by jumping two steps forward from the previous year, whereas Uttar Pradesh slips down to second spot. Some states like Gujarat and Nagaland have considerably improved their relative positions in 2016-17, while in Chhattisgarh, Haryana, and Assam situation is opposite. In 2016-17, the most advance state (in terms of SPDI) Kerala has three times higher value than the least advance state Jharkhand. The variation across states/UTs in terms of ASI has marginally declined over time as reflected by the falling value of coefficient variation (CV). In contrast, variation across states/UTs has increased in terms of ISI leading to an overall increase in the variation in SPDI across states/UTs.

Figure 1: Dimension indices and SPDI

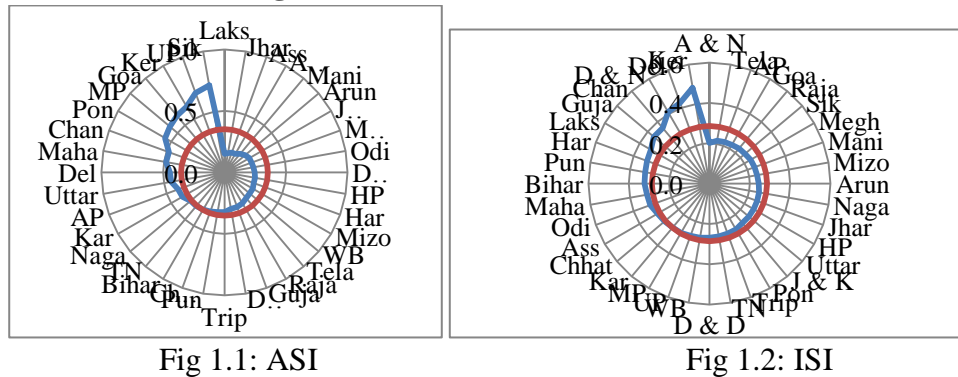


Fig 1.1: ASI

Fig 1.2: ISI

Presentation has been done on the average values (average of two periods) the dimension indices and SPDI separately in figure 1 where the red lines show the national average values in respective case. It was seen that in case of ASI, Sikkim holds the top position followed by Uttar Pradesh and Kerala, whereas in terms of both ISI and SPDI Kerala holds the top

position. At the bottom side, UTs like Andaman and Nicobar Island and Lakshadweep interchangeably hold the last two positions. This result may be because Andaman and Nicobar Island and Lakshadweep do not have the share of special schools in both periods.

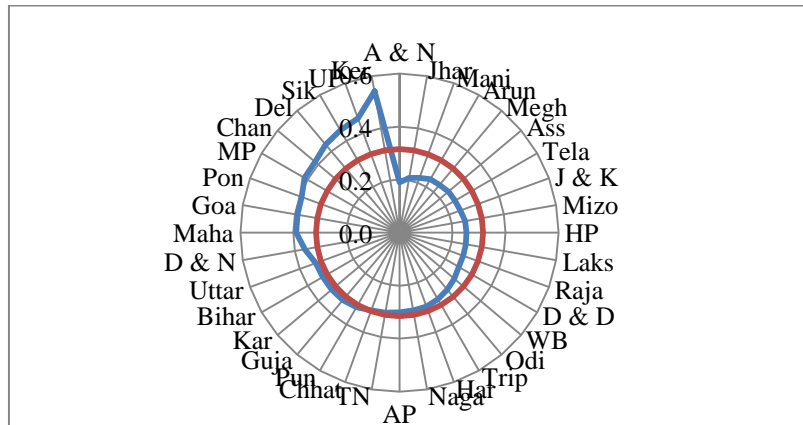


Fig 1.3: SPDI

Conclusion

The paper tries to investigate the extent of schooling provisions for differently abled across state/UTs in India. It was observed that India has not been able to deliver adequate provisions for differently abled with considerable inter-state/UTs variation. In most of the cases schools for differently abled are not available nearby. Uniformly, in cases where schools are available, they lack basic infrastructure for differently abled. This non-availability of basic infrastructure may be one of the reasons why differently abled children tend to dropout more from schools than the other children. In this circumstance, there is an urgent need of well designed strategies to increase the availability of schools so as to provide education to differently abled. In addition, the nation should pay attention to improve schooling facilities for differently abled in poorer states.

However, increasing such facilities may not be a viable option for governments especially from poorer states with limited budget for social sector development. In such case, government may go for expanding partnership with private providers or local communities such as village community. Although some forms of such partnership like EGS or AIE in

India are already exist, but these practices are not exclusively available to schools for differently abled. However, to encourage private providers, government should develop clear policies and guidelines.

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Care-Givers to the Disabled: The Inseparables

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Introduction

Long-term and continuous care for people with disabilities presents an urgent challenge in India as well as in Odisha. The burden is always with the family members. “A caregiver is anyone who cares, unpaid, for a friend or family member who, due to illness, disability, a mental health problem or an addiction, cannot cope without their support” (Angothu & Chaturvedi, 2016). The Rights of Persons with Disabilities Act of (RWDP, 2016) highlights the vital role played by care givers. This act not only focuses on the care givers but mandates research on disability, their inclusion in mainstream development programmes and the development of caregiver specific services and their livelihood. Contributing to research and writings on care givers is an important part as they represent to the total disability sections of the society.

Life becomes utmost difficult for the care givers in the remote part of the tribal district like Koraput of Odisha, where they face multiple categories of vulnerability and exclusions in terms of social, economic and geographical dimensions.

Background

Research shows the stressful demands of care-giving to family members can have negative effects on physical, mental, psychological and economical condition. The effects on physical health may include: immune

system functioning, heart rate reactivity, raised blood pressure levels, and increased risk of mortality among older spousal caregivers. Gender differences in caregivers outcomes exist because, compared with male caregivers, female caregivers face higher levels of care-giving stressors, have fewer social resources, and report lower levels of psychological and physical health. Gender and education effects on health show that female caregivers experience more stress and have poorer health than male caregivers especially in tribal areas of Odisha.

The Rights of the People With Disability Act of 2016 for the first time has recognized the care givers understanding, the needs of the caregivers, defined who are care-givers and spelt out that there is a need to develop interventions for the development and welfare of the care givers. Two important provision of the act are about care-givers and social audit of all the schemes and programmes that are meant for the disabled people. The act also mandates the rights of the people with disabilities which ultimately reduces the burden of the care givers. Organizations like SPREAD (Society for Promoting Rural Education and Development) who are working with Care-givers in Koraput District have a vision to support the needs of the care givers by linking them with all government programmes, recognizing them and making them visible as potential group. The role of caregiver is the most important who continuously look after the disabled, who face enormous stress, who give day and night service to the disabled. But no one recognizes their efforts in the family or in the community or in the society at large. So, there is a need to recognize and support their efforts and meet their rightful needs.

The state and national bodies need to recognize and identify the needs and concerns of the caregivers and support their initiatives, because caregivers have relieved the workforce of governments in providing continuous care for the people with chronic illness and disability.

Informal care-giving is an integral component of the health care system, saving the national economy indirectly. The baseline study report of caregivers which was done by interviewing 1501 care givers in 3 blocks of Koraput districts gives us the following facts

- 80% of the care givers were between 26 and 60 years.
- 85.2% of care givers surveyed had no formal education.
- Nearly 40% of the care givers were not working and who were working only did agriculture or daily wages as per the baseline study shows.
- More than 80% reported that they did not get time for themselves and more than 60% had issues of anxieties and somatic problems.
- Majority of them had worries for their livelihood security.

(source:<https://www.spread.org.in/document/Baseline%20Study%20Report.pdf>)

Care- Givers and Care Giving

The central aim of this paper is to recognise the value and contribution of family care-givers to civic society, support and empower them to participate as fully as possible in economic and social life. It is not only emphasising on quality participation but also about their recognition as care- givers who contribute to a large extent towards the economy of the country indirectly. Around the world, one person in four is affected by disability either directly or as care- givers or as family members of care-givers. The care giving to a disabled person is more challenging and can affect the lives of the care-givers at some point. It can have volatile consequences if the care-giver belongs to the rural tribal community who is excluded and vulnerable in a multiple categories. The tribal care givers face multiple dimensions of isolation and vulnerability. Swabhimani in one of their (study), recommended that, cash assistance to be given under Janani Suraksha Yojana (JSY, a maternity benefit) to a sign language interpreter, or a care giver or any such requirement of the pregnant woman with disability. The life and life cycle of the disabled as well as the care-givers becomes very tough with multiple vulnerabilities.

For the first time Care-givers have been defined as per (RWDP, 2016) The Rights of persons with Disabilities Act 2016, (chapter -1, 2 (d) that Care-giver means any person including parents, and other family members who with or without payment provides care, support or assistance to a person with disability. The RWDP, 2016 has also recognized the support to care-givers under chapter V, section 24 { 3 (i)} in the form of allowance. The Government of Karnataka has framed clear cut draft rules as per RWDP, 2016 and have recognized the participation of care-givers as members in

the state, and district level research committees, and also in the state and district advisory board as prescribed by the central act section 72 of the RWDP, 2016.

The Disabled Persons Statistical Profile (pg 51), 2016 by Ministry of Statistics and Programme Implementation under the National Policy statement has recognized that social security schemes are essential for care-giver as they incur a substantial amount for facilitating activities, therefore it is required to increase their social security base by various means.

All these measures are taken to create an environment which will be sensitive to the needs of the care-givers, and get an understanding of their challenges that they face in their daily life. The care-givers are never visible with the naked eye and it takes time to recognize their self-less services. All these measures do imply that there is a need of social support network and social support resources which will play a vital role in the development of the disabled sections of our society which has a direct connection with their care-givers. In order to make clear policies for care-givers it becomes an obligation to understand the whole gamut of needs faced by the invisible care-givers. There is a need to create information about the care-givers which can help the government to come up with plans that will benefit them to come out their drudgery.

Odisha is one of the poorest states of India with 60.8% of its rural population living below poverty line. Koraput district is one among the 30 districts, which is backward marked by acute poverty, food insecurity, illiteracy, distress migration, geographical isolation and exploitation. The district has an ethnic diversity. It is a highly unequal society where the poor have less access and ownership over resources and means of livelihood. Among the vulnerable sections, disabled and their care-givers are the most neglected due to various dimensions of exclusion making their life more volatile. The Census 2011 revealed that, among State/UTs, the proportion of disabled persons to the total population is 2nd highest in Odisha (2.96).

This fact implies the condition of the care-givers as well.

Disabled Population in India as per Census 2011 (2016 updated) – In India out of the 121 Crore population, 2.68 Crore persons are disabled which is 2.21% of the total population. Among the disabled population 56% (1.5 Crore) are males and 44% (1.18 Crore) are females. In the total population, the male and female population are 51% and 49% respectively. Majority (69%) of the disabled population reside in rural areas (1.86 Crore disabled persons in rural areas and 0.81 Cr in urban areas). In the case of total population also, 69% are from rural areas while the remaining 31% reside in urban areas. (<https://enabled.in/wp/disabled-population-in-india-as-per-census-2011-2016-updated/>) .As per the 2011 Census, the total disabled population is **12,44, 402**, registering a growth of 21.84 per cent during the decade.

The percentage of the State's disabled population to total population has increased from 2.78 in the 2001 Census to 2.96 in the 2011 Census. Among Scheduled Castes, 3.32 per cent are disabled whereas amongst Scheduled Tribes 2.65 per cent are disabled. Out of the 12,44,402 disabled population of Odisha, 2,38,357 are Scheduled Castes (19.15 per cent) and 2,53,779 are Scheduled Tribes (20.39 per cent). The sex ratio of SC disabled persons is 836 and for STs, it is 943. For eg Koraput District has 36, 291 disabled population as per 2011 census, which indicates that there are 36, 291 care givers who are engaged continuously with the disabled sections meeting all kinds of their needs. There is no data on caregivers and this is only conservative estimate that there are 36, 291 care-givers who are from the social support resources.

The same baseline study conducted by SPREAD found that there are child care-givers as well which constitute up to 1.4% among 1501 care-givers. The baseline study report is only confined to 3 blocks of Korapur district but has a lot to narrate on the voices of the care-givers which is a torch bearing remark on the recognition of them in the Adivasi communities. The baseline study points out that the care-givers in tribal communities are economically poor, politically unheard, and socially invisible.

Conclusion

There are millions of care-givers in Odisha and in India who are always engaged in giving services to the disabled, sick, old age or people with any

kind of ailment. One has to re-think how their services can be recognized, how their rights can also be ensured, so that they continue to give their care giving responsibilities, can address their own health and emotional needs, find ways to support their families, and they all should come together to a platform to advocate for their entitlements. The role of care-givers must not only be identified, but also be recognized and their efforts supported with resources , and organizing them to play the role of advocacy force to meet their needs is also vital. A person with illness impacts not only her/his life but also affects the functioning at the family level and their contribution in the community. Thus, care-givers act as a bridge between the ill/disabled person and the community/outside world by facing the brunt of caring.

The experiences of caregivers is a wisdom pool from which the society can learn and device ways to support them. Their experiences, stories can be a knowledge and information base for the course curriculum and also for community to create awareness and help to fight the stigma which is attached to the disabled or to the care-givers. Caring takes a complete life of the care-givers in most of the cases as their whole time is given to the disabled. Care-givers have to spend more time in giving hygiene care, calm down the emotional outbursts of the disabled. The care-givers involvement in direct and indirect care changes over time in response to the state of illness and treatment, and care-givers all the time adapt to the changing situations which is challenge in itself.

