

**Theme : Formal Education**  
Sub Theme: Technologies for Scaling up ODL Programmes  
Cross Cutting Theme : Quality Issues

**Using Technology for Strengthening Open Schooling**  
**A Study of the Ni-On Project of NIOS**

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Open schooling has emerged as a major parallel system of education at the secondary and senior secondary level. Policy documents of the Government of India recognize the important role of open schooling in reaching the unreached. The Central Advisory Board of Education(CABE) Committee Report (2009, p.109) states that the open school network when fully developed should be able to cater to at least 15% students in secondary education. Hence it should be necessary to plan, set up as well as strongly promote open schooling in every State.

Following the success of the Sarva Shiksha Abhiyan for universalisation of primary education, the government has launched the Rashtriya Madhyamik Shiksha Abhiyan(RMSA) for universalization of secondary education. This scheme is aimed at increasing access and providing greater quality at the secondary level. Open and distance learning is an integral part of RMSA as open schooling is acknowledged as having tremendous scope for reaching the unreached.

Despite this immense potential of Open Schooling to increase access, yet Open and Distance Education institutions in India and other developing countries face a number of challenges. According to Perraton (2004 p.12-13), open schools in countries of Africa, Latin America and Asia have been created to offer junior and sometimes senior secondary education to adolescents for whom there are no conventional schools for reasons of geography and economics. It is seen that learners at such Open Schools face all the same barriers that learners in DE institutions across the world face. In addition to this, they also have to overcome the fact that most of them belong to already disadvantaged sections of society and are also educational disadvantaged. In many cases they have been pushed out or have dropped out of school or are unable to continue their education due to various socio-economic and religious reasons. In many cases, family, work and social roles, economic conditions all affect the learner's ability and willingness to participate in education. The learner in a sense, is fighting a continuous battle against many odds to continue his/her education. This is why it is so essential that there be sensitive educational systems that will help to retain the learner and 'hand hold' them till they are comfortable with the system.

Learners in a distance education system need support both related to academic course work and non academic issues. However the areas where the distance between the institution and the learner seems the widest is that of student support services. According to Melton(2005,p 13) however well designed the self study materials may be, there will inevitable be occasion when students will need further support. According to Tait (2000,p. 28-29), student support services complement the course materials and are often perceived as a major offering if institutions using ODL. The Indian open schooling experience shows that most of the problems and barriers encountered by the student relate to non academic issues of admissions, choice of examination centre, form filling, corrections in personal details, lack of feedback, non-receipt of course materials, counseling regarding choice of subjects, lack of cooperation by the study centers etc. Undoubtedly learners who are fee paying have a right to expect and demand better services from the distance education system, which is the service provider. Scholars like David Sewart and Otto Peters view student support services as close to 'customer support services' of a commercial business enterprise.

## TECHNOLOGY FOR OPEN SCHOOLING - THE CONTEXT OF NIOS - WHY NI ON ?

NIOS is recognized as the apex Open Distance Learning System at the school level. Its functioning as an academic institution and as an examination Board that is recognized all over the world makes it a viable option for many learners. It is also a highly relevant model for replication by State Open Schools as well as open schools of other developing countries due to its ability to provide least - cost educational access with equity and justice and also because it is able to generate its own finances. From the point of view of the government, NIOS can be a major player in reaching out to marginalized groups, overcoming geographical and social barriers and can contribute to the national aim of Universalisation of Education and global agenda of EFA and UN Millennium Development Goals.

However an examination of the situation in 2006 showed that there were many gaps between the mandate given and the actual outcomes of NIOS. According to Bist(2009 p.276), review of NIOS functioning (before the Ni On launch) showed that although it was a national level institution, yet it was not being able to provide access to students in different parts of the country. This was because there was only one entry point to NIOS i.e. Accredited Institutions (AIs) who were given the responsibility of selling the NIOS Admission Form. However the geographical dispersal of NIOS AIs was highly skewed with most of them located only in and around Delhi, Haryana and Uttar Pradesh. Although the mandate was to reach out to Scheduled Castes/ Scheduled Tribes, marginalized groups, there were insignificant number of AIs in districts dominated by these groups. Moreover even in areas where AIs existed, the quality of the AIs was below par. Schools with good infrastructure and reputation were unwilling to become partners of NIOS. Many schools that were AIs of NIOS lacked necessary infrastructure and experienced teachers and as a result NIOS learners were deprived of good quality teaching-learning. Many AIs were severely understaffed due to which they were not able to provide timely, adequate and comprehensive support services to NIOS students, who were enrolled through them.

Even in terms of increasing access, NIOS existing policy was that of one time admission under which learners could take admission only in July-Aug i.e. the admission period was only for 60 days. Persons who could not take admission during this period had to wait for the entire year. The whole idea of open schooling and flexibility in admissions was severely restricted and distorted.

