

**A
Bibliography
of
Innovations in Distance Education**



**Documentation Unit
National Centre for Innovations in Distance Education
Indira Gandhi National Open University
New Delhi – 110068**

Supervision and guidance: Prof M. Aslam

Editor: Dr. Moumita Das

Manuscript prepared by: Ms. Rupali Kumari and Ms. Surbhi Saini

*Language editing by : Dr Nandini Sahu, Reader, Faculty of English,
School of Humanities*

Published by: Director NCIDE, IGNOU

PRINT PRODUCTION

Sh. B Natrajan, DR (P) Sh S. Burman, AR (P) Sh Babulal, SO (P)

MPDD

IGNOU, New Delhi

February 2009

© Indira Gandhi National Open University, 2009

All rights reserved. No part of this work may be reproduced in any form, by mimeograph or any other means, without permission in writing from the Copyright holder.

Printed and published on behalf of Indira Gandhi National Open University, New Delhi by the Director, National Centre for Innovations in Distance Education.

Laser Typeset by: Tessa Media & Computers, C-206, Abufazal Enclave-II, Okhla, New Delhi-110025

Contents

Preface

1. Potential Areas of Innovation
2. Innovative Programmes
3. Innovative Application of Information and Communication Technology (ICT)
in Delivery Mechanism
4. Innovations in Admission Procedures and Learner Support
5. Innovations in Evaluation Methodologies and Practices
6. Quality Management and Benchmarking
7. Additional Bibliography in Distance Education

Preface

This bibliography, designed by the National Centre of Innovations in Distance Education, is somewhat different from the other bibliographies on Distance Education. Our motto is to provide you a bibliography on the potential innovative areas, which are broad in themselves. This bibliography introduces you to the different potential areas of innovations in Distance Education with their brief descriptions. It further provides you the Uniform Resource Locators (URLs), which give you information on the innovations that are happening around us.

This is our first effort in providing you with a unique bibliography, which is really beneficial for the stakeholders in distance education. It is hoped that this bibliography will motivate you to generate ideas to do something innovative and apply in your educational institution for the welfare of the distance learners.

Director, NCIDE

1. Potential Areas of Innovation

The word innovation is derived from the Latin word *innovare*, which means ‘renew’ or ‘alter’. Innovation is the first attempt to carry out a new idea or invention into practice. In simple language we may say that innovation is the successful implementation of creative ideas within an organization or system. In this view, the creativity of an individual is the starting point for innovation. Broadly, an action can be identified as an innovation if it is new and useful to the system; if it increases the efficiency of the system; it is cost effective; and is compatible/adaptable with other similar systems.

In today’s competitive world, the success of the Open and Distance Learning (ODL) system depends upon innovations, which would increase the efficiency and quality of the system. For this, a concerted study of the diverse areas of the ODL system is required, which should be followed by introducing innovations in it. This can be done through the identification, adaptation and introduction of the existing innovations in the system or through the introduction of new innovations.

For this purpose the potential areas of innovation of the ODL system have been classified into the following categories:

- i. **Innovative programme;**
- ii. **Innovative application of Information and Communication Technology (ICT) in delivery mechanism;**
- iii. **Innovations in admission procedures and learner support;**
- iv. **Innovations in evaluation methodologies and practices; and**
- v. **Quality management and benchmarking.**

2. Innovative Programmes

A programme forms the core of the ODL system. It refers to either a certificate, diploma or degree programme that consists of a few courses (the number of which differs from programme to programme). The main component of a programme comprises instructional design. Instructional design is the special design of the instructions to the learners (study material) of the ODL system. The instruction is learner-centric instead of teacher-centric and has features that the learner easily understands. It is designed in such a way so as to cater to learners with a wide range of qualifications and learning abilities. It is designed in the form of printed and non-printed self-reading material where instructions, pictorial depictions, several languages, interactive dialogues and stories etc. are used liberally. Instructional materials designed to innovatively promote Indian culture, constitutional laws, clean environment, etc., are also considered as innovative programmes.

The following table provides you with the references of some of the innovative programmes that have been developed across the world.