Therefore, it is important to understand the needs of the care-givers, and their needs should be addressed in rural/tribal communities where resources are limited and communities face multiple vulnerabilities. It is important to recognize their efforts, dedicate more research on them, create care-givers friendly interventions and come out with the guidelines helpful for the state government to develop social services and support systems for the care-givers.

A Case Study of Koraput
Carers/Care-givers or service providers be it any nomenclature, their service is beyond imagination. The unheard voice of care givers has been ventilated in a systematic manner at the community level. We got this insights during many community interactions in Odisha, Karnataka and many more to be positively encountered in future. A care giver (woman

around 45 years, Lina) shares her story .. from a remote block of Koraput. Its about her son who is affected by cerebral palsy how she takes hours together to feed him. When his stomach is full she gets satisfaction. She never denies her duties towards him. She feels extremely excited when anyone visits her house and enquires about her son..The joy is beyond expression. At the initial stage SPREAD a CSO initiated a care givers group in 13 Gram Panchayats of Boipariguda Block with 500 such care givers in 49 care givers group. The idea is to share, organize them under one umbrella so that they exchange their joy, worries, anxieties, and slowly getting a recognition and pride of being a care giver to someone who is in need. The team members of Spread initially faced some hiccups in making them sitting together , talking together. and acting together... But the journey that unfolded among care givers not only organized them but also brought recognition in the community. The villagers started noticing their meetings, their group and their activities. The group formation has yielded positive results in getting their entitlements , and face new challenges. They have received pensions, ration, houses, bus pass and id cards, which are basic for sustenance with the facilitation of SPREAD team. Reaching the difficult areas by the Spread team members was the most difficult task, and training them on team building was another major milestone. Training for transformation is the belief that is adhered by SPREAD and it should be continuous so that one is ready to face new areas, and explore new areas. The care givers understand what documents are maintained in a file. They are now motivated to ask questions. The care givers day celebration is another platform that has given them strength. The care giver group members vary from 7 to 20 consisting of 4 to 9 hamlet villages. The Rights to Persons With Disabilities Act, 2016 do mandate care givers allowance and other training facilities. This act also mandates social audits. When our society is undergoing a lot of changes, our population needs care givers and it is our ethical responsibility to recognize them. In remote tribal blocks it is all the more difficult for a care givers to face when he or she is under the poverty line, the social, economical and geographical exclusions do enhance the problems... But with group formation and support from the government things are possible to change. Bringing ethical accountability and advocacy to improve the system for a sensitive disabled and caregiver friendly approach is required.

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A Challenge to Teachers and Parents – Attention Deficit Hyperactivity Disorder (ADHD)

N. Lakshmi Nancharamma

Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is a mental disorder of the neurodevelopment type. ADHD is a group of behavioral symptoms that include inattentiveness, hyperactivity and impulsiveness. It is a group of behaviors that causes problems with focus and self control. It mainly affects children, but can also affect adults. It can have an impact on emotions, behaviors and the ability to learn new things.

Rearing a child with ADHD is not like a traditional child rearing. Normal rule-making and household routines can become almost impossible. Depending on the type and severity of child's symptoms, we will need to adopt different approaches. It can become frustrating to hope with some of the behaviors, which result from child's ADHD, but there are ways to make life easier.

Parents must accept the fact that children with ADHD have functionally different brains from those of other children. While children with ADHD can still learn what is acceptable and what is not, the disorder does make them more prone to impulsive behavior. Fostering the development of a child with ADHD means that we will have to modify our behavior and learn to manage the behavior of the child.

Not every person with ADHD has the same personality traits, but there are some personal strengths that can make having the condition an advantage, not a drawback. Some people with ADHD can turn impulsivity into spontaneity.

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Bringing up a child with ADHD comes with its own challenges. There are no hard and fast rules, as ADHD can have different degrees of severity and symptoms. However, children can benefit from person-centered or tailor made approaches. ADHD can cause a child to have poor impulse control, which can lead to challenging or inappropriate behaviors. But an important step to parents is to accept that ADHD simply represents a functional difference in the brain. It does not mean that, the child can't learn right from wrong, but that they may need to find other ways to support their child in developing positive behavior.

Parents and caregivers will need to adapt their ways of interacting with the child. This includes speech, gestures, emotional language and the physical environment. For a child with ADHD, consistency is vital. By using a supportive and structured approach, challenging behaviors can be limited and the child can flourish.

Types of ADHD

The type of ADHD is determined by the symptoms of the child. The symptoms must have an impact on the person's day-to-day life. The type of ADHD is not permanent. It can change over time. However, medication and other treatment can help improve the quality of life.

ADHD is divided into 3 different types

1. Inattentive type
2. Hyperactive-impulsive type
3. Combination type

1. Inattentive type ADHD

The children who have this type of ADHD experience more symptoms of inattention than those of impulsivity and hyperactivity.

Characteristics of such children are as follows:

- Get bored quickly
- Don't seem to listen
- Appear as if they are day dreaming
- Process information more slowly and less accurately than others do
- Loss pencils, papers or other items needed to complete a task
- Difficulty in organizing thoughts and learning new things

2. Hyperactive-impulsive type ADHD

This type of ADHD is characterized by symptoms of impulsivity and hyperactivity. They can make learning more difficult for themselves and other students.

Characteristics of such children are as follows:

- Feel restless
- Difficulty in sitting
- Face trouble in quiet activities
- Impatient
- Don't think about consequences of actions
- Inappropriate comments

3. Combination Type ADHD

Students having combination type ADHD, exhibit both types of characteristics inattentive and hyperactive-impulsive type. Most people with or without ADHD, experience some degree of inattentive or impulsive behavior. However, it is more severe in people with ADHD. The National Institute of Mental Health explains that most children have combination type ADHD.

Causes of ADHD

Experts are still uncertain for causes of ADHD. Research suggests that ADHD is likely genetic but other factors may also be involved.

- Environment : ADHD may be associated with cigarette smoking and alcohol use during pregnancy as well as lead exposure.
- Changes in brain chemistry
- Traumatic brain injuries
- Nutrition-food additives may affect hyperactivity

Ways to find out ADHD in Children

- Running from toy to toy or constantly being in motion
- Talking and making noise excessively
- Having an inability to sit still for calm activities like eating
- An ADHD rating scale is a quick way to screen for ADHD

Tips for Parents to Reduce Disruptive Behaviors and Deal with Challenges related to ADHD

- Keep things interesting

- Think out loud
- Keep distractions to a minimum
- Try bed time message
- Be creative and cooperative
- Identify child's strengths
- Don't blame yourself
- Don't blame other family members
- Give praise and encouragement
- Introduce wait time
- Do not get overwhelmed
- Explain rather than command
- Avoid using negative language
- Don't allow ADHD to be in control
- Be kind to yourself
- Take breaks
- Stay calm
- Take specialist support
- Keep working to modify behavior
- Do not see other adults as the enemy
- Pick your battles
- Set aside a daily special time for your child
- Consult doctor to find minimal dose of medication
- Play attention-boosting games
- Spend more time out doors
- Teach self monitoring
- Make learning active. Encourage child to get fully involved in his home work
- Speak to the teacher is the first thing which is done by parents after finding ADHD
- Music to calm the mind
- Behavior therapy

Discipline Strategies for Teachers in the Class Room for Managing ADHD Students

A child with ADHD can place many demands on teacher's time energy and sense of competence. The constant interruptions, need for repeated instructions and close supervision can be taxing.

Children with ADHD are:

- Curious
- Creative
- Energetic
- Entertaining
- Not trying to be disruptive
- Regret their behavior but are unable to stop
- Often unaware of their disturbing behaviors
- Not mounting a personal attack on teachers

Students with ADHD do best with Teachers who

- Are flexible
- Follow clear routines
- Are consistent
- Provide a range of activities
- Set firm limits on students behavior
- Present information and tasks in steps
- Maintain a positive teaching environment
- Recognize and support individuality

Following strategies may be useful to teachers to manage students with ADHD

- Being the teacher's assistant will help them to participate in the lesson.
- Using a computer, helps to maintain interest and attention for longer and adds motivation
- Home work-good planning and communication with parents will help
- Break tasks down in to small manageable pieces to be submitted at regular intervals
- Ask questions to actively engage the students
- Provide positive attention
- Give effective instructions
- Praise child's effort
- Use time-out when necessary
- Ignore mild misbehaviors
- Establish a reward system

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- Allow for natural consequences
- Give second chances
- Allow time break
- Give appropriate supervision
- Let the children play
- Post rules for ADHD in the class room

Physical Environment for ADHD Children

Children with ADHD work best under close monitoring and with minimal distraction. The following strategies may be helpful.

- Sit them closest to teacher. This can enable discreet interaction between teacher and the child and help keep the child on task.
- Being at the front of the class often diminishes many visual distractions, including the movement and activities of the other students.
- Use displays to outline the classroom rules, assignment tasks, daily schedules or celebrate individual student's good work.
- Staying in seat for any length of time can also be difficult for these children. Consider allowing children to stand for periods as long as they are not too disruptive to others.
- Place the student next to quiet, hard working peers.
- Avoid seating children with ADHD in large clusters of tables with many students at each.

Children Have to know about ADHD

The average time of diagnosis of ADHD is 7 years. It may seem like a difficult conversation, but speaking to a child about ADHD can be beneficial for both the child and the parent. A parent should use age-appropriate language and avoid giving too many unnecessary details at first. Conversations about ADHD can keep happening as the child develops and a child may be curious to learn more about condition.

The following statements are good places to start talking about ADHD with a child.

ADHD is not a flaw: ADHD is not a weakness, a flaw or a sign that the child is bad. It does make them different from other children but those

differences should be celebrated. Similarly, too many conditions with the right support, ADHD does not need to impact negatively a person's life.

ADHD does not affect intelligence: Having ADHD does not mean a child is not as smart as their classmates or siblings. When talking to older children, it can help to remind them that some of the greatest thinkers in modern history had ADHD, including Albert Einstein and Thomas Alva Edison.

Teenagers with ADHD

Attention Deficit Hyperactivity Disorder (ADHD) is one of the most common childhood disorder, affecting between 8 and 10 per cent of children and teens. More boys than girls are diagnosed with ADHD.

Teens with ADHD may be hyperactive, act impulsively or struggle to sit still or pay attention. Although ADHD is often detected in childhood, the symptoms continue to affect many youth into adolescent and adulthood. In adolescent ADHD symptoms may become more pronounced, manifesting in trouble at school, academic under achievement, substance abuse and difficulty in maintaining relationships.

Adults with ADHD

Some people with ADHD have fewer symptoms at their age, but some adults continue to have major symptoms that interfere with daily functioning. In adults the main features of ADHD may include difficulty in paying attention, impulsiveness and restlessness. Symptoms can range from mild to severe.

Many adults with ADHD have a hard time managing their feelings, especially when it comes to emotions like anger or frustration. Common emotional symptoms of adult ADHD include, being easily flustered and stressed out. Individuals with ADHD often experience social difficulties, social rejection and interpersonal relationship problems as a result of their inattention, impulsivity and hyperactivity. Such negative interpersonal outcomes cause emotional pain and suffering.

People with ADHD can Succeed in Life

It can help to provide role models of people with ADHD who have been successful. This can range from a neighborhood friend or family member working in a job they love , to a celebrity such as Will Smith or Solange

Knowles. More than 1 in 10 children have ADHD in the United States. Other sources suggest that this may be as high as 1 in 5 or 20 per cent. Having ADHD can feel isolating for a child, so it can help to reach out to go groups that work with other children with the same and similar conditions. Summer camps and after school programmes tailored to children with ADHD are available in many regions. These supportive environments can help a child develop their social skills and combat feelings of isolation.

Treatment for ADHD

Research in to ADHD is ongoing. There is more social acceptance of ADHD than ever before and support for parents and other caregivers is increasing. Life may need more planning and thought with a child who has ADHD. It can however be just as pleasurable and fulfilling.

Early detection and treatment are critical in addressing ADHD symptoms and preventing problems such as depression, anxiety, low self-esteem and substance abuse. There is no cure for ADHD, but there are many treatment options. They work for some, but may not work for all. For most persons, a combination of medication and behavior therapy will be the most effective.

Behavioral interventions that help children manage their ADHD symptoms are supported by

- The American Academy of Pediatrics
- American Medical Association
- The American Academy of Child and Adolescent psychiatry.

Examples may include

- *ADHD summer camps
- *ADHD schools
- *Individual, group and family counseling

Specialized ADHD summer camps and ADHD schools provide structured routines and individualized education plans tailored to each student's learning style as well as social skills training and counseling. Through hands on lessons and positive reinforcement, children learn practical skills to stay organized, complete tasks and manage their ADHD symptoms. Small class sizes and plenty of one-on-one attention provide children with the support they need to excel at school and at home. Medication may be the

first step in child's treatment. Behavioral techniques for managing a child's ADHD symptoms must always be in place.

Principles of Behavior Management Therapy

There are 2 basic principles of behavior management therapy.

- The first is encouraging and rewarding good behavior.
- The second is removing rewards by following bad behavior with appropriate consequences, leading to the extinguishing of bad behavior.

Future Research

Researches need to be conducted into how teachers and parents can best manage their stress levels while responding to ADHD student behaviors. Research will also be undertaken into the provision of resources for students. Galley's ADHD support book(2007) will be studied to identify some practical strategies for understanding and supporting ADHD behavior.

