Open Archives Meet Open Peer Review?
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Overview
- Just Do It. Then Generify It.
- Peer Review Dimensions
  - Conversational, Co-Published, Open Peer Review
  - Journal of Interactive Media in Education (JIME)
  - Digital Document Discourse Environment (D3E)
  - D3E meets an OAI server...
  - Future...

Peer review dimensions
- anonymous → named
- appointed → open invitation
- author no right of reply → author right of reply
- 1-shot → conversation
- reviewers on their own → interact
- reviews discarded → reviews preserved

Conventional peer review
- All peer review models have +/-
- Anonymous, 1-shot peer review
- Pros
  + anonymity → honesty
  + 1-shot job
  + “stick with what you know…”
- Cons
  - anonymity → lack of accountability
  - research demonstrates its weaknesses
  - typically no author right of reply

A ‘native internet’ peer review model
Private/Public conversational OPR
edited + co-published with article ...
- Reviewers assigned and named/ hyperlinked
- Conversational/argumentation model (web)
- Private emails to editor if preferred
- Hybrid 2-step process: private then public
  → revision, publication + open for further comments
- Intellectual trace of the article’s history

- Computers used for print production
- Journal distributed in both print and electronic formats
- Publication design is rooted in print, but articles are developed solely for electronic distribution
- Interaction between authors and readers is possible; publications can evolve as a result of such interactions
- The inclusion of multimedia content
- Both interactive participation and multimedia capabilities are supported

**JIME**

- Conversational open peer review intrinsic to journal's review model: *the social contract*
- Authors encouraged to back claims about technology with demonstrations/walkthroughs for readers and reviewers

**Interactive demonstration of a CD-ROM**

Readers can 'play' with the construction of a painting, as students were encouraged to do.
Interactive demonstration (Java applet)

Readers can visualize the execution of a program using the Java applet tested with students.

Audio-visual slide presentation, walking the reader through a system

The author introduces the multimedia system with a series of slides and commentary (streaming audio).

Video data

The authors include video clips showing their work (children programming a robot).

JIME

- conversational open peer review intrinsic to journal’s review model: the social contract
- authors encouraged to back claims about technology with demonstrations/walkthroughs for readers and reviewers
- articles tightly integrated with reviews in a web document-discussion interface
- edited review discussions co-published with final article

JIME document user interface

(generated by D3E from an HTML submission)

Submission under review
PrePrint or Published

Peer review comments and discussion: tightly integrated co-published

Author links from text to discussion

Comments on what richness of media means in the context of this paper.
linking from one review discussion to a relevant document

Document-related news updated in the discussion space

Review process initiated with introductory email to authors and reviewers

JIME email alert to new review comment

JIME changes...

- **Author’s experience**
  - at least as much feedback as normal
  - typically gain an enormous amount from defending against expert peers
  - sometimes need to be coaxed into responding!

- **Reviewer’s experience**
  - engage in discussions with both authors and reviewers
  - formulate reflective contributions to debates in a timely, professional manner
JIME changes...  (cont/d)
- ...Reader’s experience
  - insight into how to interpret the text (esp. students)
  - ‘dissenting voices’ are not silenced
- ...the concept of a ‘Publication’
  - multimedia
  - hypertext structures possible
  - content can now be distributed across the formal document and the discussion space

Conversational Open Peer Review?
- Pros
  - Rigorous, accountable quality control
  - At its best can promote interdisciplinary dialogue
  - Reviewers can debate between themselves
  - Works because journal Policies and Practices have evolved with the Technology
- Cons
  - Both the technology and process are new
  - More resource intensive for authors and reviewers
  - Better for discursive, multidisciplinary fields?

Overview
- Peer Review Dimensions
- Journal of Interactive Media in Education (JIME)
  - Hybrid Open Peer Review on the web since 1996
- Digital Document Discourse Environment (D3E)
  - From an HTML file to interactive discussion document (used to publish JIME)
- D3E meets OAI
- Future...

D³E: Digital Document Discourse Environment
- From HTML file ➔ link-rich document-discussion user interface
- Used in many contexts
- Can be used to set up an eJournal using any peer review model
- Open source
- Components:
  - Client-side: Publisher’s Toolkit
  - Server-side: Discussion system – D3E-HyperNews – D3E-Phorum

D3E Publisher’s Toolkit (Publisher’s Tab)

D3E Publisher’s Toolkit (Article Tab)
Server-side: D3E -Phorum architecture

- Full database backend
- Open source
- Search engine
- Email in+out
- Customizable user interface
- Optional moderation
- User profiling
- Admin. tools

D3E meets an ePrint server

generating a D3E discussion space
for an archive document...

Ubiquitous D3E

discuss...discuss
any web
document
e.g. pass it an
OA1 document
URL + specify
thread titles
around which to
focus comments
and discussion

Demo: generating a peer review
discussion space for an arXiv document

Adding a comment on an arXiv document
Email confirmation of new review discussion site

Future...

- JIME discourse analyses
- D³E-OAI integration?
  - depth of technical integration?
  - organizational models?
- Scholarly Ontologies project (2001-04)
  - "semantic OAI"...
  - (Quality Metadata; citation semantics; scientometrics)

Knowledge Media Institute
PhD on OAI+Peer Review – deadline 31st May
kmi.open.ac.uk/studentships

Journal of Interactive Media in Education
www-jime.open.ac.uk

Digital Document Discourse Environment
d3e.open.ac.uk
(contact me to receive D3E release news)

Scholarly Ontologies Project
kmi.open.ac.uk/projects/scholonto