Grand Valley State University

From the SelectedWorks of Lee C. Van Orsdel

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Openness: Contribute, Access, Use

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Available at: https://works.bepress.com/lee_vanorsdel/22/
Openness: contribute, access, use

Lee Van Orsdel
Atlanta University
May 21, 2012
Learning Outcomes

• Understand that open access is part of a larger open movement

• Understand the conceptual underpinnings of open movements

• Identify current events within the open and public access movements

• Identify the benefits of OA and ways to address concerns about OA
OPEN source education textbooks science data books access
Welcome to Stanford Engineering Everywhere (SEE)

For the first time in its history, Stanford is offering some of its most popular engineering classes free of charge to students and educators around the world. Stanford Engineering Everywhere (SEE) expands the Stanford experience to students and educators online. A computer and an Internet connection are all you need. View lecture videos, access reading lists and other course handouts, take quizzes and tests, and communicate with other SEE students, all at your convenience.

SEE programming includes one of Stanford's most popular sequences: the three-course introduction to Computer Science taken by the majority of Stanford's undergraduates and seven more advanced courses in artificial intelligence and electrical engineering.

Stanford Engineering Everywhere offers:
- Anytime and anywhere access to complete lecture videos via streaming or downloaded media.
- Full course materials including syllabi, handouts, homework, and exams.
- Online social networking with fellow SEE students.
- Support for PCs, Macs and mobile computing devices.

Stanford encourages fellow educators to use Stanford Engineering course materials in their own classrooms. A Creative Commons license allows for free and open use, reuse, adaptation and redistribution of Stanford Engineering Everywhere material.

Get Started

Support for Stanford Engineering Everywhere provided by Sequoia Capital and the Stanford Center for Professional Development.
OPEN BOOKS

"I'd recommend LITTLE BROTHER over pretty much any book I've read this year."

NEIL GAIMAN,
author of SANDMAN and AMERICAN GODS

LITTLE BROTHER

CORY DOCTOROW

"A rousing tale of techno-geek rebellion."

SCOTT WESTERFELD,
author of UGLIES, PRETTIES, AND SPECIALS
Welcome to OAPEN

online library and publication platform

OAPEN (Open Access Publishing in European Networks) is a collaborative initiative to develop and implement a sustainable Open Access publication model for academic books in the Humanities and Social Sciences. The OAPEN Library aims to improve the visibility and usability of high quality academic research by aggregating peer reviewed Open Access publications from across Europe.

Featured titles

- Ancient Fishing and Fish Processing in the Black Sea Region
  - Aarhus University Press

- Grünes Band - Modellregion für Nachhaltigkeit
  - Universitätsverlag Göttingen

- Limiting institutions?: The challenge of Eurasian security governance
  - Manchester University Press

Latest Tweets

New in the OAPEN Library - Immigrant Performance in the Labour Market: Bonding and Bridging Social Capital [link]

3 days ago
OPEN PEER REVIEW
### Contributing protocols

#### Add new protocols
- Add a new lab- or person-specific protocol
- Add a consensus protocol (?)

#### Improve protocols in development

**Please Contribute!**
- Addition of 3' A overhangs to PCR products
- Baby cell column
- Chromosomal DNA isolation from E. coli
- DNA Precipitation
- DNase Protocol
- Duffy: LIC Cloning
- Etchevers: ChIP français
- ISiSBio: Protocols/Purification/Tus
- Pulse-chase protein production

### In vivo

- Acetobacter xylinum [show]
- Arabidopsis thaliana [show]
- Escherichia coli [show]
- Lactic Acid Bacteria [show]
- Mesoplasma flororum [show]
- Mouse [show]
- Mycobacterium smegmatis [show]
- Plasmodium falciparum [show]
- Streptomyces [show]
- T7 [show]
- Yeast [show]
- Phycomyces [show]

### In vitro

- Nucleic acids [show]
- DNA [show]
- RNA [show]
- Protein [show]
- Lipid [show]
- Mammalian cell culture [show]
- Plant specific protocols [show]

### In silico

- Cloning [show]
- Data analysis [show]
- Databases [show]
- Modelling [show]
- Sequence analysis [show]