Conclusion

The effectiveness of behavior management strategies depended on each child and must be tailored to the individual needs of each student. Moreover, good resources, including medications, were found to be very useful in assisting teachers and parents to manage ADHD children. The present study found that medication was useful in managing the students' responses to the teachers (Davis & Florian, 2004). Behavior management strategies that were implemented together with medication were more effective, with the most popular strategy being a combination of reward systems and constant monitoring. It is consistent with the other research findings (Power et al, 1995; Snider et al, 2003; Vereb & Diperna, 2004) that medication can help teachers and parents to understand ADHD children's needs.

In conclusion, the words teachers speak can enable or stunt learning (Staples, 2010). Our findings are useful for raising teachers' and parents' awareness of what works and what doesn't. They also provide practical and proven approaches that can be implemented with children. However, children are different and teachers may find the present research useful in analyzing their own practices and devising tailored management approaches for their ADHD students.

It is important for teachers to understand ADHD and how to manage it in a general way, but it is even more important for teachers to know their ADHD students as individuals. Enabling or stunting the learning of their ADHD students depends on teachers' ability to understand them (Staples, 2010). If teachers and parents have an awareness of their children's strengths, weaknesses and needs, they are better equipped to develop teaching and learning strategies.

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Education of Visually Impaired Children

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Introduction

The Persons with Disability Act, 1995 considers Disability as an individual pathology. According to the Act, “Disability” means– (i) Blindness (ii) Low vision (iii) Leprosy cured (iv) Hearing impairment (v) Locomotor disability (vi) Mental retardation (vii) Mental illness. The greatest challenges most children with visual impairment face are difficulties in mobility (moving around independently), difficulties understanding and using non-verbal communication (facial expressions and body language), and difficulties with written communication (because most of their peers read and write regular ink print).

The effects of a visual loss depend on a number of factors, including degree of loss (blindness versus low vision), but also upon early identification (when was the visual loss identified), early intervention services (when did the child start to receive support), parents and teacher involvement as well as when the visual loss occurred – if it was before or after basic communication, and whether language and visual recognition were developed.

It is important to realise that children who are born blind (or with little residual vision), or who lost their vision at a very early age have quite different needs, and face different barriers, than children who lost their vision fully or partially later during their childhood.

Concept of Visual Impairment

Douglas and McLinden (2005) describe visual impairment as a broad term that describes a wide continuum of loss in visual function. There are many aspects of visual function, including visual acuity (the ability to resolve detail), accommodation (the ability to focus), field of vision (the area that can be seen), colour vision, and adaptability to light. The definition used by the World Health Organisation to describe the degree of visual impairment is based mainly on a clinical assessment of the individual's ability to resolve fine detail (i.e. visual acuity), using standardised methods (such as the Snellen chart). A visual acuity of between $<6/18$ and $3/60$ after correction in both eyes is described as low vision, and $<3/60$ as blind, although people with better acuity can also be described as having a visual impairment if they show an appreciable loss of visual field. (A visual acuity of $6/18$ means that the person can discriminate fine detail at 6 metres that someone with normal vision could discriminate at 18 metres. Similarly, a lower visual acuity of $3/60$ means that the person can discriminate fine detail at 3 metres, compared with 60 metres for a person with normal vision.) Importantly, the majority of individuals with a visual impairment, including those classified as "blind", have some residual vision, which can be optimised to enable the person to undertake daily tasks and activities. In the UK the legal terms used to classify visual impairment are blind and partially sighted, and the legal registration as blind or partially sighted is on grounds similar to (though not exactly the same as) those defined by the WHO. Nevertheless, McLinden and Douglas note that different countries use slightly different definitions: for example, Kakazawa et al. (2000) describe the situation in Japan; Holbrook and Koenig (2000) describe the use of different definitions in different states in the United States. For those children who have residual vision, it is widely acknowledged that medical descriptions of visual impairment (based on a clinical assessment of visual function) do not provide an accurate indication of how the child is able to use their vision for functional activities, or functional vision. For this reason, educational services for visually impaired children will make decisions about services they offer to children based upon need, which draws on the functional implications of visual impairment as well as clinical assessments. The definition presented by the DES (2002) tends to follow this more "functional" approach, as it refers to a child's "capacity to see" with reference to particular activities.

Such children have a visual disability which is so serious as to impair significantly their capacity to see, thus interfering with their capacity to perceive visually presented materials such as pictures, diagrams and the written word. Some have been diagnosed as suffering from conditions such as congenital blindness, cataracts, albinism and retinitis pigmentosa. Most require the use of low-vision aids and are availing of the services of a Visiting Teacher. This category is not intended to include those children whose visual difficulties are satisfactorily corrected by the wearing of spectacles and/or contact lenses. At the interface between health and educational services, the use of both clinical and functional definitions is particularly important.

Types of Visually Impairment

Students with non-correctable vision problems have visual impairments. Depending on the severity of the condition, the following terms may be used in the special education or regular education school environment.

- a. **Partially Sighted:** A visual impairment that adversely affects a student's educational performance even when corrected to the extent possible.
- b. **Low Vision:** Partial vision loss that cannot be corrected by ordinary visual devices (glasses or contact lenses) causes a visual impairment known as "low vision." A person with low vision has severely reduced visual acuity, a significantly obstructed visual field, contrast sensitivity, or all three. The World Health Organization's definition of low vision is visual acuity less than 6/18 and equal to or better than 3/60 in the better eye with best correction.
- c. **Legally Blind:** From 20/200-20/400 is legally blind with severe low vision. From 20/400-20/1000 is profound visual impairment, and is very close to total blindness.
- d. **Totally Blind:** The lack of light perception is known as total blindness or total visual impairment.

Causes of Visually Impairment

a. Injury to the eyes

Injury to the eyes while playing or at work or due to accidents may result in vision loss and impairment. Particularly injuries to the cornea are the commonest cause of vision loss.

b. Inherited conditions of blindness and vision impairment

Retinitis pigmentosa is the most common cause of inherited blindness.

c. Infections of the eyes

Sometimes if the mother has had a viral infection like German measles that are transmitted from the mother to the developing foetus during pregnancy the baby may be born with blindness or visual impairment. Trachoma of the eyes caused by contagious microorganism called *Chlamydia trachomatis* may also damage eye sight. This is seen in the developing and underdeveloped countries with poor water and sanitation facilities.

d. Amblyopia

This is basically impaired vision in one eye due to lack of its use in early childhood. This is seen in squint or “lazy eye” since both the eyes project differently and send in different messages to the brain the brain may then turn off or suppress images from the weaker eye. This stops development of the weaker eye leading to amblyopia in that eye.

e. Cataract

Cataract is a clouding of part or the entire lens of the eye. Normally, the lens is clear to let in the light that focuses on the retina. Cataracts prevent light from easily passing through the lens, and this causes loss of vision. This condition usually affects the elderly. Symptoms include cloudy or blurry vision, difficulty in seeing in dimly lit areas and bright lights, colours appear faded, double vision etc.

f. Diabetic retinopathy

Diabetes affects the small blood vessels in the retina. When damaged this leads to impairment of vision. This is the commonest cause of blindness and visual impairment in the United States. An estimated 23.6 million people in the U.S. have diabetes.

g. Glaucoma

This condition results due to raised pressure within the eyes. The increased pressure impairs vision by damaging the optic nerve. This may be seen in older adults and in some babies as well who are born with the condition.

h. AIDS related visual impairment

This is usually caused by viral infections of the eyes called Cytomegalovirus or CMV retinitis. The estimated proportion of persons with AIDS who will develop CMV retinitis ranges from 20 to 40%.

i. Cancer of the eyes

Retinoblastoma is the most common eye cancer of children. There are between 300 and 400 new cases diagnosed annually.

- j. **Refractive Errors** including myopia (“short-sightedness”), and hyperopia (“long sightedness”) with or without astigmatism (when the eye can sharply image a straight line lying only in one meridian).

Characteristics of Visually Impaired

The following characteristics are shown in case of Visually Impaired children.

- Recurrent pain in or around the eye
- Severe, sudden eye pain
- Hazy, blurred, or double vision
- Seeing flashes of light or sudden bright floating spots
- Seeing rainbows or halos around lights
- Seeing floating "spider webs"
- Seeing a "curtain coming down" over one eye
- Sensing a "cup filling up with ink" in one eye
- Unusual, even painful, sensitivity to light or glare
- Swollen, red eyes
- Itching, burning, or a heavy discharge in the eyes
- Any sudden change in vision
- Changes in the colour of the iris
- White areas in the pupil of the eye
- Sudden development of persistent floaters

Some other symptoms/ problems have seen among the visually impaired children related to their daily living skills like:

Moving Around

- Having difficulty in walking on irregular or bumpy surfaces
- Walking or stepping hesitantly
- Going up and down stairs slowly and cautiously
- Shuffling the feet
- Brushing against walls while walking
- Missing objects by under-reaching or over-reaching

Everyday Activities

- Discontinuing or doing certain activities differently such as reading, watching television, driving, walking or engaging in hobbies.

- Squinting or tilting the head to the side to focus on an object
- Having difficulty in identifying faces or objects
- Having trouble locating personal objects, even in a familiar environment
- Reaching out for objects in an uncertain manner
- Having trouble in identifying colours
- Selecting clothing in unusual combinations of colours or patterns

Eating and Drinking

- Having problems getting food onto a fork
- Having difficulty in cutting food or serving from a serving dish
- Spilling food off the plate while eating
- Pouring liquids over the top of a cup or drinking glass
- Knocking over the glasses while reaching across the table for another item

Reading and Writing

- Unable to reading mails, newspapers, or books more time
- Holding reading material very close to the face or at an angle
- Difficulty in writing clearly and having trouble writing on a line

Educational Provisions for Visually Impaired

The Persons with Disabilities (Equal Opportunities, Protections of Right and Full Participation) Act, 1995 stresses the need to provide free education to all children in an appropriate environment till they are 18 years old and further emphasise their right to measures like:

- a. Transport facilities to students with disability or alternative financial incentives to the parents or guardians to enable their children with disability to attend schools;
- b. Removal of architectural barriers from schools, colleges or other institutions imparting vocational and professional training;
- c. Supply of books, uniforms and other materials to students with disability attending school;
- d. Grant of scholarship to the students with disability;
- e. Setting up of appropriate forum for the redressal of grievances of parents regarding the placement of their children with disability;
- f. Suitable modification in the examination system to eliminate purely mathematical questions for the benefit of blind students and students with low vision;

- g. Restructuring of curriculum for the benefit of students with disability; and
- h. Restructuring the curriculum for the benefit of students with hearing impairment to facilitate them to take only one language as part of their curriculum.

The Sarva Shiksha Abhiyan was launched to achieve the goal of Universalisation of Elementary Education. This adopts a ZERO rejection policy and uses an approach of converging various existing schemes and programmes. It covers the following components under education for children with disability–

- ❖ Early detection and identification
- ❖ Functional and formal assessment
- ❖ Educational placement
- ❖ Aids and appliances
- ❖ Support services
- ❖ Teacher training
- ❖ Resource support
- ❖ Individual Educational Plan (IEP)
- ❖ Parental training and community mobilisation
- ❖ Planning and management
- ❖ Strengthening of special schools
- ❖ Removal of architectural barriers
- ❖ Research
- ❖ Monitoring and evaluation
- ❖ Girls with disability

Classroom Settings for Visually Impaired

- a. Select books with good print quality and layout. The text should ideally be left-aligned (with an even left margin, and an uneven right margin). This will make it easier for children with low vision to read, with a minimum of assistive devices.
- b. Books and other reading materials should be provided in Braille for those who depend on Braille for reading and writing. The books should be provided for free or at the same price as sighted children pay for their books (in ink print).
- c. Children who write Braille should have access to writing frames and stylus for free, or at the same price as pen and pencils.

- d. Appropriate visual devices should be provided to children with low vision based on their individual needs as well as availability of devices.
- e. Orientation and mobility (O&M) training should be provided – how to move about with a white cane, use trailing techniques as well as touch and protection techniques, effective use of landmarks (including sound and echo), guiding techniques (human guide) as well as techniques for free movement in space.
- f. The seating arrangements should be fixed or at least not changed too frequently, so that the children can orient themselves and find the way to their seats independently, as well as know where all their friends are seated (located).
- g. Prevent the classroom, especially floor areas, from being cluttered to ease mobility for the children concerned and prevent accidents and injuries.
- h. Daily uses objects in the classroom (books, learning material and devises) should not be moved around too much. These should have fixed places so that children with visual impairment can find easily and independently.
- i. Produce tactile learning material as part of “class projects.” If the children make tactile maps, for example, it will help all children learn geography easily.
- j. Use real objects that the child can feel and handle, rather than abstract.

Reading Strategy for Visually Impaired Children

To promote literacy for visually impaired the following strategy should be adopted.

- Determine what medium is best for an individual child through the Learning Media Assessment. This may be Braille, print materials, dual media, auditory strategies, objects, symbols, or some combination.
- Provide books and literacy tools in a format which is accessible to the child.
- Read aloud using stories and books which are interesting and appropriate for the child.
- Create a literacy-rich environment, in which the child knows that others are reading and writing.

Apart from this, **SET-BC (Special Education Technology British Columbia)**, a provincial resource programme of the BC Ministry of

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Education, divides reading strategies for students with visual impairment into three main areas:

1. **Paper strategies**, including print, magnification and Braille;
2. **E-text strategies**, including tracking, auditory support and refreshable Braille;
3. **Auditory strategies**, including readers and auditory books.

