Starting with two courses and 4,000 students in 1985, IGNOU has reached the ladder of success being the world’s largest mega university, most diverse and inclusive institution offering over 3500 courses and catering to over 2.5 million students. IGNOU is committed to be accessible to all by ensuring learner convenience through its unique ‘age no bar, place no bar and pace no bar’ approach. This approach of IGNOU falls in line with the objectives of democratizing higher education as the current initiatives of IGNOU indicate. During last few years IGNOU has been experimenting various innovative ideas and methods for meeting the above mentioned objectives and ultimately to cater to the diverse needs of people. This has resulted into successful launching of number of programmes, courses, medium and modules. To name a few, Community College establishment, programmes for physically challenged, providing second career opportunity to Indian Army: Gyan Deep, Convergence of distance education and higher education, starting of face to face programmes, use of 3G technology for imparting education, Flexilearning mode, satellite based communication etc.

In this paper an attempt has been made to present an overview of the above mentioned innovations that has been carried out by IGNOU in order to align with the mission of democratising higher education. Also the current status of these innovations and the related issues are highlighted.
DEMOCRATISING HIGHER EDUCATION: THE IGNOU INITIATIVES

Vision Statement of IGNOU

“Indira Gandhi National Open University, the National Resource Centre for Open and Distance Learning with international recognition and presence, shall provide seamless access to sustainable and learner-centric quality education, skill upgradation and training to all by using innovative technologies and methodologies and ensuring convergence of existing systems for massive human resource required for promoting integrated national development and global understanding”.

Introduction

The Indira Gandhi National Open University was established by an Act of Parliament in 1985. Today the University is making all efforts to take higher education to the doorsteps of the hitherto unreached. The University imparts education and knowledge through various flexible means suited to the open and distance education mode, including Information and Communication Technologies, in order to fulfill the vision of democratizing higher education, it provides higher education and training to large sections of population, particularly the disadvantaged segments of the society. It promotes national integration and the integrated development of human personality; encourages, co-ordinates and assists open universities and distance learning systems across the country to improve standards in such systems.

Learners from varied groups including rural and tribal areas, physically-challenged, jail inmates and rehabilitation houses, government and non-government sectors, parents and home-makers, the employers and the employed have been beneficiaries of the IGNOU programme. The University has put special focus on women, socially and economically disadvantaged groups, the north-east region, and other tribal and low literacy areas of the country.

The University provides a multi-mode learning system comprising print, audio, video, radio, television, teleconferencing, interactive radio counseling, Internet-based learning and face-to-face counseling.

IGNOU recently has also been involved in the National Skills Mission particularly in generating employment in line with the various schemes of the Central Government.
and State Government. The aim is to provide flexible knowledge and skill opportunities for the unemployed youth of India so as to meaningfully equip them with skills and opportunities.

This approach of IGNOU falls in line with the objectives of democratizing higher education as the current initiatives of IGNOU indicate. During last few years IGNOU has been experimenting various innovative ideas and methods for meeting the above mentioned objectives and ultimately to cater to the diverse needs of people. This has resulted into successful launching of number of programmes, courses, medium and modules. To name a few, Community College establishment, growth, programmes for physically challenged, providing second career opportunity to Indian Army: Gyan Deep, Convergence of distance education and higher education, starting of face to face programmes, use of 3G technology for imparting education, Flexilearning mode, satellite based communication etc. All these noble initiatives of IGNOU are presented in the following paragraphs.

A. Empowerment of Indian Soldiers - Gyan Deep

Gyan Deep is a bold initiative of Indira Gandhi National Open University (IGNOU) to educationally empower the soldiers of the Indian Army by granting of degree - a step aimed at providing the jawans with a second career option. Gyan Deep aims to equip the soldiers who join the force just after school. Nearly 50,000 Indian soldiers retire from the army every year after completion of 15 years in service. They constitute a young workforce but they lack any kind of professional skill to enter the job market after retiring from army.
The soldiers would be receiving certification in knowledge and skills within the educational framework stipulated by IGNOU. With the imparting of formal degrees, the soldiers would be in a position to obtain a second career option and earn for themselves and their families reasonably well even after retirement.

