Faculty Self-Archiving: The Gap between Opportunity and Practice

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Economics and the digital library

• Open access movement
  – Methods: Self-archiving and OA journals
  – Policies: Voluntary v. mandatory self-archiving

• Institutional repositories
  – Substantial resource investment
  – Disappointing volume of faculty deposits

• Carnegie Mellon University Libraries’ faculty studies
  – 2006 – scholarly communication practices
  – 2007 – self-archiving practices
2006 Faculty study findings

• Some awareness of economic crisis with journals
• Some self-archiving
• Concerns
  – Little concern about or understanding of copyright
  – Widespread concern about open access journals
  – Primary concern is promotion and tenure (peer review)
• Many believe access is not an issue in their discipline
• Outcome: Authors’ Rights and Wrongs program
  – Sponsored by University Libraries and Office of Legal Counsel
2007 Faculty study

- Goal: understand
  - Faculty self-archiving practice
  - Opportunity to self-archive journal articles

- Method: code faculty publication lists found on web
  - Phase I: Code publication type and access type
  - Phase II: Code journal articles

- What could be self-archived in compliance with policy?
- Does self-archiving practice comply with policy?

Coders:
Denise Troll Covey
Kristin Heath
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Information Assistant
Coding issues

• Path to publication lists: via department web site

• Determining publication type and journal title
  – Incomplete citations, unintelligible abbreviations

• User-unfriendly web sites and publication lists
  – Multiple lists, lack of visual cues for links, readability

• Counting faculty and their publications only once
  – Assign faculty with multiple affiliations to home dept
  – Eliminate redundant citations from publication lists
Current status

• Carnegie Institute of Technology (school of engineering)
  – Phase I and II done for all departments and institutes

• School of Computer Science
  – Phase I and II done for the Computer Science Department, Human-Computer Interaction Institute, Robotics Institute, Institute for Software Research International, and Entertainment Technology Center
  – Two other departments and institutes to do

• Five more colleges to do
  – College of Fine Arts
  – College of Humanities and Social Sciences
  – Heinz School of Public Policy
  – Tepper School of Business
  – Mellon College of Science
Selected findings
Phase I
Chemical Engineering

- OA
- Restricted
- No link
- Broken link
- E-commerce

23 faculty
17% self-archive
Engineering & Public Policy

17 faculty
44% self-archive
Materials Science & Engineering

OA: 50%
Restricted: 22%
No link: 33%
Broken link: 33%
E-commerce: 22%

16 faculty
31% self-archive

Chapters: 33%
Books: 25%
Other: 33%
Human-Computer Interaction Institute

22 faculty
91% self-archive

OA
Restricted
No link
Broken link
E-commerce

Articles
38%

Conf Papers
37%

Reports
57%

Chapters
30%

Books
33%

Other
44%
Computer Science

- OA: $58\%$
- Restricted: $38\%$
- No link: $30\%$
- Broken link: $37\%$

63 faculty
71% self-archive
Robotics Institute

53 faculty
96% self-archive

- OA: 62%
- Restricted: 37%
- No link: 3%
- Broken link: 1%
- E-commerce: 0%

Articles: 75%
Conf Papers: 85%
Reports: 85%
Chapters: 75%
Books: 95%
Other: 30%
Institute for Software Research International

28 faculty
54% self-archive

OA
Restricted
No link
Broken link
E-commerce
On-request

Articles
Reports
Conf Papers
Chapters
Books
Other

47%
70%
66%
35%
31%
53%
Selected findings
Phase II
Publisher self-archiving policies

Base: All journal titles in which the faculty published

Policy
unknown
Self-archiving
prohibited
Self-archiving
allowed
Self-archiving journal articles

Base: All journal titles in which the faculty published

- **Self-archiving allowed**
- **Self-archiving practice**
- **Faculty who self-archive**
- **Faculty who self-archive journal articles**
Sample policy conditions and restrictions

• Pre-print
  – Prohibited, allowed or unclear
  – Must be removed upon publication of final version
  – Set phrase must be added once submitted for publication
  – Set phrase must be added when accepted for publication
  – Publisher must be informed of electronic address