Classroom Instruction During Teaching Learning Process

- Provide instructions brief and clear as much as possible. When repeating instructions, repeat exactly what you want to say. Instruction should not be too much lengthy and clumsy.
- Clearly define course requirements, the dates of examinations, and when assignments are due. Provide advance notice of any changes.
- Present lecture information in a visual format (e.g., chalkboard, overheads, PowerPoint slides, handouts, etc.).
- Use more than one way to demonstrate or explain information.
- When teaching, state objectives, review previous lessons and summarize periodically.
- Provide vision-impaired students with materials in alternative formats at the same time the materials are given to the rest of the class. The student must specify the preferred format, such as enlarged font.
- Give verbal description of visual aids or writing on whiteboard or slides, and spell aloud difficult words or names. Talk through calculations or procedures as they are carried out.
- Diagrams and charts can be presented in tactile form by using a special plastic film, or for partially sighted students by using thick black pen lines or enlargement from A4 to A3.
- Be aware of the effect of lighting and reflections on white-boards.
- Keep teaching environment consistent and uncluttered, and allow students to sit closer to visual resources if necessary.
- In lecture/discussion classes, take care over seating arrangements and encourage people to take turns to speak.
- Allow time for clarification of directions and essential information.
- Break information into small steps while instructing on new tasks.

Writing Assignments and Examinations

- Provide assistance with proof reading written work. Stress organization and ideas rather than mechanics when grading in-class writing assignments.

- Encourage the use of spell-check and grammar-assistive devices when appropriate to the course.
- Convert exam papers in their usual format (e.g., Braille, modified layout, large print).
- A student may require a reader to read the questions;
- A student may require a scribe for dictation of answers;
- A student may require the use of separate room with proctor;
- A student may require the use of computer to produce answers;
- Use of visual aids [e.g., closed circuit television (CCTV)];
- Better lighting (e.g., use of a desk lamp);
- Extra time and/or a separate room may also be necessary where students require a reader, a scribe or need to use assistive technology such as screen enlarger or voice recognition software.
- Consider alternatives to any assignments which depend on visual communication.

Teaching Social Skills to Visually Impaired Children

Students with visual impairments face tremendous challenges in school, both academically and socially. With struggles to keep up in inclusive classes, these students may not put forth the time and effort to learn how to develop social skills. Even if children with visual impairments attend specialized schools, you may need to assist students in socializing in typical environments where the majority of individuals are not visually impaired. Blind and visually impaired students differ, however, from teaching students with autism or other developmental disabilities. Social difficulties in children with visual impairments are typically caused by a lack of information about the visual aspects of interacting with others. These difficulties are often reinforced by others' hesitancy to establish relationships with and communicate appropriate expectations to individuals with visual impairments.

Space awareness activities – Enable children with visual impairment to move about in open space in order to feel confident and in control over their own bodies and movements.

Activities of Daily Living (ADL) – Many children with visual impairment need training in performing daily tasks that for most other children are

learnt by mimicking and copying their parents, siblings and peers. These are, amongst others: going to the toilet, washing, and dressing, tying shoelaces, eating and drinking without spilling, pouring a glass of water, and using cutlery (or sticks). Orientation on mobility should be provided to them.

TLMs for Visually Impaired

In teaching learning process some special devices may be used for them. These are:

- a. Large print materials
- b. Braille
- c. Writing aids (e.g., felt-tipped pens, writing templates, signature guides, bold-lined paper)
- d. Reading stands
- e. Typo scopes
- f. Devices and aids for activities of daily living
- g. Markers for marking stove dials, etc. (either tactile or visual)
- h. Auditory aids such as talking watches or clocks
- i. Audio or taped materials.
- j. Magnifying glasses
- k. Slides
- l. Overhead projectors
- m. Audio-videos
- n. Talking Calculator

Preventive Eye Care and Eye Examinations

Early identification, regular care, support services to children and parents with assistive devices is highly essential to bring them into mainstream.

- If one faces glaucoma, macular degeneration, diabetic retinopathy or a family history of eye diseases or disorders, regular monitoring and more frequent visits may be required.
- It's important to discuss the health care situation of the children with primary care doctor and eye doctor to follow his or her advice about ongoing appointments, medications, and/or treatments. Prevention is an important component of eye care.
- Some eye conditions and diseases are hereditary and family members may need to be monitored regularly by a general physician and an Ophthalmologist or optometrist.

The real problem of blindness is not the loss of eyesight. The real problem is the misunderstanding and lack of information that exists. If a blind person has proper training and opportunity, blindness can be reduced to a physical nuisance.

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Impact of the Training Module in Enhancing the Competency of Teachers to Handle Children with Hearing Impairment

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Introduction

In a democratic country it should be the motto of every school to inculcate the feeling of oneness among the learners of a school, so that discrimination should be wiped out from the mind of the children and sharing attitude will be developed in every child. The mandates of SSA aim at mainstreaming all the children irrespective of caste, creed and race and socio-economic status up to age 14 years+. “Inclusive education means that all students are provided the support and opportunity they need. Every effort will be made to meet the individual needs of all students through a diverse and accommodating curriculum in a regular education environment. Collaborative planning, shared ownership and common responsibility for the education of all students will foster a climate of acceptance and support with the family, society and community”.

Persons with Disabilities (Equal Opportunities, Protection of Rights & Full Participation) Act, 1995

The landmark legislation in the history of special education in India is the Persons with Disabilities (Equal Opportunities, Protection of Rights & Full Participation) Act, 1995, This comprehensive Act covers seven disabilities namely blindness, low vision, hearing impaired, locomotors impaired, mental retardation, leprosy cured and mental illness. Chapter V (Section 26) of the Act, which deals with education, mentions that the appropriate Governments and the local authorities shall:

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- Ensure that every child with a disability has access to free education in an appropriate environment till he attains the age of eighteen years;
- Endeavour to promote the integration of students with disabilities in the normal schools.
- Promote setting up of special schools in governments and private sector for those in need of special education, in such a manner that children with disabilities living in any part of the country have access to such schools.
- Endeavour to equip children with disabilities with vocational training facilities.

Recognizing that teachers need to be sensitized to the needs of CWSN, inclusive education has been incorporated as a part of the 20-day mandatory training of SSA teachers to make them aware of the concept, meaning and importance of inclusion. States are also running separate classes to equip teachers with classroom management skills. The researcher decided to adopt a Module with slight changes according to the need of the teachers and impart a mobile based training moving from school to school on Sundays for over a period of a month to impart both theoretical knowledge and classroom practice. Unless and until the efficiency of the module in enhancing the competency of the teachers is tested, the needs of the teachers will remain unsolved. In order to solve the need of the teachers of lab-area schools, the researchers took up a study on “Impact of the training Module in enhancing the competency of teachers to handle children with hearing impairment”.

Hearing Impairment

A child may be affected with hearing impairment, before birth, during birth or after birth. As stated by the experts the possible causes may be premature delivery, lack of oxygen during birth and absence of birth cry and low weight at birth i.e. less than 1.2 kg. The causes after birth are deformities of ear, nose, face and throat and infectious diseases like mumps, measles, meningitis, viral fever, injury to ears, exposure to loud sound and neglected ear discharges, etc.

Categories of Hearing Loss

1. **Mild Hearing Loss-(26 db to 40 db hearing loss)**-A child with mild hearing loss will have trouble in hearing and understanding soft speech in a noisy background.

2. **Moderate Hearing Loss-(41 db to 55 db HL)**-A child with moderate hearing loss will have difficulty in hearing conversation speech.

The other categories of children with hearing loss and mentioned below are sent to special schools for clinical treatment

- Moderately Severe Hearing Loss- (56 db-to 70 db HL)
- Severe Hearing Loss- (71 db to 90 db HL)
- Profound Hearing Loss-(91 db HL and above)

Support Services

1. Acceptance of the disability by others
2. Right type of Hearing aid
3. Proper use and maintenance of hearing aid
4. Right ear mould fitting
5. Speech training
6. Language development
7. Congenial and language stimulating environment
8. Positive attitude

In a class with children having hearing impairment, the services in Sl. No 1,5,6,7,8 are taken care of for effective teaching learning process but, the teachers should have a basic knowledge of it through orientation.

Objectives of the Study

1. To identify the training needs of the selected primary school teachers to deal Children with Special Needs (CWSN).
2. To train the selected teachers using the training module meant for children with hearing impairment.
3. To assess the competency of the teachers in handling children with hearing impairment as an effect of the training module.

Hypotheses

1. There is a positive impact of the training module on the primary school teachers in dealing with children with hearing impairment.
2. After transaction of the training module the teachers will be able to handle the learners with hearing impairment.

Training Module

The module is a set of key concepts relating to hearing impairment activities prepared by the investigators which was used during teachers training.

Delimitations of the Study

- The study was delimited to 10 primary school teachers selected from the lab-area schools based on their interest and ability which the researchers came to know in course of discussion with them.
- The module was developed by the researchers for dealing with hearing impaired children.

Methodology

Sample

10 teachers serving in primary schools (5 primary schools and two teachers from each school) of Khalikote Block of Ganjam district of Orissa were selected for the purpose of the study.

Design of the Study

It was a Pre-test and Post-test design administrated on a single group.
(Performance testing, extending intervention and final testing)

Tools

For the purpose of collection of data, the following tools were used:

1. Pre-test (Assessing the entry level behavior of the teacher of Hearing Impairment)
2. Module-(Developed by IGNOU, New Delhi on Inclusive Education, only the portions which were meant for children with hearing impairment were selected with slight changes in respect of Methodology as per the need of the class room context).
3. Work Sheet for teachers attending the training
4. Observation schedule used by the observers
5. Post-test-(to assess the behavior changes of the teachers)

Scope of the Module

- Symptoms of hearing impaired children
- Identification of hearing impaired children
- Types of hearing aids and their use
- Taking care of the hearing aids
- Classroom Management
- Use of teaching learning Materials / Methods / Techniques / Approach of teaching.

- Individual work
- Pair work
- Group Work
- Collaborative Work
- Feed Back
- Example of taking class on language
- Cooperative learning

Procedure Adopted

The teacher's entry level behavior in respect of their knowledge and skill to handle children with hearing impairment was assessed through class room performance using observation schedule. After observing the classroom transactions the deficiencies in this respect were detected and their progress in terms of performance was marked. Thereafter, intervention was extended for a period of three days to enhance the knowledge and skill of the teachers with the help of the Module and related materials. Then the teachers were asked to transact the module in their own schools which was observed term wise. After observing the classroom process of the teachers, performance of the individuals was recorded and their progress was compared.

Guidelines for the Teachers for Classroom Management

- The teacher must ensure noise reduction inside the classroom.
- Remain within 3 to 4 feet distance from the child
- Stand/ move in such a manner that the child must mark your lip movement
- Allow the child to sit in the front ensuring the visibility and audibility of your speech
- Ensure that the child can see black board writing
- Sharing in pairs among the hearing impaired and the normal children

Material to be used for Teaching Learning Process

- Charts in both written and pictorial forms
- Written strips (size 2.5 feet to 1.2 feet long)
- Flash cards 3.5 inch x 5.5 inch or postcard with pictures and words (for word picture association activity)

- Sensory training equipments
- Story books/ picture books to develop vocabulary of the hearing impaired child and for practicing writing skills
- Blocks-wooden or plastic cubes.
- Beads-for teaching counting, addition and subtraction.
- Jigsaw puzzle –A picture on a card board is cut into four or more parts and the child attempts to join these together to complete the picture.

Besides the above materials the following materials, are also to be collected/ prepared for use.

- Fruit chart
- Birds chart
- Animals chart
- Flags of different countries
- Maps of Orissa, India and Globe
- Models of fruits, vegetables, various forms of transport, furniture, etc
- Models of plastic/wood/clay
- Use of match box to prepare different contextual models.

Table-1
Pre-Test

Sl. No	Competencies spelt out In the Module	Extent of Conceptual Clarity		
		Highly Satisfactory	Satisfactory	Just a Little
1.	General awareness about hearing impaired children	-	2 (20)	8 (80)
2.	Skills of class room Management Seating arrangement	3 (30)	4 (40)	3 (30)
	Individual attention	-	6 (60)	4 (40)
	Grouping the learners with the normal Children	2 (20)	6 (60)	2 (20)
	Checking readiness of learners towards teaching learning process	2 (20)	6 (60)	2 (20)
3.	Teaching Learning Process : Objectives of the Lesson	2 (20)	4 (40)	4 (40)
	Use of methods and Techniques	2 (20)	4 (40)	4 (40)
	Use of materials	2 (20)	3 (30)	5 (50)
4.	Evaluation	2 (20)	4 (40)	4 (40)

Figures in parentheses indicate percentages

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Table-1 shows that almost all the teachers need raining in different aspects of classroom management, transaction of teaching learning process, use of suitable method and techniques, use of teaching learning material and evaluation procedure relating to hearing impaired children.

Some Reflects on Transaction of the Module

Subject: First Language (Oriya)

Competencies selected for class room transaction

- a. Dialogue Practice (structured conversation)
- b. Listening to dictation and writing accordingly
- c. Comprehension of paragraph and response to who/what/ why questions.

Response of the Students

40 per cent of the hearing impaired children were able to follow and respond. Speech was partly intelligible, some mistake in writing dictation were identified and corrected by the teacher during demonstration.

