



# Supporting Reading

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Beyond the PDF  
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# Reading is invisible



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“Nothing is more commonplace than the reading experience, and yet nothing is more unknown. Reading is such a matter of course that **at first glance it seems there is nothing to say about it.**”

– Tzvetan Todorov



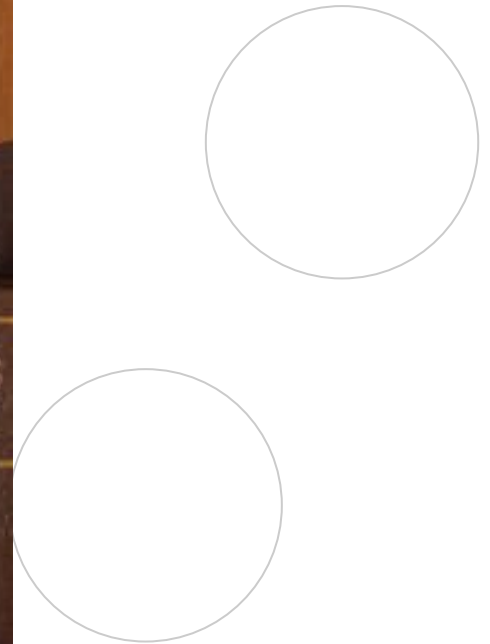
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# Reading is fundamental



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# Reading is important to science



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- Faculty spend ~150 hours/year just reading
- Scientists are reading more, more quickly, more broadly
- Reading is situational:  
**How & what we read depends on context, purpose**



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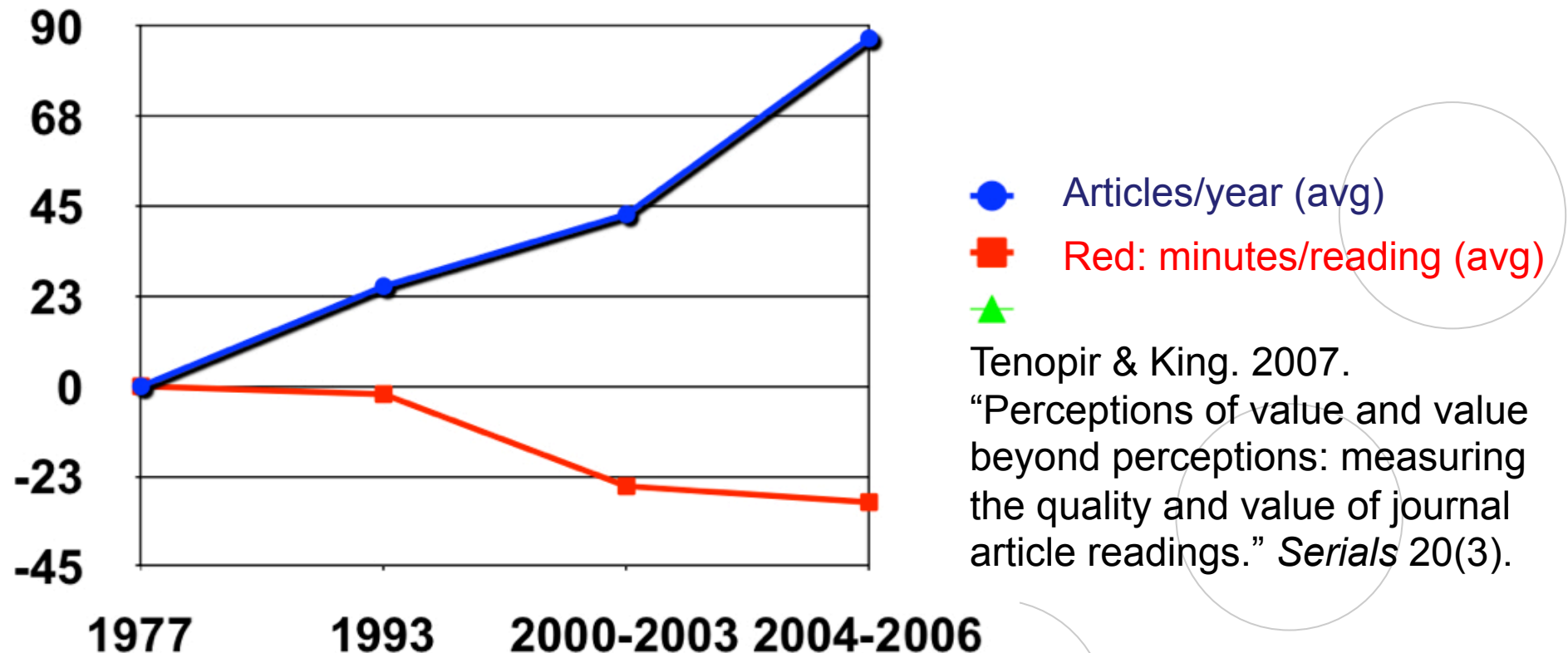
# Reading more papers in less time