• Post-print
  – Prohibited or allowed
  – Use of pub PDF prohibited, allowed, required or unclear
  – Publisher © and source must be acknowledged
  – Embargo of 6, 12 or 24 months
Assessment of compliance

• Based on whether publisher policy
  – Prohibits or allows self-archiving
  – Prohibits, requires or allows the publisher version to be self-archived

• Difficult to tell pre-print or post-print author version
• Cannot assess compliance with embargo periods
• Did not assess compliance with specific text to be displayed before and after publication, removal of pre-print after publication, links to publisher web sites, etc.
Compliance with publisher policy

Base: All self-archived articles

Compliant
Non-compliant
Pub version policy unclear
Self-archiving policy unknown
Faculty who self-archive journal articles
Analysis of non-compliance

Base: All self-archived articles

- Self-archiving prohibited
- Pub version prohibited
- Pub version required
- Faculty who self-archive journal articles
Base: All journal titles in which the faculty published that allow self-archiving

Analysis of journal policy & practice

Publisher version allowed
Publisher version required
Publisher version prohibited
Policy on publisher version unclear
Author version self-archived
Publisher version self-archived

Carnegie Mellon
Preliminary conclusions

• Like self-archiving practice, the opportunity to self-archive varies across disciplines

• There is no direct correlation between the opportunity to self-archive and the practice of self-archiving

• Many faculty appear not to know or not to care about publisher policy
Preliminary conclusions continued

• Faculty who self-archive do not consistently
  – Self-archive articles they publish in the same journal
  – Self-archive the same version of articles they publish
    in the same or different journals

• Faculty appear to update their publication lists
  and self-archive their work intermittently
  – They do not, for example, routinely go back to
    ✓ Change set phrases specified by publishers
    ✓ Replace article pre-prints or early technical report versions
    with article post-prints or publisher PDF files
Preliminary conclusions continued

• Full compliance with publisher policy is a scheduling and maintenance burden not likely to be borne by busy faculty
  – Probably contributes to non-compliance and the gap between opportunity and practice
  – Could be a publisher strategy to discourage self-archiving in practice while giving the impression of supporting open access
Preliminary conclusions continued

• Assessing full compliance with publisher policy is a scheduling and maintenance burden not likely to be borne by publishers
  – Potential impact on article submissions if publishers charge authors with copyright infringement
  – Probably contributes to non-compliance
Plans to apply the findings

• Increase campus awareness of the opportunity to self-archive in compliance with publisher policy
  – Distribute lists of journal titles and basic policies
  – Meet with deans and departments

• Create competition *
  – Name departments and faculty who self-archive the greatest % of publications and journal articles

* Competition was suggested by Michael Carroll, legal counsel for Creative Commons
Plans continued

• Recruit faculty who self-archive to champion the practice in their department or college

• Recruit faculty who self-archive and faculty who do not self-archive to participate in the Authors’ Rights and Wrongs program
  – April 2008: Panel on open access in chemistry
Additional study

• Find out why faculty do not self-archive
  – Ideological opposition?
  – No time?
  – No easy-to-use tool?
  – No training in how to use the tool?

• Help those who want to self-archive
  – Provide training in how to use existing tools
  – Provide staff to archive their work for them
  – Acquire or develop a new tool

Interviews being conducted by Carole George
Thank you!

Authors' Rights and Wrongs

Authors and prospective authors--Plan to attend or view live webcast. Videos of each event will be linked from this page.

4. Panel on Open Access
Carnegie Mellon faculty members Jay Kadane, Barbara Johnstone, and David Danks will talk about why they self-archive, the tools they use, the problems they have encountered and how they solved them, etc. The panelists' goal is to evoke a lively Q & A session with audience members.

DATE: Tues., May 1
TIME: 4:30-6 p.m. live webcast
PLACE: University Center, Rarig 3

BIOS

Joseph B. ("Jay") Kadane is Leonard J. Savage University Professor of Statistics and Social Sciences, Emeritus. He has been at Carnegie Mellon since 1971, and served as Head of the Statistics Department from 1972 to 1981. Subsequently he served for 2.5 years as Chair of the Faculty Senate. His research interests center on statistical inference, both theoretically and in applications. Currently his applied work is in phylogenetics, marketing, Internet security, and air pollution. He is finishing two books, one on statistics in the law, and the other on uncertainty.

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