Sl no	Title	URL
1.	Bachelor of Home Economics Sukhothai Thammathirat Open University, Thailand	http://www.stou.ac.th/Eng/Studies/Bachelor.asp Accessed on 23/02/09
2.	Bachelor of Industrial Studies The Open University of Srilanka	http://192.248.73.6/eng/text/index.php Accessed on 23/02/09

3.	Certificate in Livestock & Poultry (CLP) Bangladesh Open University	http://www.bou.edu.bd/SARD.html Accessed on 23/02/09
4.	Certificate in Pisciculture & Fish Processing (CPFP) Bangladesh Open University	http://www.bou.edu.bd/SARD.html Accessed on 23/02/09
5.	Clinical Ayurveda Therapist (C.A.T.) Diploma Program Ayurveda Healing Arts Institute of the Medicine Buddha Healing Centre	http://www.ayurveda-california.com/ Accessed on 23/02/09
6.	Comprehensive Herbalist Training Institute of Chinese Herbology	http://ich-herbschool.com/comprehensive_training Accessed on 23/02/09
7.	Master of Homeland Security Penn State World Campus The Pennsylvania State University	http://www.worldcampus.psu.edu/MasterinHomelandSecurity.shtml Accessed on 23/02/09
8.	Designing eLearning Environments, An Innovative, Online Certificate Program University of Colorado Denver	http://thunder1.cudenver.edu/ilt/elearning/programs/dee_certificate.htm Accessed on 23/02/09
9.	eBusiness: Graduate Certificate Programme Florida Institute of Technology	http://uc.fit.edu/dl/index.html Accessed on 23/02/09
10.	eCore programme University of West Georgia	http://www.westga.edu/~distance/distanc ecourses/programs.htm Accessed on 23/02/09
11.	East West Certified Herbalist (EWCH) Degree Program East West School of Planetary Herbology	http://www.planetherbs.com/herbal-courses/east-west-certified-herbalist-degree-program.html Accessed on 23/02/09
12.	Herbal Healer Correspondence Courses like Homeopathy	http://www.herbalhealer.com/corresp.html

	Herbal Healer Academy Correspondence Courses	Accessed on 23/02/09
13.	Master's Program in Agricultural Economics/Agribusiness Global Open Agricultural and Food University	http://www.openaguniversity.cgiar.org/course/index.asp Accessed on 23/02/09
14.	Certificate level course in Land and Property Law Sukhothai Thammathirat Open University, Thailand	http://www.stou.ac.th/Eng/Studies/Certificate.asp Accessed on 23/02/09
15.	Master in NGO Management The Global Open University, Nagaland	http://www.subsidy.in/ngomanagement.htm Accessed on 23/02/09
16.	Master of Education in Earth Sciences Penn State World Campus The Pennsylvania State University	http://www.worldcampus.psu.edu/MasterinEarthScience.shtml Accessed on 23/02/09
17.	Master of Education in Instructional Systems—Educational Technology Penn State World Campus The Pennsylvania State University	http://www.worldcampus.psu.edu/MasterinEducationalTechnology.shtml Accessed on 23/02/09
18.	Master of Healthcare Innovation ASU College of Nursing & Healthcare Innovation	http://nursing.asu.edu/programs/graduate/mhi/
19.	M.A. Programme in Biblical Languages University of Stellenbosch	http://academic.sun.ac.za/as/programs_postgraduate.htm#MAinBiblicalLanguages Accessed on 23/02/09
20.	Master of Taxation Florida Atlantic University College of Business	http://mastersoftaxation.com Accessed on 23/02/09
21.	M.Sc in Pakistan Studies Allama Iqbal Open University	http://www.aiou.edu.pk/Programmes.asp?PID=86

		Accessed on 23/02/09
22.	MSc Programme in Geographic Information Systems (GIS) University of Leeds	http://www.geog.leeds.ac.uk/odl/msc-distance-learning.htm Accessed on 23/02/09
23.	Web-Centric Alternative Certification Program (WCACP) etools4education	http://www.online-distance-learning-education.com/articles.php/tPath/12 Accessed on 23/02/09
24.	Occupational Therapy Nova Southeastern University	http://www.nova.edu/ot/admissions/distance.html Accessed on 23/02/09

3. Innovative Application of Information & Communication Technology (ICT) in Delivery Mechanism

Information and Communication Technology touches all parts of life including education. The impact of ICT in education can be felt strongly by observing the uses

of ICT tools, such as multiple media, in teaching. These ICT tools support the predominant print media being used by the ODL system. The current multiple media being used by the ODL system include audio and video cassette tapes, CD-ROM, interactive radio, television, teleconferencing, video-conferencing, online teaching through multimedia and recently, instruction delivery through iPods, mobile, etc. Today eLearning, which aims to bring the use of ICTs in mainstream teaching and learning, will provide greater access to education and learning as well as impact greatly on the administration of schools, thereby improving on efficiency and effectiveness of the schools.

