ICT, ODL and Higher / Further Education

Professor Santosh Panda
Indira Gandhi National Open University
www.santoshpanda.net
Major concerns in higher education

Access and equity
Curriculum reforms/innovations
Use of ICT
Relevance
Cost
Quality
Vocational education
National and community development
National and regional training
Generations of distance education

- Correspondence education
- Multi-/Mass media education
  (the first and second generations introduced industrialised processes to teaching and learning)
- Tele-learning/Conferencing based
- Flexible learning/CMC
  (online, multimedia, WWW: interaction, asynchronous communication, constructivist learning)
- Intelligent flexible learning
  (automated business processes, multiple media output from single source)
Models of distance education delivery

- Examination preparation model (University of London, UK)
- Correspondence education model (University of South Africa)
- Group distance education model (CRTVU, China; University of the Air, Japan)
- Learner centred model (Empire State College, SUNY, USA)
- Multiple mass media model (UKOU; IGNOU)
- Network-based distance education model (FernUniversität, Germany; UKOU; SUNY)
- Technologically extended classroom teaching model (University of Maryland University College, USA)
- Virtual university model (University of Phoenix Online, USA)

[Note: Peters, O. (2003). ‘Models of open and flexible learning in distance education’. In S. Panda (Ed.), Planning and Management in Distance Education. London/New York: RoutledgeFalmer.]
Distance education in India

• Beginning : 1962, Dual-mode University of Delhi

• Institutions : 14 OUs, <200 DEIs

• Students : Above 6.4 million (above 24% of total higher education/enrolment) # Toward GER of 20%
## Status of open universities in India (2010-11)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>IGNO U</th>
<th>BRAOU</th>
<th>VMOU</th>
<th>NOU</th>
<th>YCMOU</th>
<th>MPBO U</th>
<th>BAOU</th>
<th>KSOU</th>
<th>NSOU</th>
<th>UPRTO U</th>
<th>TNOU</th>
<th>KKHO U</th>
<th>PSSOU</th>
<th>UOU</th>
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<tbody>
<tr>
<td>Programmes</td>
<td>445</td>
<td>62</td>
<td>110</td>
<td>9</td>
<td>206</td>
<td>74</td>
<td>71</td>
<td>412</td>
<td>16</td>
<td>90</td>
<td>101</td>
<td>51</td>
<td>15</td>
<td>115</td>
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<tr>
<td>Courses</td>
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<td>625</td>
<td>707</td>
<td>102</td>
<td>1632</td>
<td>74</td>
<td>644</td>
<td>5200</td>
<td>78</td>
<td>891</td>
<td>1041</td>
<td>457</td>
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<tr>
<td>Students ('000)</td>
<td>614.2</td>
<td>192.93</td>
<td>107.83</td>
<td>26.84</td>
<td>320.29</td>
<td>214</td>
<td>41.63</td>
<td>200</td>
<td>28.84</td>
<td>25.8</td>
<td>163.32</td>
<td>26.3</td>
<td>11.83</td>
<td>7.8</td>
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<tr>
<td>On Roll('000)</td>
<td>2677</td>
<td>-</td>
<td>200.00</td>
<td>150</td>
<td>2327.66</td>
<td>423***</td>
<td>207.56</td>
<td>137</td>
<td>230</td>
<td>136.8</td>
<td>339.31</td>
<td>37.5</td>
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<tr>
<td>Teachers</td>
<td>752</td>
<td>56</td>
<td>21</td>
<td>23</td>
<td>42 (P)*</td>
<td>100</td>
<td>6 (C)</td>
<td>65*</td>
<td>20</td>
<td>20</td>
<td>24</td>
<td>6</td>
<td>-</td>
<td>45</td>
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<tr>
<td>Academics</td>
<td>447</td>
<td>15</td>
<td>20**</td>
<td>n.a</td>
<td>32 (C)*</td>
<td>10</td>
<td>05 (C)</td>
<td>n.a</td>
<td>7</td>
<td>22</td>
<td>40**</td>
<td>28</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Admin./Tec./Professional.</td>
<td>2191</td>
<td>398</td>
<td>273</td>
<td>63</td>
<td>235 (P)</td>
<td>40</td>
<td>83 (C)</td>
<td>400</td>
<td>88</td>
<td>59</td>
<td>47 + 87#</td>
<td>47</td>
<td>03</td>
<td>64</td>
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<td>Audio Video</td>
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<td></td>
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</tbody>
</table>
IGNOU: Second largest mega university

