

Running head: QUALITY OF OPEN EDUCATIONAL RESOURCES

What impact does remuneration have on the quality of open educational resources available within an education based wiki.

Peter Rawsthorne

Memorial University of Newfoundland

Partial fulfillment of the requirements for ED6610

Dr. Bruce Mann

Thursday, April 05, 2007

Executive Summary

Open Educational Resources (OER) are becoming increasingly available within internet wikis. The creation of these resources is both by volunteers and by paid professionals. What impact does being paid have on the quality and time to completion of OER entries in the wiki.

Definition of Terms and Concepts

Activity Data

Two primary sources will be used to gather activity data. Activity data refers to the ‘traffic’ activity on the server hosting the wiki. The two sources include;

Server log files – include detailed data of the traffic on the server, this includes; client computer addresses, data and time of access, navigation paths, etc.

history files – include the history of changes and additions to every wiki entry.

Content Analysis

The content of the educational wiki will be analyzed using the ‘**general information quality assessment framework**’ as outlined by Stvilia, B., Twidale, M. B., Smith, L. C. & Gasser, L. (2005). In particular, the approach outlined in “assessing information quality of a community-based encyclopedia” (ibid) will be modeled in this research effort.

Discussion Forums

One of the core features of the wiki are the **talk or discussion pages**. These pages discuss the content of an entry and are a contributor to the overall quality of the wiki.

Remuneration

Authorship of the wiki is executed by two primary participant types; volunteers and professionals. The difference between these two is financial; the volunteers are working without any financial remuneration where the professionals are paid for their work. Financial remuneration should be considered the independent variable for this study.

Background

Open Educational Resource development is increasing as evidenced by UNESCO’s OpenTraining, MIT’s OpenCourseware, Curriki and WikiEducator. The traffic and usage reporting is available as a part of the technology foundation in which wiki based OER’s are published. The wiki entries also contain associated change history and discussion information. The wiki authors are both volunteers and paid professionals, and the ability to discern these two author types can be accessed. The combination of these data sources provides the ability to analyze the differences between paid and volunteer content.

Problems Addressed by this Report

Problem Statements

1. The impact of financial support for educators and content developers in developing open educational resources is unknown.
2. At a time when both volunteers and professionals develop content for OER based wikis will financial support provide greater success in meeting the goals of the international initiatives of the international rights of the child and the millennium development goals.
3. How is quality and time to completion affected when content developers have financial support?

Hypothesis

The quality will be greater and time to completion shorter for the development of OER when content developers and educators are financially rewarded for their contributions.

Methodology

Procedure

1. Evaluate OER wiki entries for information quality. Follow the approach by Stvilia, B. et al. outlined in their papers describing information quality.
2. Cross reference wiki entries with contributors.
3. Request contributor consent from utilized entries.
4. Eliminate entries that did not receive consent.
5. Cross reference contributor and entries with financial resources.
6. Discuss results.

Selection of Groups

Two groups will be identified; volunteer contributors and professional contributors. These two groups will be determined after the OER content has been analyzed for quality and time to completion. Once content has been analyzed it will be cross referenced to contributor. It is hoped this cross reference will provide insight into the effects of remuneration.

Data Collection

Data will be collected from the following sources;

1. Server log files
2. Wiki history files
3. Talk / Discussion forums
4. Information quality analysis
5. Accounting records

Proposed Analysis

The wiki's information quality will be analyzed using methods outlined by Stvilia, B., Twidale, M. B., Smith, L. C. & Gasser, L. (2005) in their series of papers titled;

- A Framework for Information Quality Assessment.

- Assessing information quality of a community-based encyclopedia.
- Information Quality Discussion in Wikipedia.

Once wiki content has been analyzed it will be cross referenced against contributor and financial resources. This cross reference will provide insights into the hypothesis being posed.

Ethical considerations

Contributors provided content without the prior knowledge that the content would be analyzed for quality. This prior knowledge could have altered the contributors approach. The contributors' reputation could be impacted by the quality analysis.

Expected results

It is expected that remuneration for OER content creation will increase quality and reduce time to completion.

