Four decades of ODL: future directions

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President & CEO, Commonwealth of Learning

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Plan

Challenges
Three Generations of ODL
Future directions
Challenges
Where are the challenges?

- Access and equity
- Financing and cost-efficiencies
- Governance
- Quality
- Recognition of qualifications & mobility
Massification

- Globally, age participation rates grown from 19% in 2000 to 26% in 2007

- 150.6 million tertiary students globally in 2007, 53% increase over 2000

- Low income countries: from 5% in 2000 to 7% in 2007

S Uvalic Trumbic, UNESCO, 2010
Access to Higher Education

- OECD Average: 40-50%
- South Asia: <15%
- Sub-Saharan Africa: <10%
HUGE DEMAND:

University of Dhaka
10,000 of 80,000

800 universities by 2020

Public universities
9,000 out of 40,000
Three generations of ODL
The Rise of Open Universities

UNISA

The Open University

Athabasca University

ignou THE PEOPLE'S UNIVERSITY
The Philosophy of ‘Open-ness’

- Open as to people,
- Open as to places,
- Open as to methods, and, finally,
- Open as to ideas

— Lord Crowther
‘Open-ness’ in Practice

- No entry qualifications
- Credit banking
- Cafeteria approach for courses:
Increased Use of Technology Mediation
Key Developments in the 2nd Generation

- 1984: first electronic courses
- 1989: Internet
- 1991: WWW
- 1994: first online MBA (Athabasca)
- 1996: first web-based course delivery
- 1999: learning objects; LMS’s
Open Education: Second Generation

- Wider Use of Web and Online Technologies
- Interactivity: Key Aspect
- Much higher level of personalization through technology mediation
- Learning Objects
Athabasca (1978)
IGNOU (1985)
UKOU (1969)
AICU (1974)
Bangladesh Open University (1992)
BRAOU, Hyderabad, India (1982)
UNISA, South Africa (1946)
Open Univ of Sri Lanka (1984)
BCOU (1978)/OLA (1988)
Tele-Université du Québec (1972)
2008 COMMONWEALTH OPEN UNIVERSITIES
Asia has the largest number of adult ODL learners in the world, over 70 open universities!

India alone has a growing network of 14 open universities, 14 open schools and nearly 150 dual-mode institutions which collectively cater to over 7 million learners.
Third Generation: OER

The main objective of NPTEL program is to enhance the quality of engineering education in the country by developing curriculum-based video and web courses. This is being carried out by seven IITs and IISc Bangalore as a collaborative project. In the first phase of the project, supplementary content for 129 web courses in engineering, science, and humanities have been developed. Each course contains materials that can be covered in depth in 30 or more lecture hours. In addition, 180 courses have been developed in video format, with each course comprising of approximately 40 or more one-hour lectures. In the next phase other premier institutions are also likely to participate in content creation.

The NPTEL project receives its funding support through the National Mission on Education through Information and Communication Technology (NMEICT) since the year 2009. For the NMEICT Website please click here: NMEICT, The Sakshat Mission.

Whats New
- 31 June 2010 - Launching NPTEL Phase 2
  View the titles and syllabus of courses proposed.
- 16-Dec-2010 - Video Course on Electromagnetic Fields Updated 8 videos added.
- 25-Nov-2010 - Video Course on Computer Aided Design and Manufacturing Updated 12 videos added.
- 11-Nov-2010 - Video Course on Power System Dynamics Updated 14 videos added.
- FAQ - How do Institutions & Individuals access NPTEL contents?

<table>
<thead>
<tr>
<th>Branch</th>
<th>Web</th>
<th>Video</th>
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</thead>
<tbody>
<tr>
<td>Basic Courses (Sem I &amp; II)</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>24</td>
<td>19</td>
</tr>
<tr>
<td>Computer Science &amp; Engineering</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>16</td>
<td>25</td>
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<tr>
<td>Electronics &amp; Communication Engineering</td>
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<td>Mechanical Engineering</td>
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<td>23</td>
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<tr>
<td>Ocean Engineering</td>
<td>3</td>
<td>1</td>
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<tr>
<td>Biotechnology</td>
<td>2</td>
<td>1</td>
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<tr>
<td>Mining</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Metallurgy</td>
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<td></td>
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<tr>
<td>Total</td>
<td>125</td>
<td>135</td>
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What are Open Education Resources (OERs)?