- **Students : 3.2 million** (12% of total higher education; about 50% of total distance education)
- Graduates: 11,08,452
- Academic programmes: #445
- Courses on offer: #3,000
- Audio: 1549; Video: 3569
- Regional centres: 62+
- Study centres/tele-learning centres: #3107
- TV Channels: 6; FM Radio stations: 32
- Teachers & academics: 447; Admin staff: 1219
- Tutors/counsellors: # 36,000
- Offer outside India: 36 countries / 67 centres
Existing:
- National Policy on ICT in Schools
- National Mission on Education through ICT

Need for:
- National policy on ‘distance education’
- National QA framework for distance education for in-country and cross-border offer
- Norms for ISO certification for distance/open/flexible/online/blended learning

# Confused interpretation of distance education:
Distance learning; Open learning; Flexible learning; Online learning; Blended learning
(Face-to-Face within Distance Learning)
Multiple media

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[Pioneer in Information & Communication Technology Enabled Education (ICT-E²)]

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EduSat
Virtual classroom configuration

EDUSAT

REMOTE CLASSROOMS

TEACHING END

RETURN LINK
(Live Voice/ Voice Mail/Text Message)

TEACHERS/STUDENTS

Teacher/Board
PC/ Web-Camera
PTZ Camera

TV/Monitor

Touch Screen

DVD Player

ROT

SIT

WLL
Multimedia use in classroom

- **Teacher**
  - Teacher manuals, guides, Workbooks, Training (F2F, teleconference), Web- Community of teachers

- **Student**
  - Classroom-based facilitation
  - Contextualization of Learning
  - Colour Picture Workbook

- **Hardware**
  - Monitor & Keyboard

- **User**
  - Interactive Multimedia CD
    - Learner-centred design
    - text+images+audio+ video+ animation
    - interactive quizzes, educational games, role plays, drag & drop, etc.

- **Self-Learning CD**

**Increased motivation, engagement and learning**

**Santosh Panda**
Wiki: Allows collaborative knowledge building (which needs to be scaffolded as authentic).


Facebook: Allows for connection through personal profiles and facilitates social presence.

Del.icio.us: Allows for maintaining records of references in participation.

Tagging: Allows for organizing knowledge systematically for ease of navigation.

THE CHANGING INTRAWEB - FROM 1.0 to 3.0 © Gary Hayes 2006

WEB 1.0 (push)
Pushed web, text/graphics based, flash

WEB 2.0 (share)
Two way web, blogs, wikis, video, podcasts, sharing, personal publishing 2D portals and social networks

WEB 3.0 (live)
The real time, co-creative web. Growing 3D portals, avatar representation, interoperable profiles, MUVEs, integrated games, education and business. All media flows in and out of virtual worlds

1995 2000 2005 2010

1 bill 100 mill 10 mill
<table>
<thead>
<tr>
<th>Social Networking</th>
<th>Technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributed, participatory, collaborative, student-centred, constructivist, social learning</td>
<td>Blogs, moblogs, wikis, podcasts, open, vodcasts, RSS feeds, search engines, mobile learning, intelligent publishing, etc.</td>
</tr>
<tr>
<td>Social software, open software, open education resource, social networking</td>
<td>Communication over Internet Protocol (CIP)</td>
</tr>
<tr>
<td></td>
<td>Text + Voice + Video</td>
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<tr>
<td></td>
<td>Internet</td>
</tr>
<tr>
<td></td>
<td>Cell phone  PDAs  Computers</td>
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</tbody>
</table>
Welcome to **IGNOU Online** - One stop window catering to the learning needs of IGNOU learner community. Explore the links to access all learning resources available online. eGyanRosh is the digital repository of programme based learning content available in text and video formats. Education Broadcast is a webcasting facility linking you to educational channels. GyanDarshan, GyanVan and EDUSAT. Virtual Class provides links to all the online programmes of the University. Sakshat links you to the One Stop Education Portal of Ministry of Human Resource Development.
Thank you.

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Pan African e-Network

Collections in this community

- International Division Video's [8]

Sub-communities within this community

- Bachelor in Tourism Studies (BTS) [348]
- Certificate in Environmental Studies (CES) [57]
- Certificate in Nutrition and Child Care (CNCC) [89]