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Article reading has doubled.  
Time per reading decreased 25%.



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# New ways of communicating should free our time for new tasks!



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Copernicus was pursuing a course similar to that followed by previous generations of Christian astronomers who had been recruited by churchmen to solve calendrical problems. **But he was freed from the task of copying tables and charts, and thus had released time for reading and reflecting.** He was also supplied with more treatises, records and linguistic tools. His successors had even greater advantages in the form of paper tools.

Eisenstein, E. L. (1979). The printing press as an agent of change: communications and cultural transformations in early modern Europe. Cambridge University Press.



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# Kinds of Reading



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- “Active Reading”
  - purposeful often non-linear reading, often accompanied by skimming, scanning, highlighting, and note-taking
- “Just-in-time” Reading
  - delving into the literature at the end-stages of the writing process, to scan for omitted literature or new findings
- “Literature Trance”
  - horizontal scanning of the literature, like a video game
- “Reading Avoidance”
  - assessing and exploiting content with as little actual reading as possible.
- “Not reading”
  - printing & saving PDFs for reference, not planned reading



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**Table 1. Categories for reading situations.**

	Passive	Active
Single text	Enjoying a novel, reading a poem aloud	Studying a textbook, reviewing a proposal, diagnosing with a manual
Multiple texts	Keeping up with e-mail, browsing the newspaper, surfing the Web	Researching a problem, surveying a field, keeping up-to-date professionally

Bill N. Schilit, Morgan N. Price, Gene Golovchinsky, Kei Tanaka, Catherine C. Marshall. 1999. As We May Read: The Reading Appliance Revolution. *Computer* 32. <http://dx.doi.org/10.1109/2.738306>

## ■ Golovchinsky:

- Annotation
- comparing multiple documents
- transitions between reading, writing and retrieval, etc.

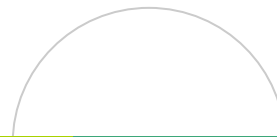
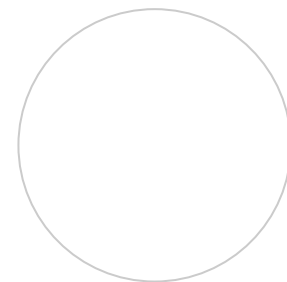
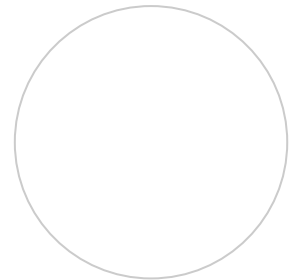
# “Just-in-time” reading



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- Delving into the literature at the end-stages of the writing process
- Scan for omitted literature or new findings



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# Trace-like engagement (Renear)



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- Researchers engage with the literature as if playing a video game:
  - rapidly, almost subconsciously develop queries likely to find known items, or retrieve subject or topic result sets, etc.
  - track references backward and citations forward,
  - dodge publisher sites, commercial integrator sites, and appropriate copies to hunt for open-access copies
  - make rapid relevance judgments: assessing impact, quality
- Sub-cognitive, kinaesthetic, even trance-like
- Often unable to easily articulate what they were doing or why
- Describe as successful — even though no article to was ever *read*.