The category of “Application of ICT in delivery mechanism” includes the innovative use of ICT tools in delivery mechanism and learning methodologies. It also includes innovative ICT-enabled online student registration, online programme delivery, online evaluation of assignments and project reports, online examination, online availability of results, and making available the self learning materials and other resources in a digital repository, etc. Any creative intervention that uses ICT in print material production and its distribution to learners is also considered an innovation in this category.

The following table provides you with the references of some of the innovative application of ICT in delivery mechanism.

Sl no	Title	URL
----------	-------	-----

1.	Anderson, Richard [et.al]. "Supporting an Interactive Classroom Environment in a Cross-Cultural Course."	http://classroompresenter.cs.washington.edu/papers/2007/BEIHANG_TVI_2007.pdf Accessed on 23/02/09
2.	Bassili, John N. and Joordens, Steve. "Media Player Tool Use, Satisfaction with Online Lectures and Examination Performance." The Journal of Distance Education, vol. 22, no. 2 (2008): 93-108.	http://www.jofde.ca/index.php/jde/article/view/9/517 Accessed on 23/02/09
3.	Bezaitis ,Athán . "Building for the Future: The USC Davis School Announces New Renovations as Part of the University's Distance Learning and Technology Enhanced Learning Initiatives."	http://www.usc.edu/dept/gero/AgeWorks/captureroom/captureroom.shtml Accessed on 23/02/09
4.	"Cross-institutional use of e-learning to support lifelong learners." Joint Information Systems Committee (JISC)	http://www.jisc.ac.uk/home/whatwedo/programmes.aspx Accessed on 23/02/09
5.	Devraj Kumar,David and Altschuld, James W.Policy. "Ideas from Contexts in Technology Integration in Science Education." Opening Gates in Teachers Education, February 12-14, 2001	http://vcisrael.macam.ac.il/site/eng/show_file.asp?propid=E5A022&subject=sc&page=sch Accessed on 23/02/09
6.	Eduserv (Innovative technology services)	http://www.jisc.ac.uk/whatwedo/services/eduserv.aspx Accessed on 23/02/09
7.	Mobile access to learning	http://www.apple.com/education/it-professionals/mac-labs.html Accessed on 23/02/09
8.	Hastie, Megan and Palmer, Dr. Allan. "Real Time, Real Young, Real Smart" : The use of the Internet for real time	http://community.flexiblelearning.net.au/TeachingTrainingLearners/content/article_4379.htm

	teaching with 5 to 8 year olds.	Accessed on 23/02/09
9.	Blackboard and Northwestern State University. A Case Study.	http://www.nsula.edu/ece/Northwestern%20State%20University.pdf Accessed on 23/02/09
10.	Dental Students Launch iTunes U Initiative	http://www.apple.com/nz/education/profiles/michigan_dentistry/ Accessed on 23/02/09
11.	Kanjilal, Uma. "Migrating to the electronic learning environment. prospects for LIS distance learners in India." 64th IFLA General Conference August 16 - August 21, 1998	http://www.ifla.org/IV/ifla64/019-123e.htm Accessed on 23/02/09
12.	Lehmann, Lesley. "Interactive in distance education—a case study : Teaching biology at two rural schools." Distance Education vol.13, no.1 (1992): 131-145	
13.	Lobel, Mia, Neubauer, Michael and Swedburg, Randy. "Elements of Group Interaction in a Real-Time Synchronous Online Learning-By-Doing Classroom without F2F Participation." United States Distance Learning Association Journal, vol.16, no. 4 (2002)	http://www.usdla.org/html/journal/APRO2_Issue/article01.html Accessed on 23/02/09
14.	Lobel, Mia, Neubauer, Michael and Swedburg, Randy. "The Teaching Moment: a learning metaphor." United States Distance Learning Association Journal vol.16, no.11.(2002)	http://www.usdla.org/html/journal/NOVO2_Issue/article01.html Accessed on 23/02/09

