National Seminar on Innovations in Distance Education and their Applications

[IDEA-2008]

22 - 23 December, 2008, New Delhi

A Report

National Centre for Innovations in Distance Education
INDIRA GANDHI NATIONAL OPEN UNIVERSITY

in collaboration with
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About the Seminar

We are witnessing an unprecedented technological revolution in all spheres of development, and education is no exception to it. The Open and Distance Learning (ODL) system, as an effective mechanism not only to reach large numbers with quality education but also to address the areas of educational intervention which were hitherto untouched by the conventional system, has taken roots in the country.

Application of ICT is increasingly playing an important role in making ODL interventions more and more effective and useful. There is a constant search going on for new and innovative technologies and their application in distance educational interventions to more effectively address issues of access, quality and equity. Educational institutes and the Industry are grappling with the issue of how exactly to harness and exploit the potentials of innovations in education systems, which include quality assurance, benchmarking, technological interventions, research and training. While all these developments are taking place, very little exchange of experience has taken place among the developers and users of new innovative technologies in the educational sector, particularly in the ODL system. In order to facilitate the exchange of experiences towards a search for the technologies that would facilitate innovative solutions for ODL system in India, and to foster the spirit of innovation, the National Centre for Innovations in Distance Education (NCIDE), IGNOU, is organizing a National Seminar on Innovations in Distance Education and their Applications (IDEA-2008) on 22-23 December, 2008 at Convention Centre, IGNOU.

Themes and lines of discussion

The aim is to gather knowledge, experiences, opinions and positions of experts in the field, and discuss the following themes.

Technology Enhanced Processes in Open Education

Distance Education in India is gaining wide acceptance due to its wide reach, flexibility, and learner-centric approach. New revolutionary developments are being brought out in the distance education arena. The effective use of ICT right from audio-video technology to mobile learning has led to development of innovative learning solutions. Under this theme the recent developments in distance education arena and application of
various emerging innovative learning solutions will be discussed.

**Innovation Perspectives in Distance Education- Possibilities and Challenges**

The distance education system needs to be reengineered and further avenues for innovation need to be explored. This theme will focus on exploring and bringing to light innovations aimed at futuristic learning solutions, which would revolutionize the distance education system. Various conceptual innovative learning models can be introduced and discussed under this theme.

**GenNext Education System-Mixed Mode Education and Multi Mode Delivery**

The education system of the future will be more advanced and learner centric catering to the varying demands of the emerging knowledge society. Under this theme various aspects of the GenNext education system will be discussed: the mixed mode education and multi mode delivery mechanisms, learning environments in this education system, and related pedagogical and technological issues.

**Participants**

The participants of the seminar included Dr. Priya Ranjan Trivedi Pro Chancellor and Plenipotentiary, The Global Open University Nagaland, and Prof. K. Kannan, Vice Chancellor, Nagaland University, ten nominees of the Vice Chancellors of the State Open Universities and ten Heads of the other Open and Distance Learning Institutions, four Directors and twelve representatives from the School/Divisions of IGNOU, and six participants from FIIT, IIT Delhi, Microsoft, TCS.

**Speakers**

In all 18 speakers presented papers during the seminar broadly covering the areas of ICT in Education.

**Sponsors**

The seminar was co-sponsored by Microsoft, TCS and FITT, IIT Delhi.

**Inaugural Session**

It was indeed an idea becoming a reality when the National Seminar on Innovation in Distance Education and their Applications was inaugurated on 22nd December, 2008 at the IGNOU Convention Center.

![The degenataries of the inaugural session at National Seminar](image)
Srivathsan (Pro Vice Chancellor, IGNOU), Prof. B. K. Gairola (Director General, NIC), and the representatives of the various collaborators – Dr. Anil Wali (MD, FITT, IIT Delhi), Mr. Tanmoy Chakrabarty (TCS), Mr. Karan Bajwa (Microsoft) and Prof. M. Aslam (Director, NCIDE, IGNOU) gave an auspicious start to the inaugural ceremony by lighting the lamp while Saraswati Vandana was recited.