The certification and enhancement of educational qualifications would be within the broad framework of Community colleges, as set by IGNOU. Community colleges recognised by IGNOU will empower the already excellent training system within the Indian army and provide an opportunity for in service trainings to be benchmarked and credits issued for the Indian-Army soldiers to obtain a formal degree. In due course of time this innovative process will allow for lateral entry into the regular university system by allowing the candidates enrolled in Certificate, Diploma or Associate Degree courses to accumulate credits.

Associate Degree of Community Colleges includes:

- Minimum two years/4 semesters of study
Total of 64 credits

1st Semester: Basic Foundation Course (16 credits) – compulsory subject – Basic Military Training – Certificate course.

2nd Semester: Applied Course in the chosen Programme Sector (16 credits) - compulsory subject – Advanced Military Training – Diploma (minimum one year).

3rd Semester: Army Class 2 Standards (16 credits) – Application oriented courses (8 credits) and elective courses (8 credits).

4th Semester: Army Class 1 standards (16 credits) – Elective courses, compulsory internship and Project work (16 credits).

Degrees offered by IGNOU

64 credits obtained on successful completion of Associate Degree will become transferable towards the completion of 96 credits in total in order to obtain a degree. The 3rd year of 32 credits will be earned with IGNOU.

Subsequent accumulation of credits and a third year of graduation with IGNOU can be taken within five years of completion of the Associate Degree.

Degrees awarded may be BA, BCom, BSc., BBA etc., with varying
specilisations.
Towards achieving these goals, IGNOU will facilitate the registration of various Regimental Training Centers and Army Schools of Instruction/HRDCs of Indian Army as Community Colleges. If need be, IGNOU would also introduce new subjects in the curriculum. Upon completion of 96 credits, the degree awarded would be similar to the ones awarded to other students.

Education for All: Community Colleges
Community Colleges are an innovative but alternative system of education aiming to empower the individuals through appropriate skill development leading to gainful employment in collaboration with the local industry. Community Colleges aim at developing skills for self-employability of the marginalized and under-privileged sections of the society including urban-poor, rural poor and women. The methodology employed under the scheme of community colleges is the imparting of skill based training to the uneducated youth.

Community Colleges generally have a two year curriculum leading to an Associate Degree by transferring to an undergraduate college or direct entry
into an occupation or trade. Starting in July 2009, IGNOU commenced the scheme of Associate Degree Programmes through community colleges in various parts of India.

The theme of community college embodies in itself the democratic goal of imparting livelihood based education to the disadvantaged section of the population. Another major contribution of community colleges has been to expand access to post secondary studies for millions of students who would otherwise not have an opportunity to participate.

Establishing one community college in each of the 600 districts in the country in the next five years as IGNOU Community College is one of the approaches of IGNOU in this direction. These colleges in different regions will be under the administration and academic control of the regional centres of IGNOU. Community Colleges will ensure vertical mobility for those who opt at a later stage for further education in the respective areas through credit transfer in the open university and distance education system in the country. Through IGNOU Community Colleges, the effort is to institutionalize the mechanism of
providing skill based programmes in India till now undertaken by non-governmental organizations and training centres. The training in skills provided in these colleges will be recognized and formalized through various certifications.

Functioning of Community Colleges
Eligibility for becoming community college
An institution applying to IGNOU for registration as a Community College should be run by an educational agency/registered society/trust or corporate body rooted in community-based activities. They must be credible institutions with a minimum period of five years of proven service and be located in the community it seeks to serve.

On receiving the application, IGNOU will scrutinize its feasibility based on the recommendations of an expert committee and the applicant will be informed of its eligibility. Prior to launching programmes, the agency should have done a need analysis of the local job requirements and opportunities and incorporate these findings into the curriculum. It should have active linkages with rural,
Agricultural, industrial and commercial organizations of the locality for empanelling part-time instructors, providing on job training to students and provide job placement to successful students.

Organisational Structure of Community College

The college will constitute the following bodies to facilitate smooth functioning of its academic and administrative activities:

Community College Board will be the Executive body of the college. The Board will manage the academic matters of the college relating to appointment of faculty, approval of programmes leading to award of Certificate/Diploma/Associate Degree, and regulate the finances of the college.