15.	NEPAD e-Schools praised as the key to bridging the digital divide in Africa	http://www.eafricacommission.org/whats-new/news/26/04/2008/nepad-e-schools-praised-key-bridging-digital-divide-africa Accessed on 23/02/09
16.	Nyarko, Emily. "Developing ICT enabled education –The future for Ghana." i Connect online	http://www.iconnect-online.org/Documents/Ghana%20Elearning%202007%20eng-%20iConnect.pdf Accessed on 23/02/09
17.	Shih, Yuhsun Edward and Mills, Dennis. "Setting the New Standard with Mobile Computing in Online Learning." International Review of Research in Open and Distance Learning vol. 8, no.2 (2007)	http://www.irrodl.org/index.php/irrodl/article/view/361/929 Accessed on 23/02/09
18.	Dzakira, Hisham and Idrus, Rozhan Mohammed. "Teacher- Learner Interactions in Distance Education.A Case of Two Malaysian Universities." Turkish Online Journal of Distance Education-TOJDE, July 2003, vol. 4, no.3.	http://tojde.anadolu.edu.tr/tojde11/articles/idrus.htm Accessed on 23/02/09
19.	Journal Of The United States Distance Learning Association, vol. 17, no.2 (2003)	http://www.usdla.org/html/journal/ED_APR03.pdf Accessed on 23/02/09
20.	Digital StudyHall	http://dsh.cs.washington.edu Accessed on 23/02/09
21.	Woodford, Mark S.[et.al] . "Sharing the Course: An experience with collaborative Distance education in	http://jtc.colstate.edu/vol2_1/Sharing.htm#Wulf,%20%20K.%20%20(1996)

	counselling education." Journal of Technology in Counseling vol. 2, no. 1.	Accessed on 23/02/09
22.	e-learning indicators: templates & tools Australian Flexible Learning Framework	http://e-learningindicators.flexiblelearning.net.au/templates_tools.htm Accessed on 23/02/09

4. Innovations in admission procedures and learner support

The admission procedure in the ODL system involves walk-in- admission or through entrance tests. As of today, the admission forms and prospectus are available online for several ODL institutions. The detailed information about the

eligibility criteria depending upon the course selected by the learner is also available online. However, there is much scope of innovation in the area of admissions that would ease the workload of the staff involved. Similarly, the learner support system is overloaded and is slow owing to several factors. An innovative application of technology and idea in admission procedures and practices that is useful and effective, and also has the characteristic of user-friendliness and cost effectiveness has been considered as an innovation. If technology has been used creatively and applied for monitoring the learners' needs and for receiving the feedback from the learners and for dissipating any other learner related dynamic information, it is considered as an innovation. For example, the innovation could be software that can monitor counseling sessions and assignments handling; and if the learner gives the feedback, then it can make changes according to the learner requirement.

The following table provides you with the references of some of the innovations in admission procedures and learner support.

Sl no	Title	URL
1.	Dzakiria, Hisham. "The Role of Learning Support in Open & Distance Learning: Learners' experiences and perspectives." Turkish Online Journal of Distance Education, vol. 6, no. 2 (2005)	http://tojde.anadolu.edu.tr/tojde18/articles/article4.htm Accessed on 23/02/09

2.	Zhang, Wei-yuan, Ferris, Kirk and Yeung, Lesley. "Online tutorial support in open and distance learning: students' perceptions." British Journal of Educational Technology, vol. 36, no. 5 (2005)	http://www.qou.edu/homePage/arabic/researchProgram/distanceLearning/tutorialSupportOpen.pdf
3.	Jamtsho, Sangay. "Challenges of ICT Use for Distance Learning Support in Bhutan."	http://www.ignou.ac.in/icde2005/PDFs/theme2pdf/theme2_77.pdf

5. Innovations in Evaluation Methodologies and Practices

Monitoring and evaluation are critical elements in managing the ODL system. They provide an evidential base and establish linkages between course structure, instructional delivery and expectations from the students. Evaluation is the most important strategy of the ODL system. The overall aim of the evaluation is to ensure that the programme/course result in the expected outcomes from learners.