Another problem related to the quality of the admission process. Since the entire registration process was handled manually, it was slow and errors taking place at different points. Admission forms were filled through paper and pen, often by persons who were not the learners themselves. This resulted in errors – spelling mistakes, factually wrong information. These mistakes were further compounded when the data was computerized and typing errors took place. Since the Admission data is the base data for all other student related operations, mistakes in the Admission data meant that students with address mistakes did not get their books, while those with spelling mistakes in their names got wrongly printed examination certificates. It was no surprise then that most of the correspondence between learners and NIOS was not related to academic issues but to 'correction cases' arising due to mistakes in data. Undoubtedly such problems resulted in efficiency of the institution and the quality of its services being adversely affected.

The above scenario demonstrated that there was a need for structural changes in the system. The massive data handling was creating problems both in terms of the large proportion of mistakes as well as the man-days being utilized for support activities of NIOS. This along with the fact that NIOS had very small staff of just 163 regular staff and about 170 contractual staff to provide services to over 1.6 million learners was evidence that the system was stretching its limits and would prove ineffective for the task that the government expected it to perform. In these circumstances, the need of the hour was the conceptualization of a new system that would take into account the vast advances in technology in the country and would be able to enhance the quality of NIOS student support services and increase access of Open schooling to the unreached.

## **NI ON - AIMS AND OBJECTIVES**

Ni On, or NIOS Online, was formally launched on 3<sup>rd</sup> July 2007. Its two major goals were firstly to contribute in the achievement of the government's goal of Universalisation of Secondary Education (USE) by increasing access of NIOS. Secondly to facilitate the structural functional transformation of NIOS as ODL institution by imparting it greater flexibility, openness, superior quality and reliable services as service provider to its marginalized target group of learners. In addition to these, Ni On also planned to put in place fundamental changes in the operating processes of NIOS so that the quality of student support services could be improved without passing the financial burden to the learner. In doing so NIOS aimed at moving in the direction of e-governance to ensure that public institutions were governed more efficiently.

## **RE-STRUCTURING OF PROCESSES THROUGH NI ON**

**Re-engineering of Admissions** - Flexibility is the hallmark of open learning systems alongwith the learner being placed at the centre of educational interventions. The system has to be built around the convenience of the learner rather than the convenience of educational managers and administrators.

The first major restructuring was aimed at increasing access and widening the admission entry points, both in terms of nature of learners and the time period of admission. In the case of NIOS, as has already been stated earlier, the admission system was a single entry one with learners being registered in a limited period. There was no scope of entry for those students from National or other State Boards of formal education who had already studied the entire course but had failed in one-two subjects and who wanted to register through NIOS and be certified in the shortest possible time. Ni On with its philosophy of online admission now made it possible for such learners to take admission.

Four new streams of admission were created. These included the existing offline admission i.e. Stream I, which continued to be operated with entry through AIs. Stream II was the online stream which allowed learners to fill their forms online through a Pull down Menu available on the NIOS website. This facility was available 24x7 throughout the country. Stream III and IV were introduced to register students who had not cleared secondary and senior secondary respectively from formal schooling and also students who wanted to register for one-two subjects. Such students were allowed to appear for the examination in three months time through the On Demand Examination facility. The registration for these streams was to be done only through the online mode.

The admission period was opened throughout the year, for learners who wanted to appear through the On Demand Examination. Subsequently admission was opened throughout the year in two blocks for public examinations also.

**Introduction of Online Payment Systems** – Another significant innovation was the introduction of the payment gateway which enabled learners to make online payments through credit card. While this may be the accepted norm today, yet in 2007 it was a novel step and required considerable negotiations before a mutually agreeable non-commercial Agreement could be with banks. The payment gateway was launched on 8<sup>th</sup> Sept 2007 and it soon became the standard format for payment. Subsequently besides admission fee, this gateway was extended for making all fee transactions for examinations, duplication of certificates etc.

**Changes in Examination System** - NIOS holds examination twice a year, which cater to the accumulated registration of the past five years. Hence the volume of data is massive and the permutations and combinations of subjects and options are voluminous. Examination processing is also dependent upon the admission data. The faster data processing through Ni On positively impacted processes related to examinations, distribution of learners at examination centers. The online registration for examination through Ni On made it easier for the learners who had to otherwise deposit forms and fee at study centers.

**Restructuring of Material Distribution and its Effect on Learner's Studying Time** – In a distance education system, one of the biggest operations is the printing and distribution of course materials. This task is also based upon admission data as the books are dispatched according to learners' chosen subjects. Earlier the finalization of admission data took many months, but with Ni On, it became possible to know the exact number of students in each centre along with their subject combinations in a much shorter time. From the learner's point of view, Ni On contributed to faster delivery of books thereby increasing study time for examination preparation. Ni On thus allowed parallel processing of admission data, and its transfer to many distribution points without loss of real time.

#### **Development of Public Grievance Mechanism through Creation Of Learner Support Centre(LSC)-**

The experience of NIOS showed that redressed of public grievances was a weak area and due to this learners were being exploited by unscrupulous elements. Further the time taken to redress problems was too long. This was especially so in case of students from far flung areas whose problems were to Delhi headquarters for one reason or another. All this greatly inconvenienced learners and contributed to tarnishing giving NIOS a bad name as a service provider.