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# Reading avoidance (Renear)

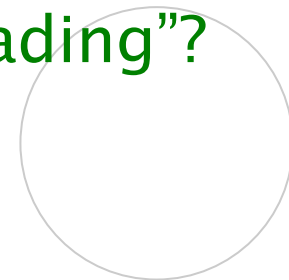
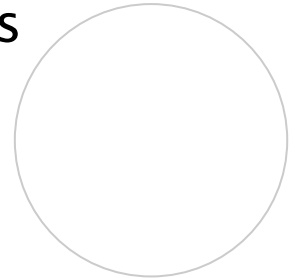


- Indexing, citation analysis help us decide which articles are relevant...  
*... without reading them.*
- Abstracts and literature reviews help us take advantage of articles...  
*... without reading them.*
- The articles we do read, in their analyses and summaries help us take advantage of other articles...  
*... without reading them.*
- Text mining and data mining for “undiscovered public knowledge” help us take advantage of articles...  
*... without reading them.*
- Text formatting (lists, equations, scientific names) and the apparatus (tables of contents, references, figures) help us exploit articles ...  
*... without reading them.*
- Colleagues and students help us take advantage of articles...  
*... without reading them.*

# “Not reading”



- There are many reasons people print or save papers
  - Reading offscreen
  - Reading at a flexible place and time
  - Ensuring access – avoiding paywalls/access problems
  - Saving for later use
    - Skimming
    - Reference
    - ...
- How much of PDF printing is for “not reading”?



# Reading is...

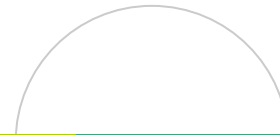
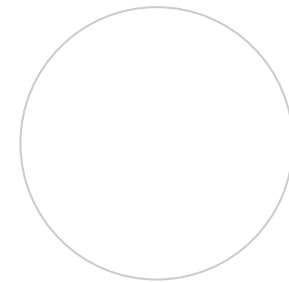


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- Mobile
- Interactive
- Social
- Material

- Catherine C. Marshall. 2009. Reading and Writing the Electronic Book. Morgan and Claypool Publishers.



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# Digital Scholarship should be



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## ■ Mobile

- Portable formats, reflowable
- EPUB: “HTML & friends in a tasty zip package”

## ■ Interactive

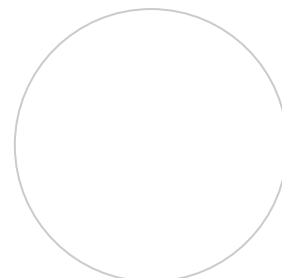
- Annotate
- Choose reading order

## ■ Social

- Granular – to facilitating remixing, reusing, & sharing
- “I want an automatic notification”