Materials that are

- Free and freely available
- Suitable for all levels of education
- Reusable
- Digital
Development of DE resources

<table>
<thead>
<tr>
<th>Instructional design, multimedia design, editing etc.</th>
<th>20%</th>
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<tbody>
<tr>
<td>Academic authoring time</td>
<td>80%</td>
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</table>

- 20% instructional design, multimedia design, editing etc.
- 80% academic authoring time
Development of OERs

Authoring shared among participating institutions/individuals

Mackintosh
World Congress on Open Educational Resources
Paris – June 20-22 – 2012

Paris Declaration
Paris Declaration

- Foster awareness and use of OER
- Foster strategic alliances for OER
- Encourage the development and adaptation of OER in a variety of languages and cultural contexts
- Encourage research on OER
- Facilitate finding, retrieving and sharing of OER
Ministers emphasized the need

- ‘to set up a common platform for OER materials for...ease of access’

- ‘for the development and use of OER in providing quality teaching and learning for all’.
FUTURE DIRECTIONS
Opening up to New Constituencies

Massification of post secondary education
Implications for the Learner

- New learner of the 1980’s
- Digital native
- Ultimate learner

- consumer as producer?
- self-directed learning?
- lifelong learning?
What Students Want

- Do not want to be lectured to
- Want to work with their peers
- Cooperate and compete
- Real education

*Prensky, 2010*
Implications for the Pedagogy

(Meta-analysis by Bernard et al. 2009)

Student <-> Content

Student <-> Student

Student <-> Teacher
Implications for Pedagogy

(Meta-analysis by Bernard et al.)

Student <> Content  # 1
Student <> Student  # 2
Student <> Teacher  # 3
Implications for Pedagogy

- Behaviorist: Teacher-Student
- Constructivist: Student-Student
- Connectivist: Student-Content
  - Terry Anderson 2010

- A mix of all three approaches?
- How will we assess new ways of learning?
The Role of the Teacher: Partnering

<table>
<thead>
<tr>
<th>TEACHER</th>
<th>STUDENT</th>
</tr>
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<tbody>
<tr>
<td>• Doesn’t tell, asks</td>
<td>• Doesn’t take notes, finds out</td>
</tr>
<tr>
<td>• Suggests topics &amp; tools</td>
<td>• Researches &amp; creates outputs</td>
</tr>
<tr>
<td>• Learns about technology from students</td>
<td>• Learns about rigor &amp; quality from teacher</td>
</tr>
<tr>
<td>• Evaluates outputs for rigor and quality; supplies context</td>
<td>• Improves output, adding context, rigor &amp; quality</td>
</tr>
</tbody>
</table>

Prensky, M. (2010). *Teaching Digital Natives*
What employers want

- Non-cognitive skills: leadership, communication, honesty/ethics, teamwork and flexibility
- Cognitive skills: analytical and critical thinking and the ability to learn

Burnett, 2012
Skills for the knowledge economy

- Intelligence
- the ability to sit still and focus
- to listen carefully
- communicate openly
- work in teams

Hanna Rosin, TED Talk
International developments: OERU

- Athabasca University
- Otago Polytechnic
- University of Southern Queensland
The OER university concept. Adapted from Taylor (2007)

- Students awarded credible degree or credential
- Participating institutions grant credit for courses
- Open assessment from participating institutions
- Open student support via “Academic Volunteers International”
- Learners access courses based solely on OER
UK Open University’s materials are among the most frequently downloaded from iTunesU
Challenges for ODL

- Creating cultures of quality
- Harnessing OER
- Integrating non-cognitive skills into the curriculum
Support services
Opportunities for ODL: MOOCs

- Finding a niche area to offer MOOCs
- Developing frameworks for credit transfers, and recognition of qualifications
- Relating to the labour market
New ways of recognition

- Certificates
- Badges
- RPL
- DGBs
Thank you
www.col.org