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### Supporting Differently-Challenged Learners in the Open School System in India

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#### ABSTRACT :

The role of information and Communication technology in the development of education has been well-emphasized in the history of education all over the world. ICTs provide platform for upgrading of knowledge and skills, exchange of creativity and inter-cultural dialogue. No doubt, large scale of initiatives are undertaken to integrate ICT in school education in India and it has been found successful through Sarva Siksha Abhiyan. But millions of children in the school-age population particularly among the multiple challenged populations are still out of school, who have greatest need of them. Even those who are enrolled in school, they don't attend school due to lack of disabled friendly infrastructure and other demand side factors such as lack of parental interest and economic reasons, and factors related to the child's disability. In this context, open schooling can be considered as the viable option considering that mainstreaming disabled population into knowledge society is an urgent task for the developing India. Based on a case-study based approach, the paper articulates how National Institute of Open Schooling, an autonomous organization in pursuance of National Policy on Education 1986 by the Ministry of Human Resource Development (MHRD), Government of India has taken number disabled friendly initiatives for their education. As a result, the enrolment and performance level has increased between the years as compared to their nondisabled counterpart. While the effective use of new ICTs has provided them an innovative platform for the development of new learning needs and new patterns of information access and application, evaluation and student support services are designed in such an innovative manner they find it flexible and friendly to the system of open and distance learning.

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#### INTRODUCTION :

The politics and practices of policymaking and policy implementation with regard to education for all are not new (Little. Although the efforts were made in the pre-independence period and then large scale initiatives were undertaken in the post independence period, especially after 1990s but the aspiration to achieve the goal is still continue after sixty years of independence. Millions of children are still Out-of-school and the teaching and learning mechanism in School is far from expectation of different stakeholders. Tribes and children with disability, who of course requires special facilities catering to their inherent characteristics. The enforcement of different policies more particularly, Sarva Siksha Abhiyan in

sufferers

belonging to Scheduled Castes, Scheduled

are

children

more particularly, Sarva Siksha Abhiyan in recent years have a very sharp focus to address the problem of hard-to-reach population with emphasis on the children with disability. But the Constitutional (86<sup>th</sup> Amendment) Act, making free and compulsory elementary education a Fundamental Right, for all the children in the age group of 6-14 years has given a new thrust to the education of Children With Special Needs (CWSN). SSA ensures that every child with special needs, irrespective of the kind, category and degree of disability, is provided meaningful and 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. The major thrust of SSA is on inclusion or mainstreaming CWSN into the fabric of formal elementary schooling, which has been in operation since more than decades. But a large number of disabled populations are still out-of school.

In India 1.67% of the 0-19 population has a disability. 35.29% of all people living with disabilities are children. Other estimates say that India has 12 million children living with disabilities.

A recent study has highlighted that the number of out-of-school children with disabilities remains a high 35% (SRI-IMRB, 2009) and currently coverage of children with disabilities stands at 26.4 lakh in mainstream schools and 2.4 lakh through home-based education.

Although there was limited research on the education of disabilities, absence of adequate and appropriate resources in the mainstream schools is the main reason for the low access of disabled in school education (RECOUP, 2008). Further, inability of teachers to adapt their teaching abounded in mainstream experiences also adds to the disadvantaged position of disabled in education. On the other hand, of inappropriateness the pedagogy adopted and irrelevance of the curriculum followed in the mainstream school resulted in the child dropping out and/or shifting to a special school (Singhal, 2010).

Contextualizing the inability of formal schools to streamline education for disabled children, the current paper addresses how NIOS as one of the Open Schooling Institution caters to the interest of children with disabilities.

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The first section discusses the challenges of educating children and youth with disabilities while the second section elaborates upon discussing how NIOS an Institution emerged and use ICT as a tool to lead the concern for the educational development of Children and youth with disability. Some special intervention in terms of using Information and Communication Technology (ICT) would be discussed but if intervention although not being used as a specialized service, yes benefits the children with special needs can be discussed in detail. The Third section discusses the trends of enrolment of learners with disability between 2007-08 to 2011-12 and fourth section points out various issues and challenges in NIOS.

#### OPEN SCHOOLING INSTITUTIONS AND ICT IN THE SERVICES OF PEOPLE WITH DISABILITIES IN INDIA

The advent of Information and Communication Technology has certainly played a very proactive role in information creation and exchange, for promoting equitable access to social opportunities, for capacity building and training, and for new opportunities for providing all. including those with disabilities. particularly persons with cognitive/intellectual multiple and disabilities but it's role in formal, lifelong learning and training opportunities has been more positive (UNESCO, 2003). On the other hand, use of technology for learning does not in any way contribute to replicating any form of stigmatization and labeling, which normally discourage the learners with disabilities in the mainstream schooling to perfectly benefit from the education system (UNESCO, 2011). Similarly, Open Schooling System as an approach of educating the children and youth doesn't provide any opportunity for labeling or stigmatization among the disabled or non-disabled population. Thus, intertwining of Open Schooling Institutions and Information and Communication Technology (ICT) has a lot of potential to address the education

of children and youth with disabilities in the education system not only providing them equitable access but also the scope of educating them with Self-esteem.

