

9. Information and Communication Technology

ICT in National Institute of Open Schooling

Under the Open Learning programme, the face-to-face contact is very limited. Since the learners are at a distance the Open and Distance Learning (ODL) mode of education has been adopted. In such scenario, Open Schooling programme has to depend heavily on the use of Information and Communication Technology (ICT). The use of ICT is relevant in case of Open Schooling by its very character. NIOS strives to use ICT in almost all of its activities and programmes, particularly as a significant strategy for "reaching the unreached".

◆ Infrastructure and Areas of Applications

The NIOS has come a long way in the forefront of Information Technology since it made a small beginning with only two personal computers in 1989. Today it has a well - equipped computer centre with various types of computers and printers of latest configuration. There is Local Area Network with centralised database system with Windows NT/Windows 2000/XP professional as the basic network operating system. Besides, Desktop and printers were provided to all the departments and branches for smooth and efficient functioning. The computers in different NIOS buildings are connected with a high end HP server through 10/100 mbps backbone connectivity. This has greatly enhanced communication and resource sharing among the users.

For Internet Access round the clock through the Local Area Network, a dedicated Internet DSL leased line with 512 K capacity has been installed in the three buildings of NIOS. It has greatly augmented the Information and Communication capability of NIOS. It has also helped in reaching the NIOS learners promptly. There is one compact Multi-Media machine "K-Yan" for training, presentations and community learning. The Cable/TV/Internet can be connected to "K-Yan".

All the Regional Centres of NIOS are provided with basic computing facilities with four computers and two printers. The Regional Centres are also provided with Internet access and e-mail facility for transfer of data and for smooth connectivity with NIOS Headquarters at Delhi. The Admission and Examination data were transferred through e-mail

from the Regional Centres to the Headquarters, which expedited the processing work tremendously. The Computer Centre provides computing services to all the Departments and Units of NIOS.

The Library is equipped with Libsys software package, which is an integrated multi-user library management system that supports all in-house operations of the Library. The Libsys consists of modules on acquisition, cataloguing, circulation, serials, article and indexing. The database of books available in the Library is being updated on day-to-day basis with details of recently acquired books. Records of all the Library patrons have been created in the Libsys package. The editing and updating activities are in progress.

◆ **Student Information System**

Starting from punching of registration/admission form and scanning of student's photograph to the issue of the certificate, all the processes are computerised. The following areas are covered under Student Information System:

- ◆ Admission/Registration
- ◆ Photo Scanning
- ◆ Pre-examination
- ◆ Result Processing
- ◆ Certification

Admission 2005-06

During the year, the initial processing in terms of data-entry, verification and updation was done at the respective Regional Centres and the data was transferred through E-mail to the NIOS Headquarters in Delhi. Approximately 267 thousand students admission data were processed at the Computer Unit of NIOS during the year 2005-06.

Examinations

Pre-Examination Activities (April 2005 and October 2005 Examinations)

During 2005-06, the pre-exam processing in respect of data of about 488092 students was done both in the academic and vocational streams as against 448 thousand during 2004-2005. The work included data-entry of examination lists and examination forms, their verification, updation and generation of various reports for use by the examination centres for conduct of examinations.

Result Processing (April 2005 and October 2005 Examinations)

During April 2005 and October 2005, Examination result of about 488 thousand students was processed. The photographs of all successful candidates scanned at the time of admission were printed on the certificates.

◆ **NIOS on the Web**

Web Accessing and Web Designing

With dedicated lease line for Internet Access, the NIOS officials can access Internet from their computers without using user name and password. This has helped the Academic as well as Non-Academic staff members to access information from all over the world.

E-mail Id to NIOS officials

Official E-mail Id of NIOS officers have been generated and configured on the NIOS web site. A training-cum-orientation programme for the same was organized to help / facilitate the officers to access Internet and their E-mails.

A separate link “Ask Your Teacher” has been provided on the web site to facilitate student’s support by NIOS. Students can now directly interact through E-mail to concerned subject experts and can easily solve their problems/ queries related to their subject area.

◆ **Online Course Material**

The complete study materials of the revised Secondary Education Course and Senior Secondary Education Sociology courses have been placed on the website. These materials are available in the PDF format and can be downloaded/accessed from the link titled “On-line Course Material” from the home page. These PDF files can be viewed in Adobe Acrobat Reader, which can also be downloaded from the website.

◆ **Information under RTI Act**

As per the Right to Information (RTI) Act, the information has been placed under the Link RTI Act on the Home Page of NIOS.

◆ **Student Information Section**

All the information related with Students like Complete Student details, Hall Ticket for the Examination and Results are placed on the Internet to facilitate the students.

E-Group Muktaashiksha

The E-Group Muktaashiksha is an Electronic forum for discussion and

sharing the information among registered users who can be NIOS Learners, Coordinators, Academic Facilitators. It also works as a Bulletin Board.

- ◆ **Future Perspective**

 - Scanning of Admission Form and Smart I-Card for NIOS Learners**

 - NIOS is working in the direction of scanning the whole Admission Form using ICR technology. This will help in retrieving the Admission Form electronically as an image and can be converted into a database as per NIOS requirement for various student data processing. Each NIOS Learner will be issued smart I-card which will be highly temper proof and cannot be duplicated.

- ◆ **E-Learning through Virtual Classroom**

 - NIOS is in the process of providing its learners the facility of Education through Virtual Classroom.