

# GIVING KNOWLEDGE FOR FREE

## THE EMERGENCE OF OPEN EDUCATIONAL RESOURCES

Jan Hylén



# Trends in Higher Education

- Growing competition
  - knowledge and learning resources are often considered as key intellectual property
- Still institutions and individuals are sharing their digital learning resources over the Internet openly and for free
- OECD/CERI study:
  - why is this happening?
  - who is involved?
  - what the implications of this?

# A new culture of openness in HE?

- Open Source Software, Open Access, Open Educational Resources
- Free availability over the Internet
- As few restrictions as possible on the use of digital resources:
  - No technical barriers (disclosed source code)
  - No price barriers (no subscriptions, license fees)
  - As few legal barriers as possible (open licenses)

# OECD/CERI Study: main objectives

- Analyse and map scale and scope of OER initiatives in OECD countries
- Conceptual analyses
- 4 main issues:
  - IPR issues
  - How to develop sustainable cost/benefit models?
  - Incentives and barriers to produce, use and deliver materials?
  - How to improve access and usefulness?
- Policy implications

# What is OER?

- “OER are digitized materials offered freely and openly for educators, students and self-learners to use and re-use for teaching, learning and research.” (UNESCO 2002)
- OER includes:
  - 1) open courseware and content;
  - 2) open software tools (e.g. learning management systems);
  - 3) open material for e-learning capacity building of faculty staff;
  - 4) repositories of learning objects;
  - 5) free educational courses...

# Drivers for OER

- Technological
  - Increased broadband availability
  - Increased hard drive capacity and processing speed
  - User-friendly software for creating, editing and remixing
- Social
  - Digital natives with substantial ICT skills
  - Desire for interactivity, willingness to share and contribute
  - Development of communities and collaborative projects

# Drivers for OER

- **Economical**
  - Lower costs for broadband, tools and lower entry barriers
  - Sites and services hosting content for free
  - New economic models for monetising user created content
- **Legal**
  - licenses such as Creative Commons