Academic Committee will be the principal Academic body of the college responsible for the maintenance of standards of instruction, examination and linkages with the industry/community. The academic committee will:

- Make regulations regarding admission of students;
- Recommend to the Community College Board proposals for institution of new programmes of study;
- Advise the Community College Board on suggestions pertaining to academic affairs made by
Prepare syllabi for various programmes; and Coordinate the industry/community linkages.

Examination Committee will be responsible for the smooth conduct of internal assessments, mid-term examination and term-end examinations. It will be the custodian of processes related to evaluation such as question paper setting, answer script evaluation, moderation, timely announcement of results and handling of examination related grievances.

Programme Structure

Associate Degree Programmes are offered both full-time or part-time.

Mode of delivery: face-to-face and Blended

Mandatory apprenticeship.

First year Foundation courses 16 credits per semester. Application oriented courses 16 credits per semester.

Second year - Electives of 8 credits; Application oriented - 8 credits, Internship and Project work - 16 credits.

Programmes under Community Colleges:
The following academic programmes leading to an Associate Degree may be considered:

AA (Associate Arts)  
AS (Associate Science)  
ACS (Associate of Computer Science)
AC (Associate of Commerce)
ABA (Associate of Business Administration)
AAT (Associate of Arts in Teaching)

Academic Framework of Community Colleges
Since Associate Degree is a new academic qualification in India, it is essential to have a common set of descriptors for the programme which articulate entry requirements, curriculum content, teacher qualifications and training and exit avenues.

Entry Requirements
Students who have completed School final are eligible for direct entry into the Associate Degree Programme. Alternatively students who have completed 10th standard may enroll in the Bachelor’s Preparatory Programmes and on completion of first year may transfer into the Associate Degree Programme.
Non 10+2 (Eighteen years age) will have to complete BPP and Associate Degree Programme from Community college for lateral entry to third year of the Degree Programme.

Curriculum Design
The curriculum of the Associate Degree
Programme should include a substantial amount of generic skills with a major portion to be completed in the first year.

First Year Courses (all foundation courses, 16 credits), Second Year (application oriented courses, 16 credits) and some of the basic electives in the respective subject of study worth of 32 credits to be completed in the first two years of Associate Degree Programme of the community college. The equivalence of the courses will be recommended by the Committee appointed.

A number of existing courses of IGNOU may be appropriately combined for an Associate Degree.

Challenges of Community Colleges
Academic pathways - transfer of students universities.
Quality assurance – recruitment of development.
Avenues for technical and vocational Business/industry linkages including Programmes to be rooted in communities

Flexi Learn: Access to Quality Higher e-GyanKosh (www.egyankosh.ac.in), a initiative that was taken up by IGNOU distribute and share the digital learning Emerging as one of the world’s largest digitized and uploaded storage of over
material. With help of special channels like YouTube, IGNOU is providing with video programmes, through the metadata link in the repository. At present about 40,000 self-instructional print materials and over a 1,600 videos are available in the repository. After its public launch in June 9, 2008, the site already had received around 700,000 hits with an average of 1,000 visits per day from all over the world. At present, there are more than 60,000 active registered users of the repository. The facilities of e-GyanKosh are now being extended with a Flexi Learn platform to offer ‘open courses’ free of cost with course wise registration and assessment. IGNOU’s Flexi Learn platform will facilitate informed learning wherein anyone can register and explore courses free of cost to gain knowledge and skill in a particular area of interest. Certification for courses will be based on payment of the requisite fees.

The Flexi Learn platform will provide an alternative way of awarding degrees and diplomas. The Flexi Learn platform offers courses in a complete open and flexible environment with following features.

Any visitor to the Flexi Learn site has the option to register for any particular course or a full length academic programme. A modular approach is followed wherein a registered learner can combine course credits to obtain a diploma or degree of their own choice.

The platform provides self learning environment with a list of Academic Advisors/Course Guides to act as mentors. The Personal Learning Environment (PLE) will have interactive tools like Discussion Board, Blogs, Wikis, Podcasting, RSS feeds, etc.

Each course has option for both online assessment as well as an offline one as per the choice of the learner wherein a learner can take their exams ‘on demand’. The final exam will be in a proctored environment. The evaluation will be at three levels – diagnostic (where prior knowledge testing is required), formative and summative and will be designed by the faculty based courses requirements. Various of evaluation may be adopted viz. objective, short essay type, term paper, course projects, practical activities etc.

