# **Automated Admission and Examination Data Management System for Community Colleges**

### **Background**

Information and Communication Technology (ICT) provides several facilities and possibilities for educational administrators for better and effective management. Managing the huge database of thousands of students in the traditional way of data submission through CDs or e-mail etc. becomes very difficult. Similar was the case with the Community Colleges of IGNOU. The admission data as well as the examination data including the awards and marks was received in different formats and structures through different means, due to which the finalization of database normally took too much time. Because of it, many other problems were also created. Particularly in the Open and Distance Learning (ODL), where its constituent units like Regional Centres and study centres, etc. are geographically apart from each other and also from the Headquarters, it becomes necessary to use latest technological tools and applications.

#### **Need of the Innovation**

For the purpose of effective and efficient collection and management of the admission and examination data of the Community colleges spread all over the country, it was felt that an Automated Admission and Examination Data Management System for Community colleges should be developed.

It was felt that the use of ICT in the admission and examination database management could reduce the possibility of mishandling of the data and delay in finalization of the data. Therefore, it was decided that most of the facilities for the students as well as for the Community Colleges should be made online. This initiative could reduce the use of papers, cost in database development and management. Moreover, the distributed data entry system would save time and efforts also.

## **Description of the Innovation**

It has basically three modules – CCU Module, Community College Module and Students Module. All these modules have multilayered security features, well defined accessibility and provisions for scalability.

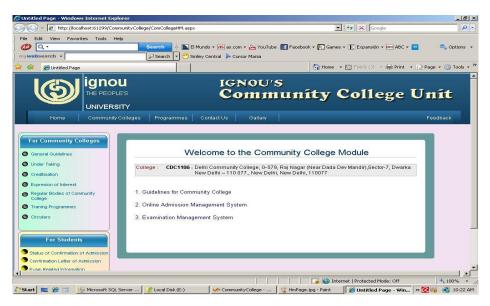
The Automated Admission and Examination Data Management System for Community Colleges have the following ICT enabled components :

- Specially designed and customizable software capable of adding any number of community Colleges and any number of programmes and courses, with a number of security features.
- Web based on time transaction of database of students and community colleges, which can be accessed by the CCU, SRD, SED and CCs anytime from anywhere.
- 24 × 7 Online students Facilitation services such as online registration (presently by the CCs only), online issue of admission confirmation letter receipt and Hall tickets for exam, online clarification of doubts, checking of result, etc.



- Web-based facilities for the Community colleges for online entry of the admission forms, examination forms, online posting of awards and marks, printing of award lists, attendance lists, etc.
- Besides the above, this system has facility of automatic generation of enrolment numbers to the students after confirmation, authorized access to the Community Colleges and Community College Unit, each CC is given separate user ID and password and the password can be changed by the Community College.
- Though database management is centralised, but it gives authorized access to
  use the database anytime from anywhere by the user entities. There is no
  possibility of duplicacy of data entry. Further, the data can be updated/edited
  by the authorized Community colleges before registration is confirmed by the
  CCU.





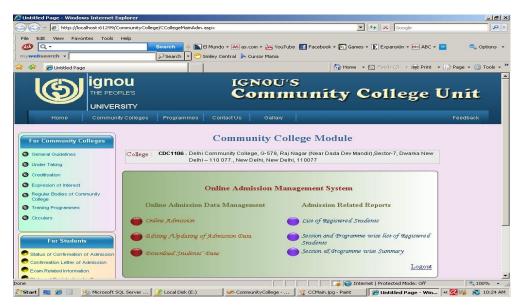
#### **Innovative Features of the Scheme**

The innovative features of the entire scheme are as given below:

- It is a completely flexible and ICT enabled system of admission and examination database management. Submission and management of database *is completely on-line.*
- There is *inbuilt mechanism for checking the validity of the courses and programmes approved by the CCU. Only valid and eligible students can apply for examination* which ensures that only eligible students appear in exam.
- It is not only simple and user friendly, but it is also cost effective and saves time and effort in data base management and in data transfer.
- It has an inbuilt provision of backup of the data base. For example, Log files are created indicating the date, time and the IP address of the system from which the server is accessed.
- It has *centralized control on the whole database* starting from the admission to the declaration of result.



- There is inbuilt mechanism to minimize or eliminate double entry.
- The *in-built multilayer security mechanism* of software takes care of the security of the data base.
- Enables Generation of reports by multiple users i.e. CCU, CCs, SED and SRD.
- It reduces the manual work in printing and submitting the database.



- Allows the candidates and or community colleges to fill the application at their convenient time.
- No postal charges or postal delays are associated with the data base submission or sending of the manual application forms to the CCU.
- The system is very dynamic and sustainable which can be extended to any extent.
- Allows to have customizable reports as and when needed both by the CCU and the CCs.

#### **Achievements**

The Automated Admission and Examination Data Management System for Community Colleges of IGNOU was designed and developed in house at NCIDE during 2011-12. This application was very successfully tested and implemented for all the Community Colleges. It was basically a  $24 \times 7$  facility for students and Community Colleges giving them authorized access for submitting data online through this portal. There was a provision for generating different types of reports and lists using the centralized database. After successfully implementation of the application, it was transferred to the Computer Division for handling and managing the software and database.

## **Applications and Uses of the Innovation**

The most important application of the Automated Admission and Examination Data Management System for Community College was that all the community colleges started submitting the database online, database management had become decentralized, but the database was centralized which could be used for any purpose anytime from anywhere. It had been appreciated by all the users CCs and the CCU also.



Immediately after starting of the system, all the Community Colleges and the Community College Unit started using the system for all types of database entry, and management related to the community colleges.

#### **Automated Examination Management System**



The scheme was being regularly extended to the new CCs and for new courses and programmes. The system had very clearly shown its strength and impact that in a short span of less than one year from its starting, almost all the community colleges started submitting data of their students online. Initially, the scheme was started for automated admission Management system but, in view of its user friendly features and utility, the system was further extended to the Exam Data Management System also.

## **Way Forward**

It does not require specially skilled or trained manpower to handle the entire process of Automated Admission and Examination Data Management System at the Community Colleges or at the CCU. It is highly user friendly programme. The training of the personal of the Community Colleges has been done through teleconferencing. Hence, there is no problem in extending it to any corner of the country. There is no additional expenditure involved in implementing the Automated Admission and Examination Data Management System because almost all the Community colleges and CCU already have the required infrastructure like computer, internet and printers, etc.

The Automated Admission and Examination Data Management System is an adaptable and customizable system which can be easily up-scaled to any number of programmes, courses, to any number of Community Colleges catering to any number of students. The software developed by the NCIDE for Automated Admission and Examination Data Management System for Community Colleges can be easily extended to the Admission and Examination management of the entire university without any additional expenditure and special arrangements except a high end server at Headquarters.

#### **Coordinator and Innovator**

Dr. Oum Prakash Sharma

Technical Team : Mr. Ajay Bhardwaj, Mr. Akhilesh Kumar and

Ms. Kamini Barna Period: 2011-2012