Subject Social Studies (Geography)

Competencies selected for class room transaction

- a. Map reading (identifying the location of a spot as per instruction)
- b. Describing the climate of a region
- c. Crops and food (Filling in the work sheet as per instruction)

Response of the Children

50 per cent of the hearing impaired children were able to follow and respond. Speech was partly intelligible, some mistake in map reading were identified and corrected by the teacher during teaching learning process.

Competencies Selected for Class Room Transaction

- a. Writing the numbers correctly as per dictation
- b. Telling the place value of a digit in a number as per dictation
- c. Place beads in abacus as per dictation

Response of the Students

35 per cent of the hearing impaired children were able to follow and respond. Some mistake were found in telling the place value which were corrected by the teacher then and there.

Table-2
Post-Test

S. No.	Competencies Spelt out In the Module	Extent of Conceptual Clarity		
		Highly Satisfactory	Satisfactory	Just a Little
1.	General awareness about hearing impaired children	4 (40)	4 (40)	2 (20)
2.	Skills of class room Management Seating arrangement	5 (50)	3 (30)	2 (20)
	Individual attention	4 (40)	3 (30)	3 (30)
	Grouping the learners with the normal Children	5 (50)	5 (50)	
	Checking readiness of learner towards teaching learning process	3 (30)	6 (60)	1 (10)
3.	Teaching learning Process : Objectives of the lesson	4 (40)	4 (40)	2 (20)
	Use of methods and Techniques	4 (40)	4 (40)	2 (20)
	Use of materials	5 (50)	3 (30)	2 (20)
4.	Evaluation	5 (50)	3 (30)	2 (20)

Figures in parentheses indicate percentages

Result and Discussion

Comparison of the results of the pre-test with the Post-test with regard to general awareness about hearing impaired children, it was highly satisfactory in case of 40 per cent of teachers in Post-test stage whereas it was Nil at the Pre-test stage. With regard to skills of class room management, it was marked highly satisfactory with 20 per cent increase as against pre-test. It was found that initially no teacher was conscious of paying individual attention, but after intervention it was found to be highly satisfactory as 40 per cent of teachers were alert in this connection. Though grouping hearing impaired children with normal children is very much essential from peer assisted learning point of view, it was negligible at the Pre-test stage, but 50 per cent of teachers were found very much conscious regarding grouping during class room transaction as an effect of the intervention extended through the Module. With regard to teaching learning process, very few teachers were conscious of the objectives of the lesson and methods of teaching before intervention. But substantial improvement

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was marked i.e. 40 per cent of the teachers were conscious of the objectives and methods of teaching after intervention. Use of materials in a mixed class of normal with CWSN is very much instrumental, which was lacking before intervention but, it was up to mark after intervention so far as appropriateness in the use of the materials and motivating the students in the TL process were taken into account. In a normal class, teachers were not so meticulous in asking questions which was observed before intervention but, it was quite satisfactory as 50 per cent of teachers were conscious of doing that after intervention. So the hypothesis no.1 and 2 are retained as the impact of the module proved effective.

Findings of the Study

- 80 per cent of the teachers lacked basic knowledge about use of hearing aids.
- 40 per cent of the teachers became aware of the know-how's of transacting the teaching learning process to the children with hearing impairment with the normal students of the class and 40 per cent need training in this regard.
- Almost all the teachers (100 per cent) acquired required knowledge and skill with regard to class room management.
- 50 per cent of the teachers were able to choose the appropriate TLMs, which they can prepare at their level.
- 50 per cent teachers need second round training on the Module
- As Hearing aids could not be used during transaction of the module, the teachers put forth their demand for that.

Educational Implications

- This module can be used for training other teachers to deal children with hearing impairment.
- Although some of the teachers could not prove proficient during training if it will be used time and again in classroom practice they can overcome their defects.
- In large scale, some of the strategies can be applied for preparation of resource teacher.
- The module can be tried out in large scale with adequate number of teachers.

- Teachers can apply the skill in preparing TLMs for use by children in inclusive set up.
- With an inclusive context and a little bit modification, this can be applied in special schools.

Conclusion

In order to fulfill the mandates of SSA, so far as mainstreaming all categories of children and providing quality education, teachers working in primary schools should be given short term training with theoretical knowledge and practical school session to deal with Children With Special Needs (CWSN). Similar specific modules for other categories of children can be prepared and teachers should be trained to handle the class effectively. Teachers should be specially trained on the use of hearing aids to come to the rescue of the hearing impaired children as and when needed.

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Inclusive Education in Practice: A Case Study

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Introduction

Education has been formally recognized as a human right since the adoption of the Universal Declaration of Human Rights in 1948. Every child has the right to avail quality education. The Constitution of India and the educational policies envisaged in post-independence era reflect a perseverance and commitment to the fulfilment of Universalization of Elementary Education. The Constitution states that ‘free and compulsory education should be provided to all children until they complete the age of 14 years’. The Education Commission (1964-66) highlighted the importance of educating children with disabilities during the post-independence period. In 1968, the National Education Policy followed the commission’s recommendations and suggested the expansion of educational facilities for physically and mentally handicapped children, and the development of an ‘integrated programme’ enabling handicapped children to have their education in regular schools. The National Policy on Education (NPE) (1986) stressed the ‘removal of disparities’ in education, while attending to the specific needs of those who had been denied equality so far (MHRD, 1986). The World Declaration on Education for All, adopted in Jomtien, Thailand (1990), sets out an overall vision: universalizing access to education for all children, youth and adults, and promoting equity. The Persons with Disability Act 1995, (PWD Act, 1995) affirmed the principle of right to education in appropriate environment of the children with disabilities.

The National Policy for Persons with Disability, 2006, which attempts to clarify the framework under which the state, civil society and private sector must operate in order to ensure a dignified life for persons with disability and support for their caregivers. It includes extending rehabilitation services to rural areas, increasing trained personnel to meet needs, emphasizing education and training, increasing employment opportunities, focusing on gender equality, improving access to public services, encouraging state governments to develop a comprehensive social security policy, ensuring equal opportunities in sports, recreation and cultural activities, increasing the role of civil society organisations as service-providers to persons with disability and their families. The National Curriculum Framework (2005) emphasized on bringing children with special needs to inclusive schools. In Sarva Shiksha Abhiyan, emphasis has also been given to bring such children to the common fold of education.

Every child has the right to receive equal education as others, regardless of disabilities, learning difficulties or ethnic minorities. In the last few decades, educational provisions for learners with disabilities have changed. More learners with special needs are studying side by side in regular schools with their peers who do not have disabilities. This concept is commonly known as inclusive education. It is based on the principle that all children regardless of ability or disability have a basic right to be educated alongside their peers in their neighborhood schools (UNESCO, 1994).

Inclusion is a philosophical principle; whereas Education for all is a commitment. Inclusion believes that everyone has the right to learn. It is the responsibility of the Government to provide free and compulsory education up to the age of 14 years. Again in pursuance of the Right of Children to Free and Compulsory Education Act, 2009 and Odisha Right of Children to Free and Compulsory Education Rule, 2010, no child is denied admission in any elementary educational institution. It indicates that all are equal and we must respect diversities. Segregation restricts social development where as inclusion facilitates it. Inclusion teaches us to arrange the minimum education for all in one platform, so that the children can get scope for sharing their experience, culture and values. It is a stepping stone to national integration.

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Inclusion is thus seen as a process of addressing and responding to the diverse needs of all children through increasing participation in learning and community activities. It involves changes and modifications in content, approaches, structures and strategies, with a common vision that covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children. An 'inclusive education' system can only be created if ordinary schools become more inclusive – in other words, if they become better in educating all children in their communities.

School education tends to provide society with equal opportunities to all the school goes. Students wear school uniforms, use the same text books, and are usually taught as a whole class by the same approach. However, individuals are never the same. There is a wide range of learning diversity in schools. In every classroom, students' learning progress is never at the same rate. The students with disabilities or learning difficulties especially need extra help. It would be very difficult for the teacher to give lessons to the whole class when students do not progress at the same pace. Again, each individual has his/her own preferred learning style. It would also be very difficult for the teacher to cater to the needs of every student's preference. As individuals are unique, the students' diversity in the classroom is inevitable. Consequently, an important issue faced by the teachers is how to provide students with a positive and supportive learning environment.

To provide deeper insights into inclusive education there is a need for qualitative research into the practices actually operating in schools and classrooms and to identify specific challenges faced by teachers of elementary schools. Inclusion of students with special needs requires teachers to have specific knowledge and training for curriculum adaptation, flexible assessment methods, good classroom management, co-teaching skills, and willingness to collaborate with parents. To substantiate the theory of inclusive education as a best practice for children with disability, a small case study in this regard has been undertaken in one elementary school of Bhubaneswar Municipal Corporation (BMC). The present study is based on findings of a school working in inclusive setup.

Objectives of the Study

1. To examine the involvement of parents and teachers in the process of inclusion of students with disabilities in general schooling.
2. To study the role of parents and teachers in mainstreaming the students with disability in regular schools.

Research Questions

1. How do parents and teachers get involved in the process of inclusion of students with disabilities in general schools?
2. What role do the parents and teachers play in preparing students with disability in regular schools ?

Research Design

A case study approach was employed to gain insights in order to conduct an in depth study on the practice and process of education in inclusive set up of Gandamunda UGH School, Bhubaneswar. The purpose of the study was to identify factors contributing to the success of inclusion in an elementary school, to delineate the major challenges the school is facing and to evaluate the effectiveness of implementing inclusive education. The study looks at how the educational needs of children are catered. As per research design interviews and classroom observation techniques were adopted. Observation was made on classroom processes and infrastructural facilities. The observations were recorded in the appropriate manner according to the formats. Photographs of available facilities and ongoing activities in the school, and Individualized Educational Plan (IEP), and assessment reports facilitated the researchers to gather information about the current practice of inclusive education in the school. Four categories of people were interviewed in the school viz. the Headmistress, four teachers, ten peers and two parents.

Sample

- Gandamunda Upgraded High School, BMC, Bhubaneswar (Odisha)
- Class III students: 2 (one child was orthopedically handicapped and other one was mentally retarded)
- Four subject teachers
- Two parents
- Headmistress

Case study : 1
Orthopedically Handicapped

Aditya Sahu, a nine year old child studying in class –III of Gandamunda UGH School, Bhubaneswar is an orthopedically handicapped child. When he took admission in class-1 he was a normal child. But at the end of the session he met an accident and his right limb was seriously affected, the bones were damaged. He also lost his younger brother in that accident. So he became physically handicapped and emotionally disturbed. He got admission to class-II but did not attend the class and discontinued his study. When the matter came to the notice of CRCC Smt. Kabita Kanungo, (presently working as teacher of this school) she met his father (Sri Gopal Sahu) and convinced him to send the child regularly to the school. Father of Aditya Sahu was convinced and sent Aditya to the school. Initially Aditya was quiet in class. He did not mix with his classmates and felt comfortable with two/ three friends. His mobility was very much restricted. He was good in drawing and painting. After the teacher recognized his potential in art gave attention to him, he gained confidence and slowly started mixing with his friends. Gradually improvement was noticed in his activities and behaviour. Now he is coming to the school regularly and is being encouraged by the teachers to participate in different activities.

Data were collected about the child from records (Individual education plan), classroom observation and through interviews with teachers, parents and peers. The collected data were analyzed and summarized as follows:

Opinion of Teachers

His class teacher Smt. Sasmita Sahoo who teaches Odia, expressed, “Aditya is very positive in his approach. When he took admission in standard III he only knew the Odia alphabets and was unable to read and write words and sentences. But after using picture dictionary, rhymes, reading small stories and few supplementary books now he could read and write Odia. Sometimes he is facing problems in Odia conjunct letters. His friends have taken some responsibility to teach him Odia.”

English teacher Smt. Kabita Kanungo with evidence explained the progress of Aditya over a few months. He is reciting rhymes with action, telling small stories, showing good manners to his teachers and friends. She also

said that at the earlier stage he was mentally disturbed and did not show interest in school activities but now he is taking part in most of the activities and also trying best to show his potential. He has some problem in his leg but when Smt. Kanungo told to show some TPR (Total Physical Response activity) action like sit down he was doing it by bending his body which reflects his willingness to perform different activities.

EVS teacher Smt. Bijayini Sarangi and Mathematics teacher Smt. Krishna Pattanaik also expressed, “He is participating in all the activities. He is good at mathematical computation. He is also interested in developing picture cards. He works comfortably in groups.”

All have noticed that he is improving academically mostly in oral activities. He is very good in drawing and has interest in doing varieties of creative art. So they are promoting him and also trying to use his ability in area of his interest.

Opinion of Father

Aditya's father is playing the role of both the father and mother as his mother has passed away. After meeting Smt. Kabita Kanungo (CRCC at that time) he admitted his son in Gandamunda UGHS. Now he could see the improvement in his son both in curricular and other curricular area and he is happy with the teachers' contribution towards his son's overall development. With much agony he expressed that his son is not availing any type of Government facilities for children with special needs like Madhu Babu Pension Yojana (i.e. Per month Rs.500 /-) and Banishree Scholarship (i.e. per month Rs 250/-) for orthopedically handicapped students. In medical examination Aditya was found having 50 per cent disability so he was debarred to get these financial benefits.

Peers Opinion

Aditya has many friends. When the researchers interviewed his friends they gladly accepted that Aditya is one of their friends. All of them viewed that he is showing good behaviour to them as well as to teachers. Some of them reported that in the beginning he was silent in nature but now he is mixing with them. They assured that nobody in their class teases Aditya for his disability rather they are learning in group and helping Aditya in learning.