Prof. K. R. Srivathsan gave the welcome address. He emphasized how this national seminar would become a platform to bring together the educational institutions, corporate houses and other organizations to share ideas and foster a cultural change, which would lead to capacity building of the masses and thereby the development of the country.

Prof. V. N. Rajasekharan Pillai and Dr. B. K. Gairola were then honoured by the presentation of mementos.

Prof. V. N. Rajasekharan Pillai then addressed the audience highlighting the technological activities of IGNOU. He said that technology is a tool with which the quality of the teaching learning process can be enhanced; if education has to reach the ever-growing population of India then this is the only medium. He stressed that an interaction between academics of open universities and corporates involved in education can lead to capacity enhancement of teachers and quality education at all levels. He also said that quantity can not be achieved by compromising on quality. He called for a deepened focus on discipline-based ICT pedagogy. This would necessitate training of teachers to increase their competency in computer skills. He concluded by saying that the optimum use of technology in education can be realized only if the industry and the universities work hand in hand and complement each others’ efforts.

Following this, Prof. M. Aslam gave an overview of the significant role IGNOU has been playing in open and distance education. He also reiterated that this seminar was to enable an exchange of ideas about the
innovative experiments in education carried out by different people.

Mr. Karan Bajwa from Microsoft emphasized that the need was to create a platform to provide equal education to all. He elaborated on the three phases of the evolution of distance education in India. He further went on to say that the key challenges were management of materials and the students’ knowledge assessment and hoped that this would be addressed in this seminar.

Next, Mr. Tanmoy Chakraborty (TCS) posed a few questions to assess the level at which technology is being used today in education. He drew attention to how distance education is the only way to reach the growing population of India. He emphasized that there was a need to leverage the capabilities that are available today and creating competent educated individuals.

The keynote address by Dr. B. K. Gairola (Director General, NIC) saw him reminiscing about his personal experiences in education and governance. He claimed that a continuous learning process was essential, and the need of the day was to establish a National Knowledge Network. Stating the importance of lifelong learning he expressed that
the creation of high definition classrooms and use of high end applications in education would ensure the inclusiveness of all to the last mile.

Dr. Anil Wali (MD, FITT, IIT Delhi) proposed the vote of thanks and he hoped that the seminar would offer pragmatic solutions to resolve issues related to education and technology.

Mr. Rakesh K. Upadhyay, Chairman and CMD, Telecommunications Consultants India Limited (TCIL) presented a paper on Distance Education – A Model for India Based on PAN African Experience. The TCIL, having been entrusted with the task of implementing PAN African e-Network, has gained quite an experience in the field of Distance Education making use of the state-of-the-art ICT technology. The objective of the presentation was the sharing of experiences in the PAN African e-Network.

Presentation Sessions

The seminar had three presentation sessions. These sessions were organised around the main seminar themes. These sessions were made up of various presentations, usually of 2 hrs in length, where leading practitioners presented their experiences and findings. Some of these sessions also featured case studies from different organisations and enterprises.

**Session I: Technology Enhanced Processes in Open Education**

This session was chaired by Prof. K.R. Srivathsan, Pro Vice Chancellor, IGNOU.

Ms. Sujata Dev, CEO & MD, TIME Broadband Services presented a paper on IPTV on Mobile. The presentation included a discussion on i) convergence and India, ii) Next Gen Networks (NGN) distance education, iii) role of IPTV and 3G in disseminating education iv) the bundle of services on these innovative platforms, v) mobile TV to bridge the urban and rural divide, vi) the challenges towards a 100%
connected India, and vii) education "Anytime, Anywhere, Any device".