A complete tracking mechanism is integrated in the platform through the e-portfolios of individual learners. The e-portfolio will keep a formal record of all formal and informal studies carried out by the registered learner. Certification of the course will be based on stipulated time spent on a course (for a 4 credit a minimum at 45 days) and completion of all learning activities identified by the faculty.
The Flexi Learn platform provides an opportunity for course before enrolling and also help them in choosing courses study. Course wise registration facilitates offering topic specific programmes especially in skill based and professional areas. A provided through this model for Schools of Studies to identify courses already available, for offering new tailor-made and need. In the long run this will help in achieving IGNOU’s objective of education by taking it to the doorsteps of the learners and quality education to all those who seek it.

Convergence Scheme: Merger of ODL and Conventional Higher Education
The objective of the Scheme is to achieve the targets set out in Document for Higher Education, and focusing on access and equity issues. Inclusion as a concept goes beyond just providing distance learning access. It takes into account the need to interface with the conventional system, use innovative technologies and to optimize the access to physical facilities, intellectual and knowledge resources in institutions to achieve its goals.

The Scheme, jointly conceived by University Grants Commission (UGC) and Indira Gandhi National Open University (IGNOU), Distance Education Council and AICTE under the guidance of the Ministry of Human Resources Development, aims to focus on enhancing the quality and quantity of education delivery in the context of social dimensions of the country, with a thrust on capacity building and strengthening of the conventional university and collegiate education system.

The success of the Scheme, announced in 2007, is not surprising. Many of the existing IGNOU courses have also found new takers with the announcement of the Scheme. Given a target of achieving 15% gross enrollment in higher education by 2015, the scheme aims to move it from the current enrollment ratio of
11% in the 16-23 age group.

Under this Scheme, a student can be enrolled for obtaining a regular degree while pursuing another complementary course. Thus, a student can aim to get two degrees at the same time. Another programme, called Bachelor’s Preparatory Programme (BPP) enables the students who have not been able to get Pre-University/Senior Secondary education to become eligible for applying for bachelor’s degree courses. This is a boon to those who were not able to complete their schooling or pre-university courses. This is a six-month intensive training programme.

While IGNOU has over 2500 Learner Support Centres by different names depending on the specific role they play such as Regular Study Centres, Programme Study Centres, Special Study Centres, Recognised Study Centres etc., the Scheme on Convergence has helped in developing synergies with well endowed colleges. This has resulted in qualified faculty and state of art infrastructure being made available to students, in addition to providing additional mentoring on a flexi time basis.

In short, technology in Education, when applied creatively enhances the potential to address both access and inclusion issues, especially in India.

3G and Mobile Technology usage for Reaching the Unreached
The significance of mobile technology is evident from the fact that increasing number of people have started using mobile devices, carrying mobiles with them all the time. Hence, any service provided to the students through mobile devices enables quick connectivity as compared to any other technology such as PC based internet technologies. IGNOU launched the SMS Alerts service on November 18th 2008. Since then, SMS Alerts Service is being used by various constituents of IGNOU including its
Regional Centres to communicate information to its students.

Following are some of the applications of 3G technology to ODL system:

ODL institutions can develop high bandwidth applications that can be used by prospective students to apply for admission using their 3G enabled mobile devices.

ODL institutions can develop 3G enabled student response systems. These response systems can respond in real time with information such as Study Centre allocation etc.

Such 3G enabled student response systems can aid in providing responses to queries of students in real time.

Most of ODL institutions send course material to their students by post as well as host material on the web for students to download. It is difficult for students to download course material which occupies large memory due to poor Internet connections.

3G technology enables faster downloads of course material to the student's mobile devices. They can download course material wherever they are, anytime. This ensures that the course material is available to every learner who is having a 3G enabled mobile device.

Education through Digitally Enabled learning

The National Mission of Education through Information and Communication Technology (ICT) was launched recently with the broad objective of ensuring connectivity of the learners to the ‘World of Knowledge’ in cyberspace and to make them ‘Netizens’ in order to enhance their self-learning skills and develop their capabilities for on-line problems solving........