Evaluation of students in ODL system becomes critical since the learner is not present physically in front of teachers/evaluators as in case of traditional teaching/evaluating mode. The learner in ODL system is generally evaluated by providing self assessment questions in the course book itself, questions at the end of each unit, multiple choice questions, projects, assignments, and through term end examination.

Any innovative method or practice that contributes to the efficiency of the evaluation system is considered an innovation under this category.

The following table provides you with the references of some of the innovations in evaluation methodologies and practices.

Sl no	Title	URL
1.	Wehrwein, Erica A., Lujan, Heidi L. and DiCarlo, Stephen E. "Gender differences in learning style preferences among undergraduate physiology students." <i>Advances Physiology Education</i> 31 (2007): 153-157.	http://advan.physiology.org/cgi/content/full/31/2/153 Accessed on 23/02/09
2.	Roberts, T. Grady, et al. "Practices in student evaluation of distance Education courses among land grant institutions". <i>Journal of Agricultural Education</i> , 45, no. 3 (2004)	http://pubs.aged.tamu.edu/jae/pdf/Vol45/45-03-001.pdf Accessed on 23/02/09
3.	Nouwens, Fons, et al. "Evaluation Perspectives. Interrogating Open and Distance Education Provision at an Australian Regional University". <i>Turkish Online Journal of Distance</i>	http://tojde.anadolu.edu.tr/tojde15/articles/nouwens.htm

	Education, 5, no. 3 (2004)	Accessed on 23/02/09
4.	Innovative and Good Practices of Open and Distance Learning in Asia and the Pacific : (A study commissioned by UNESCO, Bangkok) Jung, Dr. Insung	http://www.unescobkk.org/fileadmin/user_upload/apeid/odl_innov.pdf

6. Quality management and benchmarking

Quality management plays a key role in developing and maintaining quality in distance education institutes. It deals with the quality of the learning experience and the support services. It helps to ensure the completion rates of studies and diminishes dropout figures and results in satisfied students who may in the future be willing to start new studies. Also it ensures that the students are easily accepted in the traditional universities.

Benchmarking is one form of monitoring and measurement used in quality management. Benchmarking is being highly used in educational organizations to evaluate various aspects of the teaching–learning processes in relation to **best practice** or innovations. It provides new methods, ideas and tools to improve the effectiveness of the organization. The ODL system in India needs to improve its quality management and benchmarking mechanisms to develop and establish innovative practices in the system for increasing its efficiency.

A practice that has markedly improved the quality of the system is considered an innovation under this category.

The following table provides you with the references of some of the good practices in quality management and benchmarking.

Sl no	Title	URL
1.	“Accreditation.” Open & Distance Learning Quality Council online.	http://www.odlqc.org.uk/ac-index.htm Accessed on 23/02/09
2.	Allen, I. E., & Seaman, J. (2004). Entering the mainstream. The quality and extent of online education in the United States, 2003 and 2004. The Sloan Consortium.	http://www.sloan-c.org/resources/entering_mainstream.pdf Accessed on 23/02/09
3.	Barker, Dr. Kathryn. “Quality guidelines for technology–assisted distance education.”FuturEd Consulting Education Futurists.	http://futures.com/pdf/distance.pdf Accessed on 23/02/09
4.	Quality On the Line: Benchmarks for Success in Internet–Based Distance	http://www2.nea.org/he/abouthe/images/Quality.pdf