Aditya is very good in drawing so his friends are also taking his help. They also told that Aditya was able to play with them and run with them.

Barriers for Aditya

- a) Emotional : Sometime when he looks at other friends he lacks his confidence.
- b) Physical: He is facing problem in sitting on the ground and once he sits he does not like to move. School does not have any other arrangement for him and also government/SSA does not supply wheel chair to him because he was found disability to a range of 50%.
- c) Educational: He discontinued from the school for one year and did not continue in class-II for which he is facing problem in his study.

Case Study : 2
Mentally Retarded

Satyabrata Badajena, a nine year old child studying in class –III of Gandamunda UGH School, Bhubaneswar is a Mentally Retarded (MR) child by birth. He took admission in class-I in 2015. At that time his condition was very bad. He comes to the school with his mother/father. He was not aware of his surroundings and did not respond anyone other than his mother. In the initial days when he was staying for 15 minutes in the school, he usually became hyperactive and aggressive. At that time teachers could not control him for which they were sending him back to home with his parents. It was an usual practice. Then he did not attend the class for many days and gradually discontinued his study. His parents consulted doctor and admitted him in a therapy class and they felt happy because their child was improving socially. When this matter came to the notice of CRCC Smt. Kabita Kanungo, (Presently working as teacher of this school), she met his mother and convinced that if the child would come to the school then he could progress further both mentally and socially. Then parents sent Satyabrata to the school since the November 2016. Gradually a change was noticed in his activities. His initial hyper activeness was reduced. He was coming to the school regularly but staying till mid day and in the second half he was attending therapy class with his parents. During interaction, he only repeated the words or sentences. Instead of replying to our questions, he was repeating all that were asked to him. He didn't know

Odia and English alphabets but could write by copying from his own copy or from friends copy. He could recognize colours and could match it with the objects having the same colour. By seeing these changes in him teacher started encouraging him to participate in different group activities. He was just responding to few teachers and one or two classmates. He did not have any friend but most of the time Aditya Sahoo gave him company. He did not show any emotion and did not demand any support from anybody.

Analysis of Data and Discussion of Result

Data collected about the child through records, interviews of teachers, parents and peers were analyzed and summarized as follows:

Opinion of Teachers

His class teacher Smt. Sasmita Sahoo who taught Odia opined that Satyabrata was progressing slowly both socially and mentally. He could write Odia by just copying without understanding but unable to read alphabets. But after using picture dictionary frequently he could recognize some pictures and relate it to the objects present in his surroundings.

Opinion of Parents

His mother (Smt Laxmipriya Badajena) reported that they sent Satyabrata to the school to be sociable and independent.

Opinion of Peers

According to Styabrata's classmates, he did not have any friend. He was very silent and busy in his work only. He did not play with them, talk to them and also not eat with them. He only responds to the teachers. They also told "They did not know much about Satyabrata."

Barriers

- a) Emotional: He did not show any emotion to any of his teacher and friend. He was only emotionally attached with his parents and depends on them for everything.
- b) Physical: He was physically sound but lacks eye coordination for which he was always confused before doing anything. He mostly recognizes people through touch and sound.
- c) Educational: He lacked understanding so whatever he was saying or writing is meaningless for him.

Observation

Physical Access to School Facilities

In the school, there had been some structural modifications like ramps, however, the gradients of the ramps were too steep for students with physical impairments, and they needed assistance from other students to enter the classroom. It was observed during lunch break that students with and without disabilities shared their meals without any problem.

Facilities at School for Inclusion

- a) Regular parent – teacher meeting
- b) Qualified and trained teachers specifically for inclusive education (Samata training)
- c) Positive attitude of teachers for inclusion
- d) Ujjwal programme helps in improving the competencies

Strategies to be Adapted by the Teachers for Inclusion

- a) Peer learning
- b) Collaborative learning approach
- c) Learning friendly environment
- d) Flexible assessment process

Role of Parents

- a) Regular meeting with subject teachers, class teachers and headmistress.
- b) Encourage participation of their children in both curricular and other curricular activities conducted in schools.
- c) Regular medical checkup for their children's betterment

Teacher's Opinion about Inclusion in Education

- Inclusion is a good idea.
- Some of them could be successful in our school provided we are ready to support them. They need lot of support.
- Teaching students with disabilities is quite challenging; first of all, one has to ensure that the child is safe, and accepted by others.

Headmistress

- "Student teacher ratio is not favourable. We teach large numbers of students. Having a child with disability in a class is really a problem. It is very difficult to give equal attention to all students".
- The teachers and Headmistress of the school were very much concerned with the lack of supportive resources .

Learners' Experiences

Aditya : "I enjoy studying with my friends. They help me in my studies, and I also help them in their schoolwork. They don't discriminate me just because I am physically challenged. I respect them and they respect me. I don't have any problem".

Satyabrata : "I like the school".

Conclusion

Every child who is identified as having a disability and who receives special education services must have an individualized education programme prepared. Research suggests that special needs students who are segregated from regular students perform more poorly academically and socially than comparable students who are mainstreamed. (Kavale 2002) It can be assumed by evidence that students with disability will learn more by interacting with non disabled students than by attending homogeneous classes by observing and imitating more competent children. Mainstreaming has to be extended to the point at which students with disability are taught only in regular classrooms by regular and special teachers. All that the child needs a restricted environment and procedural safeguard along with love, care, compassion and empathy of teachers and parents and others who matter for the child.

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Reaching the Unreached: The State of Differently Abled Learners

Understanding the Hearing Impaired Children in the Context of Their Academic Progress: A Study

Ajay Kumar Swain

Introduction

Children are different from each other in physical and learning abilities. Some are taller, some are shorter and some are stronger or weaker than others. Some children can learn quickly and able to remember the techniques. Some children need repeated practice for learning. The learning abilities of children are different from others.

To educate the differently abled learners, there is a specific guideline focusing on why and how. In this connection the following facts are worth mentioning. The article “Seven Pillars of Inclusive Education from ‘why’ to ‘how’” provides a very useful review and recommendations with the seven pillars of inclusive education. Based on a review of research findings, it discusses the creation of essential conditions in schools and school jurisdictions in order to support the inclusion of the diverse range of learning performance and needs found in today’s classrooms. In order to make inclusion successful, educators need to work towards on educational climate and set of practices which include the adoption of positive attitudes, supportive policy and leadership, school and classroom processes grounded in research based practice, flexible curriculum and pedagogy, community involvement, meaningful reflection and necessary training and resources, (Tim Loreman, 2007).

Exceptional children are different types like mentally retarded, learning disabled, hearing impaired, visual impaired etc. Out of these, hearing impairment refers to partial or complete loss of hearing, which prevents a

person from completely receiving sounds through the ear. Hearing impairment is of two types like deaf and hard of hearing. Deafness is a severe disability where as hard hearing is usually insensitivity to sound in the speech. In deafness, an individual is unable to understand speech by using hearing aid. But the people who are suffering from hard of hearing can receive information from sounds by using hearing aids or assistive hearing equipments. The common categories of hearing impairment are mild, moderate, severe, and profound.

- **Mild hearing impairment (25 db-40 db):**The children having mild hearing impairment can hear between 25 db to 40 db sounds. They have difficulties with conversations and understanding in noisy environments.
- **Moderate hearing impairment (40 db-70 db):** These children can hear with 41 db to 70 db sounds. Those face difficulties in hearing conversation without using hearing aids.
- **Severe hearing impairment (71 db-95 db):**The children having severe hearing impairment can listen with 71 db to 95 db sounds. They can hear with powerful hearing aids. They need lip reading and sign language.
- **Profound hearing impairment (96 db and above):** Children who suffer from profound hearing loss are very hard of hearing and they listen with 95 db or above sounds. They require lip reading and sign language to learn.

Rationale of the Study

At the elementary stage, we find a group of differently abled learners such as visually impaired, hearing impaired, mentally retarded, and orthopedically impaired etc. As the concern of the researcher is to handle the education of children with hearing impairment, he visited number of schools and in almost all the schools, he came across some children who are categorized as hearing impairment. Out of curiosity, the researcher asked some questions to those children in usual voice but 50 per cent of them could not listen and respond. The rest 50 per cent of students could neither respond nor comprehend. Thus, the investigator was stimulated to take up a study on “Understanding the Hearing Impaired Children in the Context of their Academic Progress”.

Reaching the Unreached: The State of Differently Abled Learners

Objectives of the Study

The following were the objectives of the present study.

- (i) To identify the hearing impaired children using appropriate testing techniques.
- (ii) To develop exemplar instructional materials for hearing impaired children in order to facilitate teaching learning process in the selected concepts.
- (iii) To study the impact of the intervention on the achievement of the hearing impaired children.

Hypothesis of the Study

The remedial materials would exert positive impact on the performance of the learners having mild hearing impairment in terms of achievement.

Methodology of the Study

The method and procedure of the present study are stated below.

Design-It was a single group pre-test and post-test design. Here, test, teach and test techniques were followed.

Sample-Initially the researcher selected two upper primary schools according to his convenience. A test was administered on the students on English and Geography. It was found from the results that the performance of the student was below 40 per cent. It was felt that those students need special treatment in English and Geography. So 5 mild categories of hearing impaired students of class VI were identified from two schools.

Tools The following tools were developed and used in the present study.

- Pre-teacher made achievement test.
- Post-teacher made achievement test.
- Observation schedules.

The techniques like pair work, group work, co-operative learning and peer assisted learning were followed. The bright students were motivated and encouraged to guide the target learners.

Procedure of the Experiment: The investigator proceeded to the schools and interacted with the teachers before administering the tests. The atmosphere was made congenial for smooth administration of the tests. As the students belonged to hearing impaired mild category, due care was

taken to help them listen clearly and answer the oral questions by reading the test items aloud. With regard to the written questions a query was made whether they were able to read the question papers, if not assistance would be given.

Concepts: In the present study, interventions were adopted to develop vocabulary in English and Geographical concepts through map reading.

Testing Techniques Followed

- Individual interview and asking oral questions
- Performing some activities in pairs for peer assistance
- Showing pictures for testing picture comprehensions
- Completion test within one or two words
- Seeking response to oral questions for the fixed answer
- Formation of words

(a) **Strategies Adopted in the Study:** The following strategies were adopted to develop

The vocabulary in English and Geographical concepts through map reading of mild hearing impaired children during intervention. The researcher followed the following practices to motivate the target learners and appropriate reinforcement was given.

- The principle of equity was adhered and front seats were kept for hearing impaired learners.
- Equipment which creates background noise were replaced.
- Eye to eye contact was followed by the researcher during transaction besides allowing them to sit at a close distance.
- Short and simple sentences were used for better understanding of the students.
- Facial expressions, gestures and body language were used during transaction for better clarity of the content.
- The researcher encouraged interactions between the mild hearing impaired children and their classmates.
- The spoken words and sentences were written on the black board in bold letters with adequate spacing between words.
- Stress was given on clear handwriting, correct spelling and punctuation marks.

Activities for Developing Vocabulary in English: The following activities were undertaken to develop vocabulary in English of mild hearing impaired children during intervention.

- Visual vocabulary sheets were prepared – words with pictures.
- New words were used in various contexts relating to daily life of children.
- Different gestures, postures, lip reading, facial expressions, pictures and flash cards were used.
- Thought provoking tasks were given such as “Tell words related to Hospital or School or Garden etc.
- Charts of words and phrases with meaning hanged inside the class room near the target children.
- Video clips were used in various situations to arrest the attention of the students.

Activities for Developing Geographical Concepts through Map Reading: The following activities were undertaken to develop Geographical concepts through map reading of mild hearing impaired children during intervention.

- Globe, maps, flash cards, video clips were used to give conceptual clarification on maps of Odisha along with state and district boundaries.
- Varieties of charts with colours were used to identify the plain land, water, high land, plateau which stand for the places.
- Photo copies of map of Odisha and India were supplied to study symbols of roads, railways, rivers, seas, airlines etc.
- Group work and pair work activities were organized such as cut and paste.
- Pictures, charts etc. were used to recognize the states and boundary, districts and boundary , name of the state capital and district headquarters etc.
- Video clips were used to learn maps of different states of our country with important places.

Interventions: The intervention continued for 30 days followed by post test administered on the sample.

Strategies: The following strategies were adopted to overcome the constraints.

- Matching and batching techniques among students were followed. For one Hearing Impaired student, one bright child or mediocre child was attached who could extend peer tutoring.
- The researcher also directly extended academic support where it was felt.

Result and Discussion

In this study, competency wise performance of the sample in pre-test and post- test was analyzed. The following tables show the performance of students as a result of strategic intervention of one month.

Subject: English

Table 1
Performance of Students in English Before and After Intervention

Competencies	Before Intervention		After intervention	
	N	Percentage (%)	N	Percentage (%)
Reading vocabulary	5	14 %	5	50 %
Say words	5	12 %	5	38 %
Write words	5	10 %	5	20 %
Take part in role play	5	41 %	5	67 %
Story telling	5	25 %	5	44%

The performance of learners in English in reading vocabulary was 14 % before intervention but it improved to 50 % after intervention. Similarly the performance in the competencies like say words, write words, take part in role play and storytelling before intervention were 12 %, 10 %, 41 % and 25 % respectively where as these percentage were raised to 38 %, 20 %, 67 % and 44 % after intervention.