The efforts of Ministry of Human Resource Development (MHRD) would be geared towards creating an open house for
knowledge. The attempt is to harness a large number of knowledge resources in the manner that adds value to them by making them more personalized and useful to the lifelong learner/student. The effort would also involve content packaging and integration to suit specific needs of the students at various levels or with different kinds of talent/mental prowess. A budget allocation of Rs. 502 crores has been made in 2008-09 for the National Mission on Education through ICT.

For bridging the digital divide and empowering teachers/learners to harness information and communication technologies for their empowerment through knowledge, the need of the hour is to provide digital literacy to teaching learning community in Higher Education. The aim has to be to ensure that this community should be able to operate the computer or other devices and connect to the knowledge network. It should be for the teacher/learner to identify the content from its suitable pictorial representation and to play the audio-visual content to derive knowledge from the relevant module of knowledge. Obviously, this digital literacy cannot be spread through the computer networks since it aims to empower the teacher/learner to use the network. Hence, digital literacy for teacher empowerment will have to be imparted through other means relying heavily on audio-visual material, non-governmental organizations, change agents and institutions established for them, and mass contact programmes.

Provision of e-Books and e-Journals Free to the Learners
Overall education has two parts, formal and informal. Both forms of education require text books, reading material, journals and magazines and access to them can be provided through digital libraries which would substitute comprehensive brick-and-mortar libraries. Since everything in the library would be available on line with concurrent access to multiple sites for a
large number of students, good bandwidth around the year would be the key.

Support for Generation of e-Content and Digitization and Indexing of Existing e-Content
It shall be the endeavour of the Mission to continuously work for enriching the repository of e-contents of the nation. For the purpose it shall encourage the academicians, scholars and institutions to contribute to the world of knowledge in cyber space by creating e-knowledge content. The Mission shall also evolve a mechanism to rate the quality of the e-content generated before admitting it to the national repository.

Evaluation of e-Content
Benchmarking learning content would ensure quality which is central to the philosophy of the Mission. As content generation shall take place at various places, by different sets of experts, the development of quality assurance procedures and testing mechanisms is essential. These tools shall be deployed on the Mission website so that anybody developing content can routinely use these to get proper feedback. The Mission shall also attempt to provide guidance to them in order to facilitate their search for quality material.

Finance Assistance to Institutions of Higher Learning for Procurement of Hardware/Replacement of Obsolete Hardware
Obsolete Hardware
In order to accomplish its major objective of utilizing latest technologies to make higher education easily accessible, the Mission shall provide financial assistance to all the institutions of higher learning for the procurement of hardware or replacement of the obsolete hardware.
essential for accessing to the world of knowledge in cyber space.

National Testing Service
The Mission shall provide financial and technical support to a designated Government agency for establishment of a National Testing Service (NTS). The Mission shall be free to move for the establishment of a separate body to act as a National Testing Service in order to fulfill its objective of certifying the competence and skills acquired by the individual through formal or non-formal means of education and/or training in different disciplines/professions. This shall help them in gaining employment as also to continue their higher studies/training.

Content Generation
The National Programme of Technology Enhanced Learning (NPTEL) was started by the Indian Institutes of Technology and the Indian Institute of Science, Bangalore. A good number of quality material on various courses has been created by these premier institutions of the country. E-Contents are being continuously generated by the reputed faculty members of the premier institutions under NPTEL programmes. This programme has been subsumed with the Mission to give it a new dimension. The Mission hopes that the e-contents generated under this programme
shall be of great use for the engineering students enrolled in engineering colleges across the country.

Standardisation and Quality Assurance of Contents & Certification / Automation of Certification

The main objective here would be to evolve Quality Assurance (QA) Process for E-learning Content and to create an environment for Quality Audit of Content. The mission seeks to promote R&D in specific important areas of content creation and management for enriching the QA process and also promote multi-institutional involvement for definition of quality and dissemination of Quality awareness.