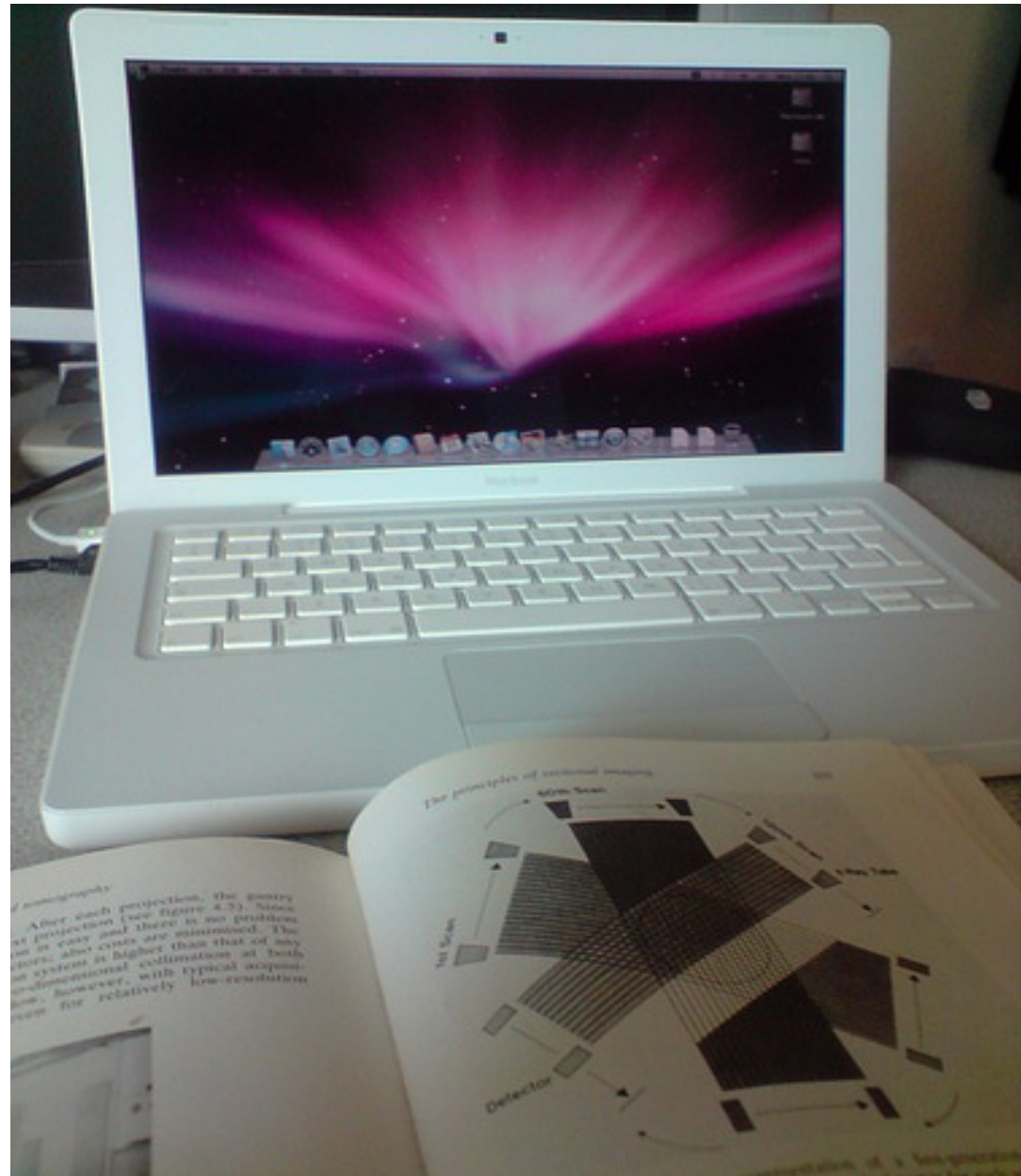
## ■ Material

- Typography and design matter
- Use body memory and spatial memory



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Reading is complex:  
Let's understand &  
support it!



Based on a slide from Carole Palmer

[Flickr user: sanofi2498](#) creative commons

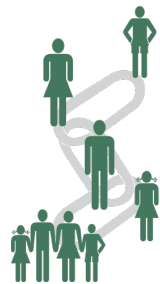
# Social Semantic Web



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Bringing the Web to its full potential



Social Connectivity

**Collaboration and Communication Tools**  
Blogs, Forums, OSNs, Wikis



**Social Semantic Information Spaces**  
Web, Desktop



**World Wide Web**  
URIs, HTML, HTTP



**Semantic Web**  
RDFS, OWL, SPARQL



Syntax

Semantic



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# ESWC workshop: SePublica



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- <http://sepublica.mywikipaper.org/>

A screenshot of the SePublica website. The header features a colorful bar with the word 'SEPUBLICA' in white. Below the header is a navigation menu with links: 'SePublica', 'Questions and issues', 'The Workshop', 'Keynote speaker', and 'Committees'. The main content area is light blue and contains several sections: 'Countdown' (39 days until submission deadline), 'SePublica Calendar', an 'Apply' button, 'Questions?' (with contact email sepublica@googlegroups.com), and 'Community'. The right side of the page features a large text block about the workshop's mission and goals.

**SEPUBLICA**

**SePublica**   **Questions and issues**   **The Workshop**   **Keynote speaker**   **Committees**

**Countdown**  
39 days until *Submission deadline*.

**SePublica Calendar**

**Apply**

**Questions?**  
For questions, please write to [sepublica@googlegroups.com](mailto:sepublica@googlegroups.com).

**Community**

**SePublica, May 29 or 30 2011, at ESWC (May 29 to June 2). Hersonissos, Crete, Greece.**

SEPUBLICA is an **Extended Semantic Web Conference workshop**. The mission of the SEPUBLICA workshop is to bring together researchers and practitioners dealing with different aspects of semantic technologies in the publishing industry. How is the SW impacting the publishing industry? How is our experience of publications changing because of SW technologies being applied to the publishing industry?