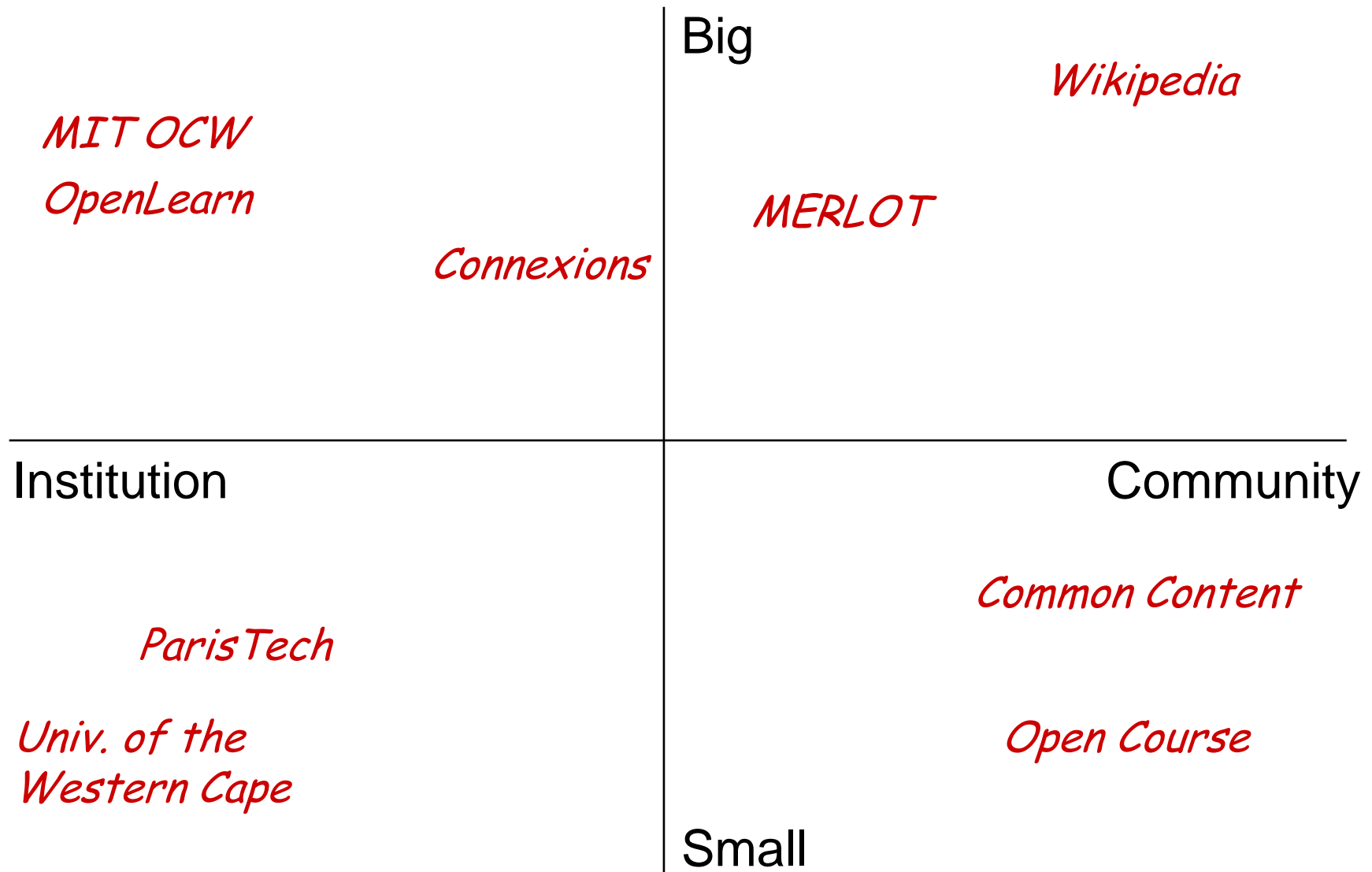
# Mapping the OER movement

- It is a global movement
- Growing number of initiatives and resources – but we cannot give accurate numbers
- The most frequent target group is post-secondary instructors, followed by students and general public
- A growing number of users
- In order to ensure easy access most providers have no registration – consequently: poor user data

# OER initiative models

- Publicly or institutionally backed programmes
  - OCW programmes (MIT, Global Consortium with +200 members from 35 countries)
  - OU:s OpenLearn
  - OpenSpines
- Community approach
  - Open Course, Common Content, Free Curricula Center...
- In between models:
  - MERLOT, Connexions, ARIADNE

# OER Providers



Source: OECD (2007)

# Mapping OER – Follow Up Study (2008)

- Six major OER initiatives
  - Increase of number of resources between 35-300%
  - Increase of visitors between 50-150%
  - Increased language diversity (due to translations)
  - Increased global use
- Trends
  - Less text, more video
  - Podcasts

# From grass root movement to institution based initiatives

- Earlier few institution wide initiatives
  - Started by enthusiasts
  - Few at management level knew about initiatives
- Now mostly institution based initiatives

# Use and users of OER

- According to MIT and Tufts, users of OCW are typically:
  - well educated (with bachelors or masters degree)
  - self-learners (MIT 47%, Tufts 43%)
  - from North America (although 57% were non-US visits)
- Johns Hopkins OCW also reports large numbers of professionals and self-learners

# The use of OER

- Often a supplement used for its flexibility and quality
- Mostly smaller chunks of learning materials used
- Lack of time, skills and reward system are reasons for people not to use OER

# Motivations for producing and sharing OER

Governments	Institutions	Individuals
Expanded access to learning	Altruistic reasons	Altruistic or community supportive reasons
Bridge the gap between non-formal, informal and formal learning	Leverage on taxpayers' money by allowing free sharing and reuse between institutions	Personal non-monetary gain – “egoboo”
Promote lifelong learning	“What you give, you receive back improved”	Commercial reasons
	Good PR and show-window attracting new students	It is not worth the effort to keep the resource closed
	Growing competition – new cost recovery models are needed	
	Stimulate internal improvement, innovation and reuse	

