eLearning in the context of EO

Where we are & where to go next

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eLearning in the context of EO

Where we are & where to go next
History

- Online education (1990)
- E-Learning (1998)
- Open Course Ware (2000)
- Open Educational Resources (2003)
- Massive Open Online Courses (2008)

- Open University (1969)

Aydin (2016)
History

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Bridging the digital divide
Digital Divide

Internet Population and Penetration

Internet Population
- about 1 million users

Internet Penetration (%)
- >80
- 60 - 80
- 40 - 60
- 20 - 40
- <20

by Mark Graham (@geoplace) and Stefano De Sabbata (@maps4thought)
Internet Geographies at the Oxford Internet Institute
October 2013 - geography.ox.ac.uk

data source: World Bank 2011
http://data.worldbank.org
Digital Literacy

- Functional skills
- eSafety
- Creativity
- Critical thinking and evaluation
- Effective communication
- Ability to find and select information
- Cultural and social understanding
- Collaboration
- Effective communication
- Ability to find and select information
Sustainability, Quality & Completion rates
User completion rates

- Not started: 2662 (46%)
- Started: 3147 (54%)
- Not started: 2129 (68%)
- Started: 1018 (32%)

Registered Users: 5809
Started Course: 3147
Not started Course: 2662
Finished Course: 1018
Not finished course: 2129
Pedagogic Structure
General concept of a xMOOC (Yousef et al. 2014)
General concept of a cMOOC (Yousef et al. 2014)
Comparison of the development of the learning communities in xMOOCs and cMOOCs over time (Caulfield, 2013)
Conclusion
eLearning in the context of EO

Where we are & where to go next
eLearning basics
General process of information transmission (Weber 1990)
Sweet spot between new and known information (Weber 1990)
The Types of Intelligence
by Mark Vital

- **spatial**: visualizing the world in 3D
- **naturalist**: understanding living things and reading nature
- **musical**: discerning sounds, their pitch, tone, rhythm, and timbre
- **quantifying**: things, making hypotheses and proving them
- **logical-mathematical**: tackling the questions of why we live, and why we die
- **existential**:
- **linguistic**: finding the right words to express what you mean
- **bodily-kinesthetic**: coordinating your mind with your body
- **intrapersonal**: understanding yourself, what you feel, and what you want
- **interpersonal**: sensing people’s feelings and motives

Frames of Mind: The Theory of Multiple Intelligences by Howard Gardner
Future developments
Blended Learning

- Open University (1969)
- Online education (1990)
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Blended Learning

Face-to-Face Learning

Online Learning
Blended learning

- Integration with existing trainings
- Process of integration
- Creation of positive feedback loops
- Establishment of scaling and copy mechanisms
Adaptive Learning

- Online education (1990)
- E-Learning (1998)
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- Open Educational Resources (2003)
- Massive Open Online Courses (2008)

Open University (1969)
Echoes in Space
History

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Learning Standards

- Open University (1969)
• IEEE 1484.12.1 – 2002 Standard for Learning Object Metadata

• Dublin Core Metadata Initiative Learning Resource Metadata Initiative (LRMI)

• IMS Global Learning Consortium - Learning Resource Meta-data Specification

• ISO/IEC Metadata for Learning Resources
Chapter

Atom A

Atom B

Atom C

Atom D

Atom E

Atom F

Hörmann et al. 2001
Conclusion
Conclusion
Conclusion
Conclusion

CAULFIELD, M. (2013) xMOOC Communities Should Learn From cMOOCs | EDUCAUSE, EDUCAUSE review.


Thank you for your attention