

## The Collaborative Environment: The Use of Wikis in Scholarly Communication

Will Engle  
LIBR 559L  
June 14, 2010



Scientific and scholarly advancement are processes of **collaboration**

—

Research **builds upon, challenges, or reuses** previously published knowledge

(Panton Principles, n.d.)

### Early Wikipedia Model:

A serious encyclopedia in which the results were **not proprietary**, but were **freely distributable** in any desired medium

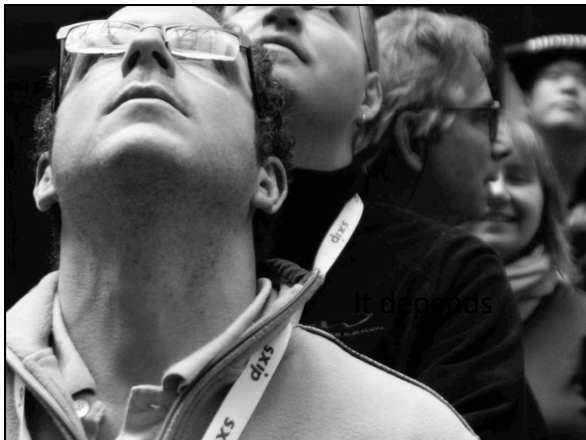


Ward Cunningham:

Groups of people who want to collaborate also tend to trust one another

- No distinction between reader and writer
- Version control

Can Wikis be Used to Improve Scholarly Communication And Collaboration?



### Three Aspects of Scholarly Communication

- (1) communicating informally with other scholars and scientists
- (2) Preparing, shaping and communicating to a group of colleagues what will become formal research results
- (3) The ultimate formal product that is distributed to libraries and others in print or electronically

(Thorin, 2006)

Larry Sanger (2008):

Derivative versus Original  
Communication

The purpose of a scholarly journal is not only to disseminate information to the community but, in its present configuration, it also provides **quality control**, a **trusted archive** and **author recognition**.

(Rowland, 1997)

## Advantage of Wikis

- Central repository for information
- Central repository for communication
- Tracking and revision
- Intertextuality

In the standard scholarly publishing environment, updating information requires the **generation of a new article.**

(Mietchen et al., 2011)

## Barriers to Use

- Lack of credit or ownership
- Lack of control
- Perceptions about quality and scholarly merit
- Need for static, citable/archivable end-product

## Wikigenes: A wiki for the life sciences where authorship matters.

The screenshot displays the Wikigenes website interface. At the top, the logo reads "wikigenes evolutionary knowledge". Below the logo, there is a search bar and a navigation menu. The main content area features a "Gene Review" for "CXCL12 - chemokine (C-X-C motif) ligand 12" in "Homo sapiens". The review includes a list of synonyms, a citation for Müller, A. et al., and a summary of the gene's function. A "Disease relevance of CXCL12" section lists several key findings, such as its role in lung cancer and its interaction with CXCR4. The interface also includes a sidebar with options like "Edit this page", "Discussion", and "Share".

## Scholarpedia

## Academic Publishing Wiki

Popular pages | Journal of Persian Studies | Minkapedia | Community | Random Page | Wiki Activity

### Anthropology Magazine

Contents [show]

Search this wiki

555 PAGES ON THIS WIKI

287 PAGES ON THIS WIKI

#### Welcome

Anthropology's rich ethnographic record and methods give this field of study an ethical responsibility to promote what Renato Rosaldo has called "cultural citizenship." That means teaching a fundamental habit of critical inquiry into our social surroundings through both political engagement and open-minded dialog.

Anthropology Magazine (AM) responds to a widely recognize need for more pedagogically-oriented anthropological writing. We invite submissions that explore anthropological topics in an interesting, accessible way through any related field of study.

Please visit the Anthropology Magazine Welcome page for our mission statement, types of submissions, etc.

This is the main page for the **Anthropology Magazine**. "AM" is an interdisciplinary forum for teaching and learning cultural critique. The Anthropology Magazine also accepts review articles. These can be formal peer review articles or literature reviews of existing published articles or books. The Anthropology Magazine encourages all authors and reviewers to register a user name and associate their work with their real name.

#### Steps in the wiki publishing process

1. The **Anthropology Magazine** is an "open" journal. If you wish to bring an article you have written to the attention of the **Anthropology Magazine** community, place the (Anthropology Magazine) template at the start of your article. For details, see the instructions to authors.
2. You can draft your article in a wiki environment. See preliminary drafts.
3. When your article is ready for peer review, use the Peer Review template.
4. If you wish to write a formal peer review article of an article marked by the (Anthropology Magazine) template, you must mark your formal peer review article with the (Anthropology Magazine) template. Formal peer review articles that review an article of the Anthropology Magazine are themselves subject to peer review. See Anthropology Magazine instructions for reviewers.

Browse submitted articles



## Semantic Wikis

Information can be given meaning so that can it might function like a table in the relational database system

## The Formal Product Is Changing

- Explosion in research
- Explosion in pricing
  - to merely licensing them
- Impact Factor Spiral
- Digital communication

## Public & Transparent Peer Review:

Wikis are used for transparent peer review. Reviewers could even edit the submitted text by themselves rather than writing a report about what should be changed.

Larry Sanger (2008):

An article that is written with a large and diverse set of authors—**particularly if it is under the gentle guidance of experts**—can be expected to be lengthier, broader in its coverage, and fairer in its presentation of issues.

## References

- Arita, M. (2009). A pitfall of wiki solution for biological databases. *Journal of Biomedical Informatics*, 42(3), 295–296. doi:10.1093/bib/bbn053
- Grace, T. P. L. (2009). Wikis as a knowledge management tool. *Journal of Knowledge Management*, 13(4), 64–74. doi:10.1108/13673270910971833
- Hinten, C. V., Hense, A., & Razum, M. (2008). A Wiki for Collaboration and Publication in Research. 2008 IEEE Fourth International Conference on eScience, 790–794. IEEE. Retrieved from <http://ieeexplore.ieee.org/xpls/locallink/abstract?arnumber=4736900>
- Hoffmann, R. (2008). A wiki for the life sciences where authorship matters. *Journal of Biomedical Informatics*, 41(9), 1047–1051. doi:10.1038/ng.f.217
- Huss, J. W., Orozco, C., Goodale, J., Wu, C., Batakov, S., Vickers, T. J., Valafar, F., et al. (2008). A Gene wiki for community annotation of gGene Function. *PLoS Biol*, 6(7), e175. doi:10.1371/journal.pbio.0060175
- Procter, R., Williams, R., Stewart, J., Foschen, M., Snee, H., Voss, A., & Aggan-Targhi, M. (2010). Adoption and use of Web 2.0 in scholarly communications. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 368(1926), 4039–4056. doi:10.1098/rsta.2010.0155
- Sanger, L. (2008). *Should science communication be collaborative?* Plenary address at 10th conference of the International Network on Public Communication of Science and Technology. Retrieved from <http://lars.sanger.org/2008/06/should-science-communication-be-collaborative/>
- Shirky, C. (2008). *Here comes everybody: the power of organizing without organizations*. New York: Penguin Press.
- Thorin, S. E. (2006). Global Changes in Scholarly Communication. In H. S. Ching, P. W. T. Poon, & C. McNaught (Eds.), *eLearning and Digital Publishing* (Vol. 33, pp. 221–240). Berlin/Heidelberg: Springer-Verlag. Retrieved from <http://www.springerlink.com/econway.library.ubc.ca/content/w873e131171x2421/>

### Photo Credits

- <http://www.flickr.com/photos/rogic/>. Used with permission from the creator.