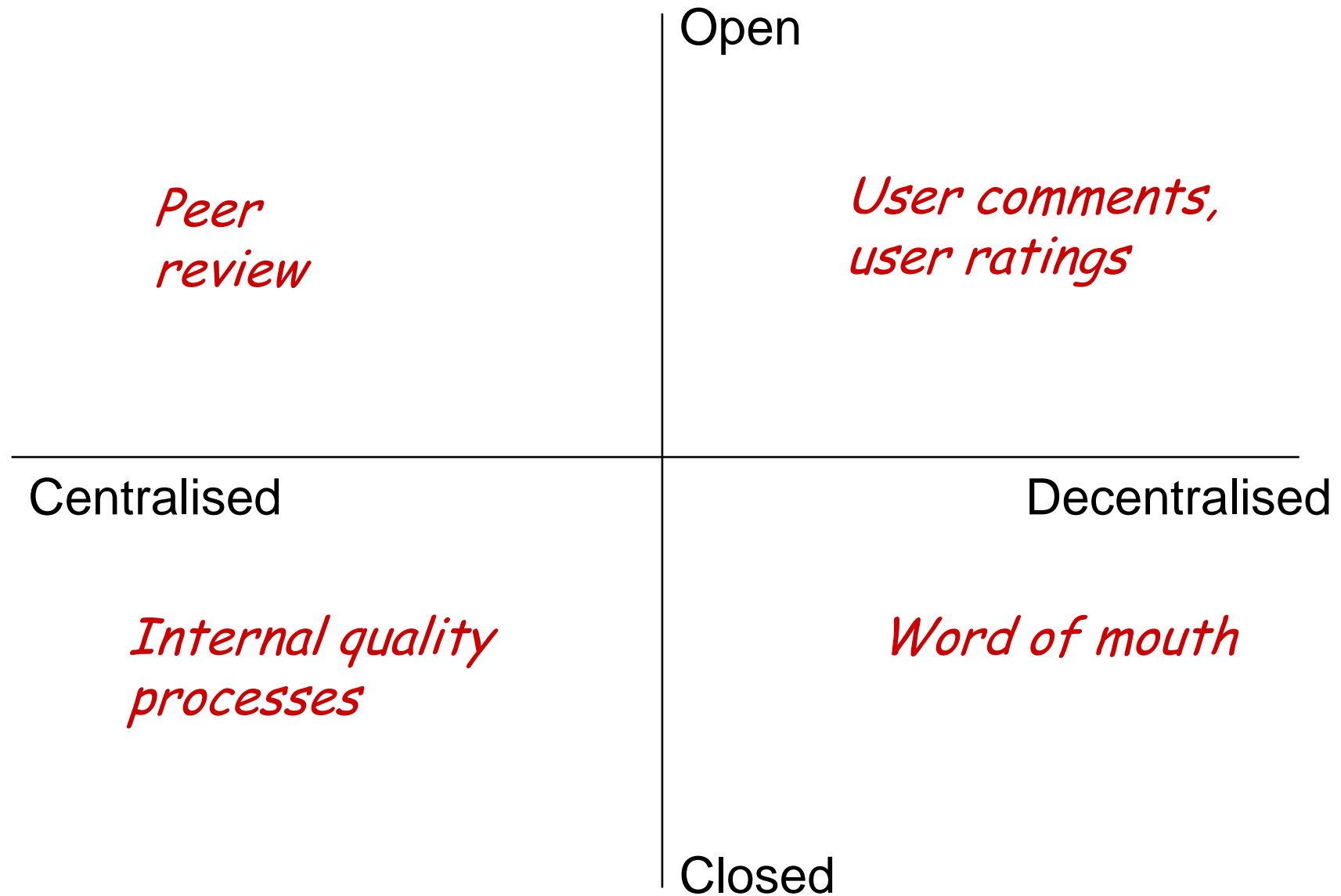
Underlying Drivers and Inhibitors of technical, economic, social and legal nature

Source: OECD (2007)

# Main Challenges for the OER movement

- Quality and relevance of resources
- Intellectual Property Rights
- Sustainability – more than economics, but important to find a good revenue model
- Technical issues

# Quality management processes



Source: OECD (2007)

# IPR issues

- Four main problems:
  - Practical difficulties: obtaining rights to use content is very time consuming and expensive
  - Awareness about copyright and open licenses too low among academic staff: everything *not permitted* by the copyright holder *is prohibited*
  - “Commercial” and “non-commercial” use of OER
  - Too strong copyright regime (or too rigid interpretation) hinders the use of ICT in education

# Sustainability Check List

1. Goals for the project
2. Organization in terms of size, structure, degree of centralisation
3. Type of resources (OCW, LO) and media format (HTML, XML, PDF) for sharing
4. Target group and type of reuse to be supported
5. Incentives for contributors
6. Ways to reduce costs (e.g. rejecting all third-party licensed content)
7. Funding or revenue model

# Sustainability: Revenue Models

- Replacement model – OER replaces other costs (has a natural limit)
- Foundation/Donation model – start up model but Government support could work in a European context
- Segmentation model – offer “value-added” services to user segments (sales of paper copies, training, user support...)

# Sustainability: Revenue Models

- Conversion model – “you give something away for free and then convert the consumer to a paying customer”
- Voluntary support / Membership model – regular fees or support from individuals or institutions
- Contributor pay model – contributors pay the cost, the provider makes it available for free (cp. Open Access)

# Technical issues

- Open Source Software and Open Standards
  - OS stimulate innovation, foster interoperability and allows HEI to avoid lock in of learning resources in particular platforms (commercial or OSS)
- Metadata – still important but less needs to be done “manually”:
  - Metadata harvesting
  - Folksonomies

# Policy Implications (1)

- International level
  - Interoperability
  - Building a knowledge base for the OER movement
  - Awareness raising activities
- National level
  - Holistic approach to digital learning resources
  - Review existing copyright regime
  - Open publication of publicly funded resources

# Policy implications (2)

- Institutional level
  - The risk of doing nothing
  - IT strategy including OA and OER
  - Incentives for faculty members to use and produce OER
  - Training and support for development and use of OER and particular copyright issues

# THANK YOU FOR YOUR ATTENTION

Giving Knowledge for Free –  
the Emergence of Open Educational Resources

- [http://www.oecd.org/document/41/0,3343,en\\_2649\\_35845581\\_38659497\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/41/0,3343,en_2649_35845581_38659497_1_1_1_1,00.html)

jan.hylen@metamatrix.se