One challenge of the Semantic Web is to move from a dissemination platform to an information platform. The Semantic Web promises to “**fundamentally change our experience of the Web**”; however, in spite of improvements in the distribution, accessibility and retrieval of information...

# Thank You!



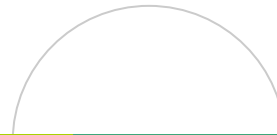
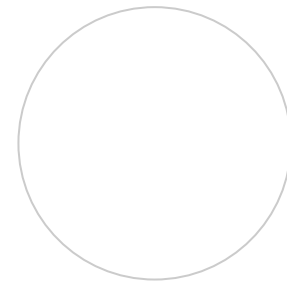
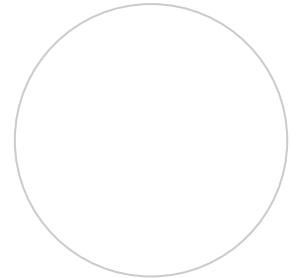
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## ■ Questions & Comments?

### Contact:

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- Twitter: @jschneider



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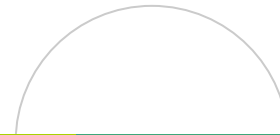
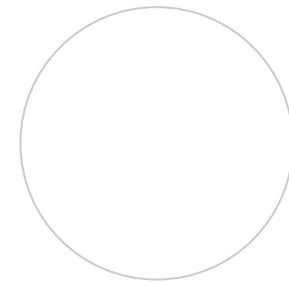
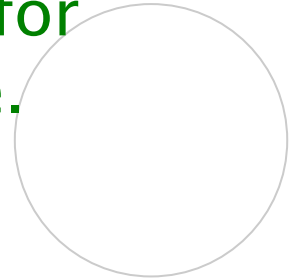
# Spatial memory for page location



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# Core References



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(Open access ISWC 2009 workshop paper:  
[http://esw.w3.org/images/c/ce/HCLS\\$\\$ISWC2009\\$\\$Workshop\\$Renear.pdf](http://esw.w3.org/images/c/ce/HCLS$$ISWC2009$$Workshop$Renear.pdf) )
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# Slide credits



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- Carol Tenopir & Donald W. King. 2007. “Perceptions of value and value beyond perceptions: measuring the quality and value of journal article readings.” *Serials* 20(3).

# Other related presentations



- Geoffrey Bilder. “Social Media and Scholarly Communication”. ISMTE 2010 Oct 19, Oxford, UK  
<http://www.slideshare.net/CrossRef/social-media-and-scholarly-communication>
- James Evans, Carol Tenopir. “Electronic Publication: The Narrowing of Science and Scholarship?” 11th Fiesole Collection Development Retreat, Glasgow, Scotland, July 23-25, 2009 via  
[http://digital.casalini.it/retreat/retreat\\_2009.html](http://digital.casalini.it/retreat/retreat_2009.html)
- Carol Palmer. “Research Practice and Research Libraries: Working toward High-Impact Information Services”  
[http://www.oclc.org/programsandresearch/dss/ppt/dss\\_palmer.ppt](http://www.oclc.org/programsandresearch/dss/ppt/dss_palmer.ppt) OCLC, Dublin, Ohio, June 19, 2008

# Other related presentations



- Renear, A.H. (2007). “How we will [^won’t] read in 2017”. Time Odyssey: Visions of Reference and User Services RUSA President's Program American Library Association Washington DC, June 25th, 2007, revised August 13, 2007.  
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<https://www.ideals.illinois.edu/bitstream/handle/2142/9259/stm06Final.pdf?sequence=2>

# Reading & citing more broadly



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- “I am able to look up secondary references that I might have over-looked when not available on line...has greatly affected my ability to be more knowledgeable and inclusive.” (U.S. university)
- “...I read and cite a wider range of material, especially material outside my discipline, and I feel more confident that I am engaging with the relevant literature.” (Canadian university)

James Evans, Carol Tenopir. “Electronic Publication: The Narrowing of Science and Scholarship?” 11th Fiesole Collection Development Retreat, Glasgow, Scotland, July 23-25, 2009. “Comments from academics (worldwide) 2008-2009” via [http://digital.casalini.it/retreat/retreat\\_2009.html](http://digital.casalini.it/retreat/retreat_2009.html)



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