Mr. Rakesh Mehrotra, Head, Rural Technology Mission, Tata Teleservices presented a paper on The ITC Revolution and Modernization of Processes and Technologies for Open and Distance Education. He highlighted the opportunities and the challenges in developing processes and systems for ODL using interactive and near interactive audio visual technologies, teaching aids, search engines, benchmarking and customize the learning process etc., which can be used for providing quality education to the masses even in rural and far-flung areas of the world.

Prof. K. R. Srivathsan, Pro Vice Chancellor, IGNOU presented a paper on Systems and Pedagogy in Technology Enhanced Learning. The objective of the presentation was to lay a basis for effective practice of technology enhanced education. He discussed the limitations of the present 'bookish' education system. He then showed a learning centered system of instruction wherein the students were engaged in each topic subject to an acceptable unit perfection requirement. Next he described the kind of systems - collectively referred to as the Education Grid Gateway System (EGGS) that go into supporting the technology enhanced learning system. Lastly he showed how we may adopt or adapt different well known conventional systems of pedagogy and evaluation processes over the Education Grid.

Session Summary: Possibilities of IPTV on mobile keeping 3G technology in view was one of the major highlights of the session. It was concluded that Education Grid Gateway System, Tutored Video Instruction(TVI), and Subject Matter Experts (SME) were some of the areas that would help create an ambience of quality education in India.

Session II: Innovation Perspectives in Distance Education-Possibilities and Challenges

This session was chaired by Prof. Prof. K. Kannan, Vice Chancellor, Nagaland University.
Prof. Kushal Sen, IIT Delhi presented a paper on Technology Enhanced Learning: An Indian Experiment in Distance Education in Engineering. He discussed the NPTEL project. He also discussed the challenges and opportunities in dissemination of web and video based instructional content and the scope and need for public-private partnership for enhancing and supporting such processes.

Dr. Ashok Jain, Vice President, Entrepreneurship and Management Processes International (EMPI) presented a paper on Learning Environment for Next Gen: Process Innovations. He emphasized on better retaining and revitalizing of the core components of teaching and learning. In his paper he presented an integrated Open Knowledge Resources ICT model based on e.g. Learning 2.0, web 2.0 etc for engaging teachers in curriculum development, content design, development and effective delivery of content based on these new mode of collaborative teaching and learning.

Dr. Ajay Chauhan, CORE Technologies, Mumbai presented a paper on Enhancement of Learning with 3D Experience and IPTV. In his presentation he introduced the basic features of the two technology trends of 3D Immersive Virtual Reality (VR) systems and IPTV.

Mr. Rajeev Mathur, Microsoft India presented a paper on Innovative Use of Technology in Distance Education. The talk focussed on the Microsoft projects being done by Unlimited Potential Group wherein the efforts are to deploy technology in the most simple and economic way to impart distance education.

Session Summary: It was concluded that teachers, being at the core of the education system, especially in open learning, where they can take of ICT to make the teaching material more relevant along with the help of the questions asked by the students. It was emphasized on the availability of the correct information in the course material. The session also emphasized
on the construction of virtual systems.

Session III: GenNext Education System- Mixed Mode Education and Multi Mode Delivery

This session was chaired by Dr. Latha Pillai, Pro Vice Chancellor, IGNOU.

Dr. Padmanabhan Iyer, Emeritus Professor, IIITMK, Trivandrum, Kerala presented a paper on Portal Based Education. He provided an overview of the activities of IIITMK, laying emphasis on the use of ICT for empowering people, i.e., to bring minds, machines and learning data information together. He highlighted the analytical chemistry portal for education and research and societal applications. The portal provides links to digital lab techniques, e-course, interactive blog for clearing doubts in analytical chemistry. HE also stressed on the role of a virtual learning campus model.