Subject: Geography

Table -2
Performance of Students in Concept Attainment in Geography

Competencies	Before Intervention		After intervention	
	N	Percentage (%)	N	Percentage (%)
Map reading: Locating the places	5	20 %	5	77 %
Colour concept – Plain land, water, high land etc.	5	13 %	5	49%
Boundary of states, districts and country	5	09 %	5	35 %
Identify the water line, railway line, road, air line etc.	5	22 %	5	68 %
Names of states with capital and districts of Odisha with headquarters	5	38 %	5	62 %

Before intervention in relation to the subject Geography, the performance in the competencies like map reading-locating the places, Colour concept – plain land, water, high land etc., boundary of states, districts and country, identify the water line, railway line, road, air line etc, names of states with capital and districts of Odisha with headquarters were 20 %, 13%, 09 %, 22% and 38% respectively but after intervention the performance in the said competencies were 77 %, 49 %, 35%, 68% and 62 %. When no intervention was provided, the students felt awkward during transaction. But after intervention they felt comfortable and answered the questions. After intervention the students could not have courage to read the maps. When assistance was given instantly through their friends of high achievers and mediocre achievers, they could do it. Thus, their achievement at the post-test was found satisfactory.

Educational Implications

- a) The strategies adopted in the study can be transferred to normal class where non disable learners are studying. It will help a lot to both teachers and learners.
- b) The nearby schools can use these strategies where the children of hearing impaired categories are studying.
- c) The results can be shared with the parents of the children and teachers of different schools.

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The Learning Disability in Dyscalculia that Needs Combating

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Dyscalculia is the type of learning disability resulting in difficulties in learning numerical and mathematical ideas and concepts.

Clinical Signs of Dyscalculia

- Difficulty in common Mathematics processes such as addition, subtraction, multiplication.
- Difficulty in Mathematics concepts such as sequencing of numbers, and sequencing of rules required in mathematical problems.
- Poor retention and retrieval of Mathematics concept.
- Inability to work with numbers of symbols.
- Inconsistency in understanding and application of Mathematics.
- Poor sense of direction and time e.g. difficulty with reading maps, telling time etc.
- Difficulty in applying rules in sports.
- Trouble keeping track of score and plays during card and board games.
- Inability to handle money transaction in day-to-day living.

Difficulties in Mathematics

- Shape discrimination –confusion in recognizing shapes may cause difficulty in recognizing numbers.
- Size discrimination –concepts like big, small, long and short are very important for mastering abstract quantitative concepts like

more, less, greater than, less than etc. This may also lead to difficulties in estimating area, perimeter, etc at a later stage.

- Classification –categorizing objects into sets are a very important concept for mastering Mathematics. Difficulties in this can also lead to difficulties in sample operation like counting.
- One-to-one correspondence –lack of understanding of this could cause problems even with counting. This may also lead to failure in understanding ordinal numbers.
- Auditory –visual integration necessary to remember names of symbols, (numbers signs, etc). Memory deficits could aggravate the problems.
- Place value confusion in this area can lead to difficulties in addition (involving borrowing and carrying over), division and multiplication.
- Computation skills in understanding commutative properties of addition/ multiplication and concepts that subtraction is an inverse operation of addition and division in an inverse operation of multiplication.
- Problem solving difficulties in solving word problems due to problems in language, lack of analysis and reasoning.
- Spatial concepts –difficulty in making measurements of time, distance etc.

Strategies for Intervention

- Identifying the problem areas in Mathematics is the first step towards helping the child. Concretizing the concepts, use of multi sensory approach, repeated drill and revision exercises once understanding of the concept is ensured, will help in consolidation and retention. Gradually increasing the difficulty level of the concepts, using examples from real life stories around Mathematical concepts can be attempted to get the child involved in learning.
- It should be kept in mind that each intervention strategy is a unique instructional design based on the kind of learning difficulty the child has and the nature of the Mathematical concepts itself. Hence, it implies lot of creativity and imagination on the part of the teacher handling the difficulty.

Strategies to clarify some of the Mathematical concepts to the Learning Disabled Children in dyscalculia are discussed below.

1. Teaching Pre-concepts, Mathematical Operations

- Prepare a work sheet with missing Mathematics. Ask the students to fill them in.
- Promote understanding of the terms longer and shorter by drawing lines of various lengths of the chalkboard and asking the students to make them longer or shorter.
- Use number line to develop vocabulary such as before, after, between, larger than, smaller than, and the same as. Permit students to refer to the number lines in answering questions (e.g. what number comes just before 7, what number comes just after 13? What number comes between 6 and 8 ?)
- Give student a set of cards numbered from 1 to 10. Instruct him to turn up one card and ask whether that number comes before after or a number that you choose at random. Also use more or less and smaller than or larger than for this activity.
- Print operational sign on flash cards. Let the students practice with the cards every day. Add kinesthetic clues by cutting the signs out of sandpaper and pasting them on the cards.
- Provide colour cues for operational signs to call attention to the signs. Also draw circles or boxes around the signs to enable students to attend more closely to the signs.

2. Teaching Fractions

Not only children but many adults also have difficulties in understanding fractions. To understand fractions, we should be aware of the fact that

- Fractions make sense only when viewed in relation to a whole number. They make no sense as independent entities.

Material and experiences should be provided to the children to master these basic facts.

- Fraction and equal sharing-give children a bag of marbles, sweets etc and ask them to share equally between 2,4,8 and 10 children and write the fractional equivalent.
- Fractions and shapes-draw and cut symmetrical shapes and ask children to fold into $\frac{1}{4}$, $\frac{1}{2}$, $\frac{1}{8}$ etc.

- Fraction/ lengths- estimating or measuring length of a long strip its $\frac{1}{4}$ $\frac{1}{2}$, $\frac{1}{8}$ etc. This activity could be done with capacity, weight, time, etc for generalization
- Charts could be drawn to illustrate the relationship of fractional parts to the whole.
- Gradually introduce assessments requiring work with fraction without clues.
- Use the measurements in simple recipes to reinforce fractional components

The following Anecdotes of two upper primary school children are worth mentioning so far as dyscalculia is concerned

Anecdote -1

Ramesh : A dropout from class VI

Question by the teacher: “Why did not you continue your studies and dropped out from class VI ?

Ramesh : During my primary class, I always scored less than 20 marks in Mathematics. I was unable to work out the sums (addition and subtraction within three digit numbers). The teacher called me to the front of the class and asked me to perform addition of numbers and subtraction of the numbers. I could not do it correctly. The whole class laughed at me. I could not write the numbers correctly in relation to place value. So I made mistakes in respect of both addition and subtraction. Till class VI, when these problems could not be remediated my performance in mathematics proved to be very poor. I was humiliated by my friends and members of the families. A private tutor was engaged by my father to help me to overcome the difficulties. So I decided not to continue my studies.

Anecdote-2

Kishore : A drop out from class VI. My parents engaged me in house hold work. They sent me on two occasions to purchase vegetables. I was so poor in calculation that I could not pay the price with correct calculation. The shop keeper was annoyed and did not give me anything. My father knew that due to wrong calculation at the time of payment, I was denied to receive the vegetable. So the child suffered from dyscalculia. The above two cases clearly proves that although both the students were studying in class VI, they made mistakes in simple calculation.

In our primary and upper primary schools dyscalculia learners need special training to overcome their problems. But the teachers never try to seek the reason. It is duties of the teachers to consult the expert / teacher educators who need to conduct case study and solve the problems of these children.

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Physical Impairment – Motor and Mobility Impairments

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Introduction

Many children with physical impairment are brought to the schools with wheel chairs and crutches for mobility. It is therefore essential that we start making schools more accessible for children with motor or physical impairment. According to numerous international conventions and agreement, all children have the right to access quality education in an inclusive setting in their home communities.

What is Motor Impairment?

Motor impairment is a disability affecting the ability to control muscle movement, which often limits mobility. Examples include cerebral palsy, arthritis, paralysis, limb loss and reduced function of one or more limbs. The impact of these conditions on learning, development and participation will vary from child to child.

Many children with motor impairment also experience difficulties in social interaction with other children (and adults), with attention as well as with their cognitive and language development. This highlights the need for comprehensive collaboration between education, health and social sectors when support services are organized by teachers, schools and education authorities.

What is Mobility Impairment?

Mobility may be impaired by a number of conditions. Some are permanent; others are of a temporary nature. These include cerebral palsy, arthritis, muscular dystrophy, multiple sclerosis (MS) and Juvenile Parkinson's

disease. Injuries may also temporarily or permanently affect mobility. These children from primary to secondary level are allowed to have their school with normal students in government schools. These children have shown spectacular performance in different fields.

Practical Tips for Teaching Children with Physical Impairment

- a. Classrooms and school facilities (libraries, toilets, sport grounds and play areas) should be made physically accessible for all children.
- b. Children who use wheelchairs, callipers or crutches for mobility may find it difficult moving around within a traditional classroom blocked by rows of chairs and desks. It is therefore important that we “set up” the classroom in such a way that all the children can move freely. Children must not just have physical access to their own desk, but also to other parts of the classroom for group activities or just to fetch something from a shelf or cupboard, or to paste a drawing on the wall.
- c. Children who get easily tired, and need much rest, may find it difficult to come to school on time or to stay in school the whole day. We should therefore repeat important information once or twice to make sure that all the children have heard it at least once. This will also benefit children with ADHD and children who may have had difficulties understanding the information the first time around.
- d. Children with physical impairments may sometimes wish/need to use their own furniture, such as ergonomic chairs and sloped writing tables. This should be accommodated without being obtrusive for the other children.
- e. Specially-designed furniture, if possible, be made available for those who need chairs and tables that differ from standard classroom furniture. This does not have to be expensive. Chairs can be designed based on local models.
- f. Some children would be more comfortable standing rather than sitting down – especially children with back injuries. This should be accommodated in the classroom.
- g. Children who are motor impaired, or are without one or both arms/hands, may need to use a tape recorder or an electronic note-taker

during class. They should also have the option of providing giving in their homework on a cassette tape or printed out from a computer with voice-recognition software.

- h. Many children with physical disabilities will need additional time to read, write, or take notes. This may affect their classroom participation as well as the time they would require to finish assignments. Teachers and school administrators (as well as school inspectors and supervisors) should make sure that the children concerned get the time they need to properly show what they have learned in school. This is important for all children, both with and without disabilities. It is particularly important that extra time is given during examinations.
- i. Some children with physical impairment may need extensions on deadlines for homework and classroom activities that involve locating and using library resources. Teachers should therefore provide reading lists, a list of things to do, and learning material well before the start of the activity, so that the children can prepare properly and begin early.
- j. Activities that take place outside of school (such as visits to museums, galleries and sport activities), should be planned and implemented in such a way that all children can participate and benefit from the activities. If the class visits a museum or exhibition, it should be a place that is physically accessible. If sport activities are organized, they should be planned in such a way that all the children are benefitted according to their individual potential and abilities.
- k. The normal children in the class should be encouraged to help and assist their classmates with disabilities as part of their own social, emotional and academic development, which is mutually enriching.

Cerebral Palsy

Cerebral Palsy is caused by an injury to the parts of the brain that control movement during the early stages of development. In most cases, this injury occurs during prenatal stage. However, it can sometimes occur during birth and from brain injuries in early infancy (such as lack of oxygen from near drowning, head injury or being shaken). It is estimated that two children out of every 1,000 have cerebral palsy.

Children with cerebral palsy may have difficulties with: ◀

- a. Movement of body parts or the whole body
- b. Talking as well as non-verbal communication (facial expressions may not always reveal true emotions – i.e. the child might appear to be smiling but is actually very angry or sad).
- c. Involuntary muscle movements (spasms)
- d. Eating and drinking
- e. Muscle weakness or tightness
- f. Balance and coordination
- g. Posture (the ability to put the body in a chosen position and keep it there)
- h. Attention and concentration

Practical Tips for Teaching Children with Cerebral Palsy

- a. If the child has speech problem, we should be patient and allow the child all the time s/he needs to ask, or answer questions, or make comments.
- b. We should allow the child a chance to move around. Children with cerebral palsy need muscle stimulation to improve their motor skills.
- c. Some children with cerebral palsy tire easily. We should therefore allow them time to rest during the school day. A place to rest should ideally be provided by the school.
- d. If the school has access to a computer, it would benefit children with cerebral palsy because many experience difficulties with written communication (often in addition to oral communication) due to weak fine-motor skills.

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Education of Mentally Challenged Children

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Introduction

According to the American Association of Mental Deficiency, “Mental Retardation exists when there is significant sub average general intellectual functioning existing concurrently with deficit in adaptive behaviour and is manifested during the developmental period. It states that people classified as mentally retarded range from those who can be trained to work and function with little special attention to those who are virtually untrainable who do not develop speech and some motor functions.

There are different methods of classifying M.R. Psychological classification is based on the level of intelligence. Psychological test are administered to find out extent of the deficit. On the basis of IQ Mental Retardation is divided into four categories.

Table: 1

Category of M R	IQ Range	Mental Age In Years
MILD	50-70	9 YRS - 12 YRS
MODERATE	35-49	06 YRS - 09 YRS
SEVERE	20-34	03YRS -06 YRS
PROFOUND	Below 20	Less than 03 YRS

Low IQ is indicative of damaged to brain, the lesser potential for learning skills to be independent to life. The children with low IQ need more help and supervision in carrying out the activities in their day to day life.