Developing Suitable Pedagogical Methods for Various Classes and Intellectual Calibers and Research in e-learning

Web enabled learning modules suffer from the absence of teacher and peer interaction/pressure. Many a times, the content developers develop the modules keeping in mind their own clientele of students or their own impressions of the student’s caliber, receptivity, etc. This may result in a “one shoe fit all” syndrome. It is well known that any given class would have very bright students, mediocre students and weak students. Even among them, the grasping power of concepts would vary.
based on their surroundings and the perceptions that the students have derived over a period of time. The most efficient pedagogical method would also depend on the extent of knowledge that the students has in that area.

Development of Language Converter Tool Kit

The focus of the National Mission on Education through ICT would be on content for all classes starting from nursery level to research level. Presently, the content being developed for Sakshat under this Mission is in English. English content also makes it possible to tap into the convenient, open access educational resources available on the Internet, be they in text, audio, visual, simulation, animation, question answer or in any other form. This abundant resource, however, cannot be tapped in regional languages because of IPR restrictions. Hence, efforts will be made to convert knowledge modules into various regional languages and also to subsequently launch a movement for creating the above types of content in the regional languages.

Development and Realization of Virtual Reality Laboratories and Supporting Facilities for e-learning

The Mission shall work for providing all the institutions of higher learning, in the country, with access devices and
connectivity through high speed broadband and VPN etc. It is estimated that approximately 20,000 institutions of higher learning shall reap this benefit. It shall be the endeavour of the Mission to ensure that the access devices are available with maximum number of learners in the country to enable them to become ‘Netizens’. To achieve this objective it shall support development of low cost and low power consuming devices through their field trials. The Central Government would also bear 75% of the cost of the connectivity having bandwidth up to 10-25 Mbps per college or per department of a University if remaining cost is borne by State Government or college/institution concerned.

Development of Certification & Testing Modules for Virtual Technological Universities & Creation of VTU, Multi Media Research and International Programmes

The proposed Virtual Technical University (VTU) shall serve as a nodal agency for imparting training to undergraduate and postgraduate students as well as to the newly recruited teachers in the fields of Science, Technology, Management, Architecture, Pharmacy and other applied areas. The University will provide flexible, credit based courses to all registered participants using modern technology.
VTU will help them in updating their knowledge and advancing their career objectives.

Inclusive Growth for the Disadvantaged Group

IGNOU with its diverse, low-cost programmes and a wide network has succeeded in attracting a significant group of learners from amongst the disadvantaged. However, a considerable cross-section of people still remains outside its reach. The University is mandated to reach them. The University has taken up a number of new initiatives mainly focused on empowering women, persons of the SC/ST category and the differently abled population of the country.

Women’s Empowerment

The University has been making conscious efforts to reach out to women, especially those from the remote and rural areas. Some of the initiatives in this direction are:

Setting up the School of Gender and Development Studies in 2007: One focus area of study of this School is “Women’s Studies”, which analyses the status of women in society with the objective of strengthening individual and institutional efforts that enable women’s empowerment. The School is offering the following
pertinent programmers:
Certificate in Women’s Empowerment and Development (CWED).
Diploma in Women’s Empowerment and Development (DWED)
Ph.D in Women’s Studies.
Establishing 26 women-specific study centres across the country.
Setting up a Committee for Prevention of Sexual Harassment against Women (CPSHW). This committee oversees all work related to complaints of sexual harassment at IGNOU, besides carrying out awareness-raising workshops, seminars and other related activities. During the year 2008-09, the CPSHW prepared a document on the Policy & Procedures for the Prevention, Prohibition, and Punishment of Sexual Harassment of Women at the Workplace, as per the Supreme Court guidelines. The document has been submitted to the University authorities for adoption in the form of an ordinance.
SC/ST Empowerment
The University has made extensive efforts regarding the empowerment of persons in the SC and ST categories. Some of the measures taken in this direction are:
SC/ST Cell: This cell looks after all issues pertaining to the grievances of SC/ST employees.

Increased Access to ST Population: IGNOU has tried to increase its reach to the tribal population of Madhya Pradesh through a new scheme of mobile study centres, which has been found to be successful.

EEBB Centres: To provide access to people in the Economically and Educationally Backward Blocks (EEBB), identified by the Sachar Committee, efforts have been initiated to establish Special Centres in these blocks, irrespective of whether such centres fulfill the conditions normally expected of IGNOU study centres. Through these centres, aspiring learners of these blocks are given opportunities to pursue a variety of vocational programmes, besides BPP and bachelor degree programmes.