	Education The Institute for Higher Education Policy	Accessed on 23/02/09
5.	Lampikoski, Kari. "Who determines quality in distance education?" World bank Distance educationet	http://www1.worldbank.org/disted/management/governance/q-02.html Accessed on 23/02/09
7.	Mariasingham, Michael A. and Hanna, Donald E. "Benchmarking Quality in Online Degree Programs Status and Prospects"	http://www.westga.edu/~distance/ojdla/fall193/mariasingham93.htm Accessed on 23/02/09
8.	IQAT Interactive Quality Assessment Tool	http://www.iqat.org/about.php Accessed on 23/02/09
9.	Subject benchmark statements Quality Assurance Agency for Higher Education	http://www.qaa.ac.uk/academicinfrastructure/benchmark/ Accessed on 23/02/09
10.	Batura, Mikhail, Krasovski, Dr. Vladimir and Tavgen, Dr. Igor. "Quality Assuring of Distance Education."	http://ieeexplore.ieee.org/ielx5/4520396/4529902/04529918.pdf?arnumber=4529918 Accessed on 23/02/09
11.	Jung, Dr. Insung. "Innovative and Good Practices of Open and Distance Learning in Asia and the Pacific."	http://www.unescobkk.org/fileadmin/user_upload/apeid/odl_innov.pdf Accessed on 23/02/09
12.	Inglis, Alistair. "Quality Improvement, Quality Assurance, and Benchmarking: Comparing two frameworks for	http://www.irrodl.org/index.php/irrodl/article/view/221/867

	managing quality processes in open and distance learning.”	Accessed on 23/02/09
--	--	----------------------

7. Additional Bibliography in Distance Education

Several bibliographies are available on Distance Education but none on innovations in Distance education. Here we will mention some bibliographies in Distance Education with its URL if you go through these, then you would really understand how this bibliography is different from other bibliographies.

- Computer support collaborative Learning Requiring Immersive Presence prepared a CSCLIP Bibliography in distance education.
<http://csclip.iris.okstate.edu/bib.htm>
- Centre for the Virtual University also design a Distance Education Bibliography <http://www.umuc.edu/odell/cvu/webliography.html>
- Education & Technology Resources prepared bibliography on Distance Learning entitled “Distance Learning Bibliography”
<http://mason.gmu.edu/~montecin/disedbiblio.htm>
- Select bibliography is prepared by S. Armitage and M. Bryson under online Teaching: Tools & Projects. <http://www.oucs.ox.ac.uk/ltg/projects/jtap/reports/teaching/bib.html>
- Graduate School of Library and Information Science prepared a LEEP Bibliography. <http://www.lis.uiuc.edu/programs/leep/leep-bib.html>

National Centre for Innovations in Distance Education

The National Centre for Innovations in Distance Education (NCIDE) at the Indira Gandhi National Open University (IGNOU), Maidan Garhi, New Delhi, is an all embracing facility for promoting, supporting, engineering and disseminating innovations in Open Distance Learning/Education system. It is a ground for nurturing bright and inquisitive minds whose ideas and explorations are expected to revolutionize the Open and Distance Learning (ODL) system and thus provide for transforming India into a learning society.

The goal of the Centre is to develop a culture of continued search for new and innovative solutions to issues and problems on the way of University’s mission to offer

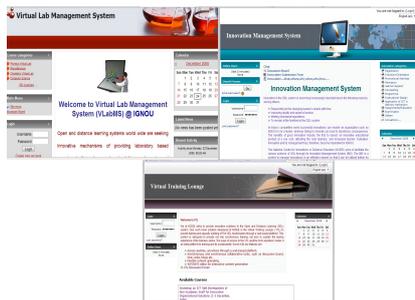
seamless education across the various levels, achieve cost efficiency in its operations and provide borderless access to quality education and training.

To achieve this goal, NCIDE:

- promotes, develops and pilots innovations in all aspects of the ODL system and operates on the principle of Build-Operate-Transfer (BOT) strategy.
- provides intellectual and technological support to the stakeholders for the growth and development of the ODL system.
- is a resource centre for prototype development that ensures quality assurance, cost- and learner-related effectiveness, and system efficiency.
- encourages innovations in distance education through collaborations within IGNOU and with other institutes in India and abroad.

Activities

- Innovative Learning Solutions
- Documentation and Dissemination of Innovations in ODL system
- Harnessing the Potential of EDUSAT
- Capacity building using mixed mode of training intervention
- Research and Development



Contact

Director

National Centre for Innovations in Distance Education
Indira Gandhi National Open University

Block-G, Zakir Hussain Bhawan
New Academic Complex,
Maidan Garhi, New Delhi- 110068 (INDIA)

Phone: 91-011-29536413

Fax: 011-29536398

Email: ncideignou@rediffmail.com

Websites: <http://ncide.ignou.ac.in/>

<http://www.ignou.ac.in/ncide/index.html>