Mr. Satish Kaushal, Country Head, Government & Education, IBM India presented a paper on Leveraging Information Technology to Align with New Paradigm in Learning & Training. This presentation was on knowledge navigation which is the trend of the future. He emphasized on mobile learning and delivering content on different form factors that are connected to the net with the fast changing paradigm of learning. He stressed on what IGNOU needs to do to embrace and align with the shift in learning requirements. He suggested that IGNOU should adopt the connected students, connected infrastructure approach.

Mr. Vineet Garg, Microsoft India presented a paper on Microsoft Digital Literacy Program. The talk covered the activity of Microsoft, which is conducting a pilot study for its digital literacy program to understand the effectiveness of eLearning content in rural areas through shared access centers. The program stressed the importance of rural telecentres, basic understanding of computer skills and knowledge, creating awareness of ICT, internet
and web basics, productivity software, security and privacy. He announced that a digital literacy program in Hindi was initiated by Microsoft, with emphasis on relevant course content linked to employability.

Mr. Sanjeev Bhamre, Regional Head L&D, TCS, Delhi, presented a paper on Multi Modal Methods for Delivering Learner-centric Training. This presentation focused on the different practices that are being utilised by Tata Consultancy Services Limited. This talk addressed the different scenarios encountered in distance learning that share similar characteristics: huge student population based at remote centers, centralised evaluation, and students targeting different proficiency.**

**Session Summary:** In open distance learning system, teacher is more of a mentor than a conventional teacher, and with the help of the mobile devices, the learning is enabled anywhere and anytime. Finally, it was concluded that cloud community is a new trend emerging in extended learning.

**Session IV: ODL Experiences-IGNOU**

This session was chaired by Dr. P.R. Trivedi, Pro Chancellor and Plenipotentiary, The Global Open University, Nagaland.

Prof. Manohar Lal, Director, SOCIS, IGNOU, presented a paper on Mobile Television: Technology, Applications and Challenges. In his talk he gave an overview of the state-of-art MTV technology, the possible challenges in its effective realization and possible future new applications were discussed. He emphasized that the effective realization of the technology for the purpose presents several technological challenges for the designers and developers of Mobile Television (MTV) and has the potential of opening a floodgate of new applications, particularly to the fields of entertainment and education.

Mr. Mithun Datta, Egyankosh, IGNOU presented a paper on Egyankosh. He said that Egyankosh as a national digital repository where
all IGNOU course material are available in PDF for. The audio and video lectures are also available, which is in collaboration with YouTube. It contains a blog and wikipedia. He also discussed other possibilities in egyakkosh, such as phone, student interaction forum etc.

Mr. Sudhir Kumar Arora, University Librarian & Coordinator, NODLINET, IGNOU presented a paper on National Open and Distance Learner's Library and Information Network [NODLINET]: Quality Management for Distance Learners. He said that NODLINET has been established at IGNOU with the aim to create an integrated e-platform for digitization of scattered e-resources to provide access to the target beneficiaries. The Network would assess the content requirement of ODL system and further establish linkages with other national library networks to strengthen information resources for ODL system by sharing mechanism.

Innovations in Instructional Design of CCDP. He said that the Certificate in Craft and Design (Pottery) programme and its print and video materials have been designed and developed for the rural artisans, unemployed rural youth and interested persons in pottery.

This programme aims to remove the shortcomings of the artisans and enhance their socio-economic status. The goal of the programme is to develop and upgrade the various required skills and knowledge to learners, which will help them in getting self employment, improving their craft business, empowerment and providing social status to the rural artisans and creating interest of youth in the craft. The programme has been found to be successful in transmitting the desired skills to the learners.

Session Summary: The presenters gave various technical inputs, which are useful for qualitative education in distance learning, although for rural learners it remains a challenge and a debatable issue.