EDNERU: Initiative for North East Tribal population education and research.

Empowerment of the Differently Abled
A national Task Force has been constituted to make the IGNOU premises and its programmes completely accessible to people with disabilities across the country. The access audit of the IGNOU campus at the headquarters was conducted on 22-23 October, 2008.

In order to develop human resources in
various areas related to disability for creating a disabled-friendly society as also promoting interdisciplinary study of disability with the purpose of removing barriers to empowerment of the persons with disabilities, the National Centre for Disability Studies (NCDS) was established in 2006. NCDS has launched a Post-graduate Diploma in Disability Management for Medical Practitioners, in collaboration with the Rehabilitation Council of India. The Programme equips the medical practitioners with the skills and knowledge to effectively deal with persons with disabilities.

Usage of Satellite
The University endeavors constantly to make appropriate use of new technological solutions to achieve its mission of seamless education, cost-efficiency and borderless access to quality education. The University has enhance, in the recent past, its technological capabilities in the production and transmission of audio and video programmes through radio and television as well as the latest Web-enabled online services offered through the internet to learners spread across the globe.

Gyan Darshan
Gyan Darshan (GD) is a digital bouquet of four channels – GD-1, GD-2, GD-3, and
GD-4. These channels beam programmes produced by IGNOU, UGC, NCERT, CIET, NITTTRs, IITs, DST and different ministries of the government of India. The transmission of GD channels is almost completely automated through the installation of the video server, GD-1 is a 24-hour channel which airs enrichment programmes produced by various government and educational organizations, and IGNOU curriculum-based programmes. GD-2 is the Interactive Distance Education Channel, dedicated entirely to distance education. Regular teleconference sessions and induction meetings are held through this channel for learners and trainees of the open university system and other apex bodies.

During the year 2008-09, Gyan Darsha-1 and 2 have witnessed a tremendous growth in reach, since both channels were placed on the following DTH platforms – DD Direct Plus, Dish TV, TataSky, Sun TV, Big TV and AirTel. It was also available in the IPTV network for which an MOU with M/s Goldstone was signed. Further, GD-1 has been declared a 'must carry' channel for all IPTV service providers and has been made available in many cities through the BSNL network. GD-1 and GD-2 are also being webcast through IGNOU’s website. Test transmission of the Science Channel on GD-2 started, with effect from
23rd December, 2008 to broadcast programmes made by IGNOU, CEC, Vigyan Parsar, etc.

Gd-3, "Eklavya", was inaugurated on 26th Jan. 2003. It is a 24-hour channel programmes generated at various IITs, for disciplines in the area of engineering and microwave links, from where they are this is at IIT, Delhi.

GD-4, "Vyas Channel", launched in Jan. needs of students pursuing higher in the country. The programmes are coordinated by the Consortium of Education Communication (CEC). The Vyas Channel has now become available on the DTH platform as well.

Gyan Vani
Gyan Vani, a ‘radio cooperative’ funded by the MHRD, is the only FM Radio channel in the country devoted exclusively to education. Gyan Vani programmes include information relevant to students of pre-primary to post-graduate classes, it also carries enrichment programmes for generating environmental awareness, awareness on female empowerment, legal literacy, capabilities in professional and science education. Each Gyan Vani has a range of about 60 kms. At present there are 26 GyanVani FM Stations functioning across the country at Allahabad, Ahmedabad, Aurangabad, Bangalore, Bhopal, Chennai, Coimbatore, New Delhi, Guwahati, Hyderabad, Indore, Jabalpur, Jaipur, Kolkatta, Kanpur, Lucknow, Mumbai, Mysore, Nagpur, Patna, Panaji, Raipur, Rajkot, Shillong, Varanasi and Vishakhapatnam. Eleven new stations are on the anvil.

Gyan Vani has made significant strides in recent years with all the 26 stations producing programmes. The radio programmes are contributed by NCERT, NIOS, IGNOU, NGOs and various State Government Departments. Gyan Vani has created a Programme Exchange Unit and all the radio stations have access to the best
productions of each station. Developmental and educational programmes from broadcasting organizations of countries such as Australia, Canada and Germany are also being aired on Gyan Vani stations. Gyan Vani, Delhi, is also web/cast using IGNOU’s in-house facility.