### Other

- General resources [show]
- Aseptic Technique [show]
- Flow cytometry [show]
- Microfluidics [show]
- Microscopy [show]
• Open access to data not just papers
• The rate of discovery is accelerated by better access to data
• Actionable data
• Funder mandates around management and sharing of data (in some cases)
OPEN ACCESS
Self-archiving

Authors deposit manuscript in a repository
voluntarily or to comply with mandate or to follow discipline practice

OA publishing

Publisher finds alternative funding model—all content free to read
Funding model may require author/funder to pay APC
Liberal author and user rights

Hybrid

Publisher experiments
Offers authors choice—OA or regular publishing route
OA choice requires payment of article processing fee
May/may not affect journal cost
What ‘libre’ means

open and free to read
open to contributions and participation
open to use with few or no restrictions
open to indexing and machine readable
OA approaching a tipping point? four indicators

disaggregation of traditional publishing
rise of mega-journals
momentum from researchers & funders
push for access to publicly funded research
disaggregation of traditional publishing system

Internet

- citizen scientists
- peers
- publishers
- societies
- social media
- blogs
- researchers
- libraries
- editors

- formulation
- registration
- certification
- selection
- dissemination
- archiving
- access
rise of the mega-journal

2011: <14,000 articles
RESEARCH ARTICLE

The Illusion of Owning a Third Arm

Article Usage

Total Article Views: **5635** from Feb 23, 2011 (publication date) - Mar 9, 2011*

Breakdown by View Type
- HTML Page Views: **5049**
- PDF Downloads: **567**
- XML Downloads: **19**

Cumulative Views from Feb 23, 2011 (publication date) - Mar 9, 2011*

![Graph showing cumulative views over time]
peer review

certification
selection

sound methodology interest/importance
momentum from researchers and funders (including universities)

OA Repositories
momentum from researchers and funders (including universities)

OA Mandates

Harvard (9 schools)
MIT
Kansas
Oberlin
Duke
and others (http://roarmap.eprints.org)
momentum from researchers and funders
“We envision a world in which there is free and unrestricted access to information on malaria, independent of geographical locality or socio-economic status.

Knowledge empowers. Empowered people prevent and control malaria better.”
Quoting World Bank president:

“Knowledge is power....Making our knowledge widely and readily available will empower others to come up with solutions to the world’s toughest problems. Our new Open Access policy is the natural evolution for a World Bank that is opening up more and more.”
push for access to publicly funded research

NIH Mandate

$ 32 Billion
biomedical research grants each year

90,000
peer-reviewed articles each year
500,000 users access 1M+ articles a day

25% users from universities
17% from companies
40% from general public
push for access to publicly funded research

FRPAA
Federal Research Public Access Act
push for access to publicly funded research

We the People petition movement
OA approaching a tipping point?
four indicators

disaggregation of traditional publishing
rise of mega-journals
momentum from researchers & funders
push for access to publicly funded research
Arguments you can make for open access
Open Access increases citations

% increase in citations with Open Access

From a 12-year sample of 14 M articles in ISI databases
Data: Brody & Harnad 2004; Hajjem et al. 2005
We don’t know who all might want to read our stuff

interdisciplinary readers
underfunded readers
international readers
digital readers
serendipitous readers

From a talk given by Ellen Duranceau (MIT) at the 2012 SPARC Open Access meeting, March 12, 2012
‘Better mining’
argument

allows for better discovery within and between disciplines (text and data mining)
‘Public Good’ arguments

speeds invention and discovery
greater return on investment
serves mission of universities
Virtually all OA publishers offer...

better support for authors
shorter time to publication
rapid dissemination
more eyes on the page
better feedback to authors about use
authors keep copyrights
Concerns you may hear about open access
Hybrid Models

mixed business model uncomfortable for many
relatively low adoption rate by authors (around 2%)
unknown impact on subscription prices
many OA funds exclude funding for hybrid articles
For faculty who are skeptical...

Has taken time for impact factors and reputations to build

Business models still emerging

Author pays (APC) has better traction in the STM community

Growing challenge with predatory publishers
OA archiving has challenges

Sustainability can be an issue

Participation of faculty typically weak (particularly for institutional)

Confusion over what can be deposited (post print, pre print, published version?)

Copyright issues murky and (often) frustrating
Screenshots used under fair use.

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