Session V: ODL Experiences- OUs & DDE

This session was chaired by Dr. P.R. Trivedi, Pro Chancellor and Plenipotentiary, The Global Open University, Nagaland.
Prof. M. Aslam, Director, NCIDE, IGNOU presented a paper on *Capacity Building of PRIs- A Multi-Mode Training Intervention*. He said that the IGNOU in collaboration with the Ministry of Panchayati Raj and under the sponsorship of United Nations Development Programme (UNDP) undertook a project on ‘Capacity Building of PRIs Through Multi-Mode Training Intervention’. The project is initially expected to cover six northern states including Bihar, Chhattisgarh, Haryana, Madhya Pradesh, Rajasthan and Uttrakhand. The main objectives of the project are: i) Empowering and building capacities of elected members of Panchayats and development functionaries and ii) Institutionalizing mechanisms to strengthen capacity building. The project is an attempt at empowering Panchayats by a capacity building intervention through Multi-Mode Training Intervention.

Dr. Manoj Kulshrestha, SOET, IGNOU presented a paper on *Innovations in Programme Delivery of CMSR*. He discussed the IGNOU-HHML Motorcycle Technicians Competency Development Project. The salient features of the programme include Use of ICT, Resource Sharing, Education-Work Linkage, Competency based Training, and Fulfilment of Corporate Social Responsibility (CSR). In this innovative programme design the learners are exposed to real world situations and the challenges of the field. Under effective evaluation mechanism, the learners are continuously evaluated by their trainer during the hands-on training session apart from participating in Trade Test at the end of the programme.

**Statement by Representatives from SOU & DDES**

**Panjab University**

- Innovations emerged in IGNOU;
- Experience on the e-learning and data based programmes;
- Need for delivering the courses and a proper evaluation mechanism;
- In Science & Engineering subjects need to be supplemented it with practical labs.

**Utkal University, Bhubaneswar**

- Need to think how to link IT with education;
Participants from SOUs & DDEs delivering their statements

- Adopt and cultivate the available technologies;
- Gather the best practices being adopted by corporates and develop an educational package;
- Training in website management leading to development of websites and development of a new course.

**Tripura University**

- Remoteness is an issue;
- Alternative way to reach people is required;
- Study material does not reach the students in time and sessions are affected;

**Srinagar University**

- Need to think about the target groups;
- No power supply available in the remote areas so the modern facilities available with the University are not utilized properly.

**Karnataka State Open University**

- Need to introduce small modules to enable the learners pursue higher education e.g. Certificate in Motorcycle Repair course can have a course in mathematics to bridge the gap leading to a diploma in Mechanical Engineering and further to a degree programme;

**Tamil Nadu Open University**

- TNOU will take initiative to start online course in Computer Sciences;

**TCIL**

- The Seminar was excellent;
- Distance Education requires right perspective among people;
- Need to create awareness e.g., through mass media etc.;
Motivation is required to empower and educate the masses;

Need to bring the University and industry together;

Industrial efforts are not enough.

**Way Forward-Open discussion:**

**Summary**

**Experiences so far:**

- Piecemeal and casual approach;
- Limitations of conventional training programme;
- Multi-mode training intervention;
- Multimedia approach to cover large numbers;
- Conventional mode of training intervention for limited number of students;
- Evolution of multimode pedagogical environment;

**Practices to be adopted:**

- ODL & correspondence courses are being taken as a fallback option. Deliberations regarding this issue are required.
- There is a need to have combined efforts from the industry and OUs for e.g., convergence of digital literacy by Microsoft and computer literacy by IGNOU.

- Utkal University has made computer literacy mandatory for commerce courses. It plans to adopt Microsoft digital literacy programme and find ways to link the Microsoft certified course with some University programmes.

- Ways to provide access to the learners of PG programmes and Management programmes, the open course ware should be found out.

- Networking of institutions is required.

**Outcome of the Seminar**

- A distinct possibility which emerged was collaboration between NCIDE and Microsoft together with SOCIS to develop “Computer Skills Development” programme.

- A possibility of collaboration between TCS and IGNOU need to be explored as to bridge the Industry-Academic for quality content development and delivery of contents through multimode delivery system.