The National Institute of Open Schooling (NIOS) formerly known as National Open School (NOS) was established in November, 1989 as an autonomous organization in pursuance of National Policy on Education 1986 by the Ministry of Human Resource Development (MHRD), Government of India. It has taken a number of initiatives including they were provision of Open and Basic Education of children in the age group of 6-14 who were never enrolled or dropped out from the formal school: (ii) provision of the Secondary and Senior Secondary Education through Open and Distance Learning (ODL) mode of (iii) provision of Open Education. Education Vocational and Training (OVET). The Support to the students is provided mainly through the personal Contact Programme (PCP) at about 4000 identified Study Centers throughout the country.

The World Summit of the Information Society (WSIS) recommends that information and communication technologies (ICTs) be used in all stages of education, training and human resource development (Declaration of Principles: 30) (WSIS, 2003).As a leading education provider in the field of Open and Distance Learning in Indian education system, NIOS has propagated ICT as a medium of facilitating education of the clientele group and its scope has increased. Along with print material, NIOS provides the wide scope for education of learners through Media Support to Courses/Programme in the form of audio video and multimedia, programmes, Web Radio Programme and Teleconferencing etc.

## ICT AS TOOL FOR ACCESS TO EDUCATION

NIOS understands the problem of persons with disabilities and also other marginalized groups. The regional centers

and Study Centers, the main hub for admission process are far away distance from the locality of a person. Therefore, NIOS has the provision of On-Line admission, which facilitates the person with disabilities to enroll in the open schooling system without any difficulties. While the physical access limits choice, provision of support services are the constraints in the formal schooling system, the availability of flexible system encourages the person of disabilities to enroll in NIOS, the largest open schooling system in the world.

#### ICT as a tool of facilitating learning

One of the major activities of the NIOS is to make use of modern means of Communication and Educational Technology in distance Education. Audio and Video programmes are significant components of the multi-media packages offered by NIOS for its various courses of study. The audio/video programmes supplement and complement the other modes of learning such as printed self learning materials and personal contact programme.

Most of the programmes, except for the language courses (Hindi, English, Urdu), have been produced both in English and Hindi Version. Using documentary, docudrama and other interesting formats, these programmes attempt to present the topic/theme in a simple, interesting and engaging manner, so that the learners get a clear understanding and insight into the subject matter.

The video programmes are being telecast on DD-I from 05.02 a.m. to 05.25 a.m. on every Friday and on Educational Channel - Gyan Darshan on every day from 6.30 p.m. to 7.00 p.m. The audio-video cassettes are also sent to AIs, AVIs, SAIEDs and Regional Centers of NIOS.

Recently, NIOS is also taking the proactive measures like introduction of Talking books and the books with large prints for facilitating education of learners with disabilities.

#### ICT AS A TOOL OF EVALUATION

NIOS has the provision of ON Demand Examinations, which provides flexibility to the learners in attending the examinations. Whenever learner feel that it is convenient for them to attend NIOS examinations they can walk into the examination center and appear examination in particular subjects. Till now, ON Demand Examinations are held in 13 subjects at Secondary level and 18 subjects at Senior Secondary level. Although the facilities are provided to all the group of learner, not only specific to learners with disability but it provide a lot of scope for learners with disabilities. It removes frustration. loss of self esteem. peer group ridicule, depression etc and Attempts to remove the threat of failure in examination unlike the formal system of education.

In the NIOS system of Evaluation, there are also some provisions for learners with disabilities. Learners who have minimum hand function but having speech disorders will be allowed to use the computer for the examinations. This facility will also be available to such visually impaired persons and persons with learning disability who make this request in advance and submit proof of using this facility as means of communication from the authorized authority as specified at However it will be the responsibility of the learner to bring

laptops, ensure adequate battery support and functioning of equipments. Centre Superintendent will have the right to check the machines for no pre-fed information except the required software (including the Text Reading Software) to enter the response. Learner will need to report one hour in advance to complete these formalities. Visually Impaired Learners mav be allowed to use amanuensis/take examination using Brailler typewriter, or computer. When the student takes examination using Brailler, NIOS will seek the assistance of an organization for the Blind to transcribe the papers into print and the regular examiners will evaluate the papers along with other papers. The learners should arrange to bring own Brailler's. Typewriter, Computer etc., for examination purposes. Equipment such as talking calculator, abacus, Taylor frame and geometry drawing kit may be allowed in the Examination Hall.

# NIOS AND EDUCATION OF PERSONS WITH DISABILITIES.

National Institute of Open Schooling (NIOS) started in 1989 has more than 16 million learners in its fold. But the enrolment of persons with disabilities is very compared to its total enrolment. But the positive side is that the enrolment is increasing by years.