Interactive Radio Counseling (IRC)
IGNOU runs at least one hour of live phone-in counseling programmes every week in the regional languages through the various Gyan Vani stations. The studio invites experts to clarify learners queries put across to them for their homes via the telephone.

Both broadcast and non-broadcast modes of delivery were adopted by the University and the audio/video programmes produced at the University’s Electronic Media Production Centre (EMPC) were broadcast/telecast over Gyan Darshan, Gyan Vani, EduSat, AIR/Doordarshan Channels.

In order to infuse interactivity in open and distance learning, one-way video and two-way audio teleconferencing facilities are offered through GD-2. Important nationwide programmes for IGNOU learners, lectures by eminent experts/dignitaries, discussions with RC staff, induction for new learners and convocation for graduating learners were conducted live through teleconferencing mode. Besides this, telecounselling and communication sessions were conducted for select application-oriented programmes such as nursing, information technology, MBA etc, in which the students got ample opportunities to interact with the faculty. The teleconferencing facility was also used by other institutions, such as the DAV College Management Committee (DAVCMC), National Board of Examination (NBE), Institute of Chartered Accountants of India (ICAI), and the Department of Power, amongst others.

EDUSAT is the first Indian satellite designed and developed by Indian Space Research Organisation (ISRO) exclusively for serving the educational sector. It is mainly intended to meet the demand for an interactive satellite-based distance education system for the country. It is a collaborative project of the MHRD, ISRO, Department of Space and IGNOU. The satellite has six Ku-Band transponders and six Ext. C-Band transponders. One beam or Ext. C-Band covers the entire country, including the Andaman and Nicobar Islands. It reflects India’s commitment to use
space technology for national development, especially for development of human resources in remote and rural locations.

The University has established 134 interactive terminals across the country with a two-way interactive facility. An EduSat Mini Hub has been shifted from ISRO, Ahmedabad, to EMPC. ISRO has also provided a new Learning Management System (LMS) for the network.

A recent study was conducted by the Centre for the Study of Developing Societies, New Delhi, aimed at assessing the impact, effectiveness and sustainability of interactive media technologies being utilized in the delivery system of IGNOU. The study included Gyan Vani, Edust-based teleconferencing, the IGNOU slot on the national channel, Doordarshan, the web platform and internet facilities. The broad findings of the study as stated in the final report submitted, are as under:

**IGNOU Hour on Gyan Vani**
Forty percent of students listen to the IGNOU Hour programmes broadcast on Gyan Vani. Fourteen percent students listen to the IGNOU Hour programmes on a regular basis. Forty one percent students tune in sometimes and the rest do not listen to programmes broadcast on Gyan Vani.

**IGNOU Programmes on Doordarshan**
Forty seven percent of students watch IGNOU Programmes telecast on Doordarshan channel 1. Ninety three percent students who watch IGNOU programmes on Doordarshan’s main channel are comfortable with the language of telecast. Sixty percent students who watch the IGNOU slot on Doordarshan rated the content quality of programmes telecast as good. More than seven out of ten students said the programmes telecast on the IGNOU slot on Doordarshan are useful in the learning process. Sixty percent students who watch programmes telecast on Doordarshan felt it helped them in understanding their programme topics better. The awareness of students about IGNOU programmes on Doordarshan DTH is quite high as more than seven out of ten students were aware about it. Fourteen percent students of IGNOU were found to have Doordarshan DTH in their homes.
Conclusion
As India strives to become a knowledge society, IGNOU ensures that no section gets left behind, that’s where attaining the objective of democratizing higher education. From the above discussion, it is worth mentioning that IGNOU’s contribution in democratizing higher education is commendable. The innovations of IGNOU to impart education anybody, anywhere anytime using all channels is visible from the initiatives and the current status. With the growing demand of skilled workforce across the globe, IGNOU is taking all steps towards this. Right to Education is very much evident from the above mentioned initiatives. To conclude IGNOU’s initiatives in democratizing higher education, a dynamic and innovative university with a passion to educate all and reaching the unreached, IGNOU has become the People’s University… the university of a billion plus.

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