There are four levels of mental retardation on the basis of IQ. These are as follows:

Reaching the Unreached: The State of Differently Abled Learners

Mild Mental Retardation (IQ 50-75)

This is the largest group of people comprising of 80% retarded population. They are 'educable' and do not show the signs of brain pathology or other physical defects. Their retardation therefore is not identified at times, even after having schooling for a considerable period. Their Learning development is often slower than the normal children. It can become apparent only when the child starts lagging behind the peers in school work. With early detection, parental assistance and appropriate training, these students can reach a third to sixth grade educational level. Although they cannot carry out complex intellectual tasks, they are able to take up manual jobs and jobs involving inferior skills and function quite successfully, independently and become self supporting citizens.

Moderate Mental Retardation (IQ 35-49)

This group consists of retarded population to a tune of 12 %. These are 'trainable' and their retardation is evident early in their lives. They are slow to develop language skills and their motor development is also affected. Some of these students can be taught to read, write and speak some broken language. Physically, they are clumsy and suffer from poor motor coordination.

Severe Mental Retardation (IQ 20-34)

This is the group of 'dependant retarded' consisting of 7% of retarded population. These are the children with severe problems of speech retardation and sensory defects and motor handicaps are common.

Profound Mental Retardation (IQ under 20)

They belong to the category of 'life support mental retardation' consisting of 1% of retarded population. Most of these are severely deficient in adaptive behaviour and unable to master even the simplest of tasks. Severe physical deformities along with conclusive seizures, mutism, deafness and other problems are common.

Causes of Mental Retardation**Biological Causes**

In about 25% to 35% of the cases, of mental retardation, there is a known biological cause. The most frequent being the presence of an extra chromosome causing Down's syndrome. The frequency of this disorder increases with the increasing age of the mother. A birth complication like

inadequate supply of oxygen to the brain is another major cause of biological mental retardation. Many cases of mental retardation are classified as 'familial retardation' where there is no known biological cause, but there is a family history of retardation. Cretinism is retardation due to endocrine imbalance like failed thyroid or degeneration of thyroid

Radiation

Radiation may act directly on the fertilized ovum or may produce mutation of the sex cells of either or both parents, which may, in turn lead to defective offspring.

Malnutrition

Protein deficiency in mother's diet during the last five months or in the diet of the child during the first 10 months after birth can cause great harm to child's brain.

Prematurity and Trauma

Babies weighing less than 1500 grams at birth, difficult labour, bleeding within the brain of the babies are some other causes.

Infection and Toxic Agents

Presence of carbon monoxide, syphilis or germ measles with mother can cause retardation in the foetus. Incompatibility between the blood types of the mother and the foetus, drugs taken by mother during pregnancy could result in mental retardation.

Principles of Teaching Mentally Retarded Children

The usual guidelines for facilitating learning hold good for children MR as well. These are

- a. Simple to complex
- b. Concrete to Abstract
- c. Part to whole
- d. Known to unknown
- e. Generalisation
- f. Sequential

Teaching Learning Materials (TLM)

The main objective of teaching a mentally retarded child is to develop his adaptation level. This can be done with the help of the following teaching learning material.

- a) **Flash cards:** These can be used for identification of the names and action words. The picture on flash cards should be very near, clear and very close to the real objects. The size of the pictures should not be less than 2''X 2 ½''. It should be pasted on a piece of card board so that it can be used many times for a long period.
- b) **Pictures:** Whatever we want to show the students through pictures should be faithful to the object, good in details and have natural and real colours. Pictures can be used for teaching to build their imagination.
- c) **Blocks/puzzles:** These are very helpful for improving children's eye-hand coordination, enhance logical thinking, part and whole concept, searching for the missing details, matching real objects with concept.
- d) **Educational toys/ materials like Abacus, Joining the blocks:** These make learning fun for children. Toys and games can help explain and teach things at a pace which children find quite comfortable. Educational toys and games should be made of durable material and use non-toxic colours.

Concrete Materials: These are important to provide children real life experience. Things in concrete materials make concept formation easier for children, as they can feel them, see them, and if possible smell, taste and hear them.

- a. **Story Books:** Story books supplement verbal explanation with visual inputs. They not only make their language better and improve learner's comprehension but also make the recall and recitation better as they are able to fall back on the visual clues to complete the story.
- b. **Globes/ maps/ charts/ visual aids:** These teaching aids provide children with visual details of a concept, object, formation and structure. Such teaching learning materials are effective in supporting visual memory. These can be placed in learners surroundings to check the loss in visual memory so the learning which has taken place lasts longer.
- c. **Workbooks and worksheets:** These are to be prepared by the teachers as per the level and needs of a particular child.

Teachers have to choose a picture pattern either from a readily available book or draw these things themselves. They should keep them ready in sufficient number so that children's precious learning time is not wasted everyday in preparing them daily.

- d. **Tactile materials:** We should have pieces of different textures to enable children to feel them and realize their shape and texture. We should have smooth, sticky, slippery material, and also soft, hard and spongy material so that we can provide children with these tactile inputs.
- e. **Models:** Three dimensional models facilitate learning in a classroom. Through models, children can be shown for touching e.g. structure and lay out of industrial plants, solar system and internal human body parts, etc.

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Education of Children with Autism

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Introduction

Autism is a severe form of child psychopathology. It is a complex developmental disability. Autism is a wide spectrum of developmental disorders characterized by impairments in 3 behavioural domains: (a) Social Interaction (b) Language, Communication and imaginative Play, and (c) Range of Interests and Activities. Childhood Autism emerges in children at approximately age of three and is characterized by a triad of impairments that variably appear in different levels of severity.

Individuals with autism can vary widely from one another. However, all individuals with autism can progress and learn when their programming is designed around their unique, specific needs (Wagner 1999). In recent times, educational placement options for children with autism have expanded in response to changing theories of programming for all special needs children. The benefits of this type of placement are clear although the programming must be well defined and implemented in order to increase the likelihood of success. There are two main aspects for the education of children with autism; one is that education is a treatment for autism. The second goal is to reduce the degree of autism.

Inclusion and ASD Students

Inclusion can be described as the practice of including students with disabilities alongside with other students in a regular classroom (Gilhool,

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1989; Ford, 2013). Inclusion can be described as including students of different conditions, backgrounds and abilities to be in the same classroom. Theoretically, inclusion is related to philosophical decision that emphasizes ‘the importance of bringing together diverse students, families, educators and community members’, in the purpose of establishing supportive learning atmosphere that helps every individual recognizes that all students are learners who benefit from a challenging, meaningful, appropriate curriculum (Meynert, 2014). Special need students frequently discovered in a regular classroom are diagnosed Autism Spectrum Disorders (ASD). ASD students clearly require special attention and care. Autism is stated as having impairments in reciprocal social communication and social interaction, and the presence of restricted and repetitive behaviors, interests, or activities (American Psychiatric Association, 2013; Tuononen, Laitila, & Kama, 2014)

The student with Autism Spectrum Disorder (ASD) is less likely than his normal peers to initiate conversations, respond appropriately to the conversational turns and be able to understand the intention and the illocutionary force of utterances. He also shows poor understanding towards the emotional states of others and struggle in particular to use facial expressions to show his emotions (Cummings, 2014). The children with autism struggle with comprehension (Williamson, et al., 2014; Accardo, 2015). Besides that, students with disabilities often have problem with managing their cognitions in order to understand what they read (Cain et al, 2004; Duff & Clarke, 2015). Research proved that students with ASD may show ability in decoding any information but often have problem in comprehending what they read, and have difficulties in making inferences from texts (Nation et.al, 2006; Finnegan &Mazin, 2015; Ricketts, 2011; Accardo, 2015). However, blending normal, mildly and severely challenged students in the same class is not an easy job because the students who are severely challenged could experience a sense of failure if they are expected to follow the curriculum for normal children because they are unable to cope.

Indicators of Autism

Delays in milestones may be exhibited by children with autism as indicated here:

1. Does not babble, point, or make meaningful gestures by 1 year of age
2. Does not speak one word by 16 months
3. Does not combine two words by 2 years
4. Does not respond to name
5. Loses language or social skills
6. Has poor eye contact
7. Doesn't seem to know how to play with toys
8. Excessively line up toys or other objects
9. Is attached to one particular toy or object
10. Doesn't smile
11. Seems to be hearing impaired all times
12. Has difficulty in learning to engage in the give-and-take of everyday human interaction first few months of life
13. Seems indifferent to other people, seems to prefer being alone
14. May resist attention or passively accept hugs and cuddling
15. Seldom seeks comfort, responds to parents' displays of anger or affection in a typical way.
16. Although attached to parents, their expression of it is unusual and difficult to "read"
17. Is slow in learning to interpret what others are thinking and feeling
18. Appears physically normal and has good muscle control
19. Shows great interest in numbers, symbols, or science topics
20. Is tremendously upset by any change in sequential order of work given to him/her.
21. Needs and demands absolute consistency in their environment. A slight change in any routine- in mealtimes, sequence, dressing, taking a bath, and going to school at a certain time and by the same route- can be extremely disturbing. Order and sameness lend some stability in a world of confusion.
22. May have mental impairment, inconsistent performance on some areas of language ability.
23. May have fits
24. Is withdrawn from the surroundings
25. Has limited vocabulary
26. Shows repetition of words
27. Has meaningless smile, a wink, or grimace

28. May not be able to interpret social cues like smile/ wink; / grin/ invitation smile and extending her/his arms for a hug or frowning.
29. Has inability to interpret gestures and facial expressions makes the social world seem bewildering.
30. Has difficulty in seeing things from another person's point of view leading to 'immature' behavior such as crying in class or verbal outbursts that seem inappropriate to others.
31. May be disruptive and aggressive at times, making social relationships still more difficult.
32. "Loses control", particularly in a strange or overwhelming environment, or when angry and frustrated.
33. May break things, attack others, or hurt them, show tantrums

Strategies for Handling Students with Autism

Four strategies that can be recommended for handling students with autism including ASD are: co-teaching, differentiated instruction, peer-mediated instruction and intervention (Ford, 2013), Vaughn, Schumm, & Atrguelles (1997) describe co-teaching as a strategy of teaching where one teacher can function as the main teacher who is responsible for all instructions conducted in the classroom, who is assisted by another teacher who extends additional assistance. The next type of model is parallel teaching where the two teachers plan and design the lessons together before the class is split into 2 groups each of which handled by each teacher. The benefit of this model is that each group can get each other's expertise in addition to enable the students to accomplish the task assigned to have that in addition to being able to have discussion and work in small groups. The other model of co-teaching is a model where one teacher is responsible to prepare the main teaching and to take up remedial measures. It is needed to provide additional support for students with autism. Beside these models, the two teachers can be in the same classroom each of which can take turns to do instructions for the students, or each can assist students while the other gives instructions for other students. The strategies implemented are mediated by the use of two languages to meet the mission of the school as a bilingual school.

The students with ASD are special and the uniqueness requires explicit need for teachers to identify individualized approaches to help them

achieve their academic goals (Mayton, et al., 2010; Accardo, 2015). Individualized instruction strategy for ASD students can be in the form of differentiated instruction. Differentiated instruction is the instruction provided to students based on the different needs of the students in the same classroom (Choate 1993; Nordlund, 2003).

Educational Strategies

1. Create an environment that is not over stimulating. The child will do better if there is no loud music playing in the background, as it distracts an autistic child from concentrating.
2. Create a structured environment with predictable routines. This is where the picture schedule so often used in autistic classrooms comes into play. The daily routine should be the same from day to day, only differing for special occasions. At such times, an appropriate picture representing that event should be placed on the child's schedule.
3. Give fewer choices. If a child is asked to pick a colour, say red, only give him two to three choices to pick from. The more choices, the more confused an autistic child will become.
4. Select repetitive motions when working on projects. Most autistic classrooms have an area for work box tasks, such as putting erasers on pencils or sorting colours into coloured cups.
5. Keep voice low and clear when teaching. Autistic children become agitated and confused if a speaking voice is too loud. Excess talking between staff members should be kept to a minimum.
6. Limit physical contact. While this is a good strategy for all children, autistic children cannot properly interpret body language and touch, so minimal body physical contact is best.
7. Allow students to stand instead of sit around a table for a class demonstration or for morning or evening meeting. Many children do better when allowed to stand. Many rock back and forth and this allows them to repeat those movements while still listening to teacher instruction.
8. Encourage and promote one to one interactions with students to promote social skills. Since autistic children have a problem with social skills and appropriate social behaviour is very important.

Opportunities for social interaction might have to be structured at first, but with practice, they will start to understand social interactions.

These ten suggestions should help in educating the autistic child with less stress and in a more focused environment taking into account their limitations.

Autism Teaching Methods

TEACCH (Treatment and Education of Autistic and Related Communication- (Speech Impaired Children)

TEACCH was developed by psychologist Eric Schopler at the University of North Carolina in the 1960s; it is used by many public school systems today. A TEACCH classroom is structured, with separate, defined areas for each task, such as individual work, group activities, and play. It relies heavily on visual learning, strength for many children with autism and PDD. The children use schedules made up of pictures and/or words to order their day and to help them proceed smoothly between activities. Children with autism may find it difficult to make transitions between activities and places without schedules. The following strategies may help for the autistic child;

- a. Try to avoid long communications. Verbal instruction should be clear, brief and short.
- b. Many children with autism are good at drawing, art and computer programming. These areas of talent should be promoted with technical support.
- c. Many autistic children get frustrated on one subject such as drawing pictures or maps.
- d. Use concrete visual methods to teach number concepts.
- e. Many autistic children have problems with motor control in their hands. Writing legible handwriting is sometimes very hard. Further, it brings stress to them. To reduce frustration and help the child to enjoy writing, they may be acquainted with the use of computer.

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