Nature of Disability	2011-12	2010- 11	2009-10	2008- 09	2007- 08			
1. Loco Motor	1852	1303	1337	7695	3136			
2. Visually Impaired	207	49	196	283	388			
3. Hearing Impaired	748	609	842	601	657			
4. Leprosy Cured	205	204	181	133	140			
5. Mentally Retarded	6074	229	566	710	806			
6. Mental illness	90	150	107	133	196			
7. Multiple Disability	263	254	338	1260	1146			
8. Cerebral Palsy	4677	4126	2826	1576	1050			
9. Learning Disability	2083	2406	1199	992	770			
Total	16199	9330	7592	13383	8289			

Table-1:

Enrolment of learners with disabilities in NIOS from 2007-08 to 2011-12 (Source: NIOS Statistical Report,2012)

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The total enrolment was 8289 in 2007-08, which has increased to 16,199 in 2011-12.But there was sharp decrease in enrolment from 2008-09 to 2009-10 from 13383 to 7592, a negative growth rate of 43% between 2008-09 to 2009-10(Table-1)

Disability	2007-08-to 2008-09	2008-09-to 2009-10	2009-10 to 2010- 11	2010-11 to 2011-12	2007-08-2011- 12
Loco Motor	145.4	-82.6	-2.54	42.13	-40.94
Visually Impaired	-27.1	-30.7	-75	322.4	-87.44
Hearing Impaired	-8.52	40.1	-27.7	18.58	12.17
Leprosy Cured	-5	36.09	12.7	0.49	31.71
Mentally Retarded	-11.9	-20.3	-59.5	2552	653.6
Mental illness	-32.1	-19.5	40.2	-40	-54.08
Multiple Disability	9.948	-73.2	-24.9	3.543	-883
Cerebral Palsy	50.1	79.31	46	13.35	345.4
Learning Disability	28.83	20.87	101	-13.4	170.5
TOTAL	61.45	-43.3	22.9	73.62	95.43

Table-2

Growth of Enrolment of learners with disabilities in NIOS from 2007-08 to 2011-12 (Source: NIOS Statistical Report,2012)

As the table indicates, the overall growth rate of enrolment of learners with disabilities is 95.43% between 2007-08 to 2011-12.But there is wide variation between the enrolment based on the nature of disabilities. While the growth rate of enrolment of learners with Mental Retardation stands at 653.6%, the highest growth rate among all the learners with varying degree of disabilities, learners with Multiple disabilities are the worst sufferer, the growth rate being negative at 883%.But the growth has been positive for the learners with cerebral Palsy.

Unlike general groups of population, NIOS links with many NGOs and Special Schools for the education of persons with disabilities. The following case study implies how the difficulties of studying in mainstream school don't end their aspiration to be educated rather NIOS helps them as a good alternative to be educated.

"Unlike most 26 year olds, Gagandeep Singh was exuberant after he was felicitated for having cleared his Class X exams this year. But Gagandeep is no ordinary twenty six year old. Suffering from acute cerebral palsy, he was rejected by mainstream schools in the early years of childhood, after passing his class 5 from the Punjab School Education Board. At the age of 14 years he enrolled at Aashirwaad - The North India Cerebral Palsy Association (NICPA) and has since developed confidence that he can study too. Two years ago, he cleared Class 8 through the National Institute of open schooling (NIOS) at BCM Arya Model Senior secondary school and now is a matriculate. Eager to be a designer, Gagandeep is learning photo shop.

Not only Gagan, Vishesh Gupta also cleared class 10 at the age of 26 years. He was a normal child till the age of 7 but began having convulsions and stopped going to school. This year he cleared his class 10 and is all set to prepare for class 12 exams through NIOS".

#### Implementing ICT plans for a better and disabled friendly education in Open Schooling system.

Information and Communication Technology has certainly played an important role in developing countries where Persons with Disabilities face multitude of problems in their surrounding and also education system due to lack of infrastructure and overall, the systemic inefficiencies to tackle the problems of these section of society. Therefore, a sharp focus on linking ICT for the education of persons with disabilities is essential, particularly in the open and distance learning set-up.

I. Advocacy of Open Schooling ICT: through Information and communication Technology has its spread beyond time and space and has the potential to reach the masses within a fraction of time. On the other hand, open schooling system has a lot of flexibility but the total share of enrolment of learners with disabilities is less than 1% of the total enrolment. Therefore, it is desirable that NIOS should strategize for advocacy of open and distance learning as one of the fruitful solution for education of persons with disabilities in numerous forum for more enrolment. Publicity of open schooling as a potential option need to be done by using ICTs in special schools/ NGO Links with RCI s and health centers.

II. Promote alliances with agencies and institutions for effective use of ICT: No doubt, NIOS uses audio, video and webbased programme to educate its' learner. But effectiveness of these ICT tools depends on how these are used. Since most of the learners in NIOS belong to marginalized groups, it mayn't be easy for them to use these facilities due to lack of enabling infrastructures. Accredited Institute may be motivated to extend the ICT infrastructure for the use of NIOS including learners learners with Disabilities.

- III. Focused attention on capacitybuilding of Tutors: Capacity Building of Tutors and AI co-coordinators need to be trained to use ICTs as a tool to help learners with disabilities. However, efforts must be focused on capacitating Tutors to develop a techno savvy spirit among the learners and peer support network so that the learners having no access to ICT tools can be compensated through support of peer network.
- IV. Steps should be taken to set-up a technological resource centers in each region so that learners, who lack access to Web-based ICT tools or high cost technology can benefit from it.

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