In view of this, it was felt essential to set up a pro active student's services mechanism. According to Bist (2009), under Ni On, a 24x7 call centre was made functional to address problems of NIOS learners. It was supported by the huge Ni On database that was available at the click of a button. The LSC was managed by trained executives as well as an IVRS system. Capacity building of the executives along with preparation of FAQs was done. The larger vision of LSC was to broad base it from a learner query answering Call Centre to a Centre where there would be a number of services available for learners. The LSC was to have a platform for counseling of learners by NIOS tutors as well as a interactive 'Chat Room' for teacher support. Resource materials that would also support learning were to be made available through this facility. It was visualized that LSC would be fully expanded to include all aspects of functioning of virtual Contact Classes, feedback on assignments, examination helpline etc for the learners.

#### **IMPACT OF PROCESS RE-ENGINEERING UPON KEY NIOS OPERATIONS**

Ni On has had a considerable operational impact. After the initial resistance, it has been accepted as the system that will stay and without which it is impossible for NIOS to move ahead. The transparency of the operations and the time-cutting has been crucial. A major impact has been in reducing the number of transactions. For instance, following introduction of Ni On, it is possible to confirm admission of a learner within 10 days of receipt of Admission Form on the net as against 60 to 90 days in the offline system. It has also helped in credibility enhancement of NIOS as this system calls for online validation before submission of form resulting in error-free electronic data.

Ni On has been able to reduce the distance with the learners as it has allowed each learner to communicate directly with NIOS through an email id. It has brought about change in the AIs who were initially resentful that the number of seats allotted to them had been taken away and were being distributed through a computerized system. However over the years many AIs have come to recognize the benefits of the system. The fact that many schools have themselves gone in for massive technology usage has also helped in changing mindset. AIs are now comfortable in corresponding with NIOS through internet and most communications are done electronically. This has had multiple benefits – while it has made communication faster, it has also reduced costs of postage and stationary. It has also helped NIOS to contribute to the effort for paperless communication and make a contribution to preserving the environment. From the financial point of view, the introduction of online fee acceptance has meant faster financial revenue returns for NIOS.

The social impact of Ni On is also noteworthy. The use of technology has helped to reach out to those who are living in remote areas where there are no study centers of NIOS. The penetration of telecom network and internet has made it possible for NIOS learners to use technology for their academic and non-academic purposes. The availability of information through the NIOS website has helped to make learners more self

reliant and removed them from dependency upon Study Centre to independent 24x7 direct contact with NIOS. The effect of Ni On has also been upon enrolment of girls. While the increase of girls enrolment between years of 2005 - 06 and 2006-07 which were offline admission years was 6609 for academic programmes, the increase for the same programme between 2006-07 and 2007-08 following the introduction of online admissions in 2007 was 13,498 i.e. more than 50%. Similarly the increase between 2007-08 and 2009-10 shows the increase as 14,982, which shows the positive effect on girls enrollment. Similarly states like Madhya Pradesh, Bihar, Chhattisgarh, and Tripura, Jammu and Kashmir have all shown an increase in enrolment.

Although Ni On has been a path breaking initiative, there is a need to monitor its functioning continuously and make changes for its improvement so that quality is maintained. Since the use of technology is aimed at supporting the learner, the possibility of any malpractices entering the system has to be monitored through regular systemic checks. Ni On builds upon the spirit of transparency introduced by Right to Information in 2005 by the Government of India, and also sets a model for other State Open Schools to emulate. Ni On demonstrates that better services are only being possible with the extensive use of technology. It is expected that Ni On as a system will continue to be further strengthened by NIOS so that advances in technology can be successfully used for increasing access and improving quality in open schooling.

#### **References:**

Bist, Dinesh S. (2009) Use of ICT for Process Re-Engineering and Structural Transformation of NIOS, *Indian Journal of Public Administration*, April-June Vol.LV, 2009 No.2, Indian Institute of Public administration, New Delhi

CABE Committee Report (2009), Vo. 1, MHRD, Government of India, New Delhi,

MHRD, Framework for Implementation of RMSA(Universlisation of Secondary Education), MHRD, Govt of India, New Delhi, [http://education.nic.in/secedu/Framework\\_Final\\_RMSA.pdf](http://education.nic.in/secedu/Framework_Final_RMSA.pdf), pg 46- 47

Meltron, R.F.(2002), *Planning and Developing Open and Distance Learning, A Quality Assurance Approach*, RoutledgeFalmer London and New York

NIOS At A Glance <http://www.nos.org/staistical>

Perraton,H.(2004) Aims and purpose in Perraton,H. and Lentell,H (ed) *Policy for Open and Distance Learning. World Review of Distance Education and Open Learning: Vol 4*, RoutledgeFalmer and Commonwealth of Learning, London and New York

Tait, Alan(2000), Planning Student Support for Open and Distance Learning, *Open Learning* 15(3)