Limits of the study

The study is limited in that it only considers one OER based wiki, it doesn't include other OER type resources and doesn't provide a comparison to fee based educational materials. It could also be considered simplistic that financial remuneration will not have a positive affect on quality and reduce time to completion.

Recommendations for the future

The following should be considered for future research projects;

- Include other OER based wikis
- Include analysis for depth of knowledge
- Consider other forms of OER (including non-free resources)
- Consider other forms of Non-open Educational Resources

References

- Augar, N., Raitman, R., & Zhou, W. (2004). Teaching and learning online with Wikis. In R. Atkinson, C. McBeath, D. Jonas-Dwyer & R. Phillips (Eds), *Beyond the comfort zone: Proceedings of the 21st ASCILITE Conference* (pp. 95-104). Perth, 5-8 December.
<http://www.ascilite.org.au/conferences/perth04/procs/augar.html>
- Baker, D. (2005). Are Copyrights A Textbook Scam? Alternatives to Financing Textbook Production in the 21st Century. Retrieved 9 March 2007, from
http://www.cepr.net/publications/textbook_2005_09.pdf
- Curriki. (n.d.). Global Education and Learning Community. Retrieved 13 March 2007 from
<http://www.curriki.org/xwiki/bin/view/Main/>
- Désilets, A. and Paquet, S. (2005). Wiki as a Tool for Web-based Collaborative Story Telling in Primary School: A Case Study. Retrieved 15 March 2007, from <http://iit-iti.nrc-cnrc.gc.ca/iit-publications-iti/docs/NRC-48234.pdf>
- Downes, S. (2006). Models for Sustainable Open Educational Resources. Retrieved 21 March 2007, from <http://www.downes.ca/files/sweden.doc>
- Duffy, P. and Bruns, A. (2006). The Use of Blogs, Wikis and RSS in Education: A Conversation of Possibilities. In *Proceedings Online Learning and Teaching Conference 2006*, (pp. 31-38). Brisbane.
- Holt, D. (2005). High Fidelity Collaboration – WhyWikisWork & WhyWikisWorkNot. Retrieved 10 March 2007, from <http://www.ascilite.org.au/conferences/brisbane05/farmerworkshop.doc>
- Lamb, B. (2004). Wide Open Spaces: Wikis, Ready or Not. *EDUCAUSE Review*, 39, 5, 36-48.
<http://www.educause.edu/pub/er/erm04/erm0452.asp>
- Lih, A. (2004). Wikipedia as Participatory Journalism: Reliable Sources? Metrics for evaluating collaborative media as a news resource. Symposium. *Proceedings of the International Symposium on Online Journalism 2004* (in press).
- Grenfell, M. (2006). Knowledge Construction Online: Does Constructivism deliver the goods?. In B. L. Mann (Ed.), *Selected styles in web-based educational research* (pp. 384-402). Hershey, PA: Idea Group Publishing.
- Mathes, A. (2004). Folksonomies - Cooperative Classification and Communication Through Shared Metadata. Retrieved March 10, 2007 from
<http://www.adammathes.com/academic/computer-mediated-communication/folksonomies.html>

McMullin, B. (2005). Putting the learning back into learning technology. In G. O'Neill, S. Moore, & B. McMullin (Eds.). *Emerging issues in the practice of university learning and teaching*, AISHE, Dublin. Retrieved 11 March 2007, from <http://www.aishe.org/readings/2005-1/>

Stvilia, B., Twidale, M., Gasser, L., & Smith, L. (2005) Information Quality Discussion in Wikipedia. Retrieved 22 March 2007, from <http://www.isrl.uiuc.edu/~stvilia/papers/qualWiki.pdf>

Stvilia, B., Twidale, M. B., Smith, L. C., Gasser, L. (2005b). Assessing information quality of a community-based encyclopedia. In: *Proceedings of the International Conference on Information Quality - ICIQ 2005*. Cambridge, MA. 442-454. Retrieved 22 March 2007, from <http://www.isrl.uiuc.edu/~stvilia/papers/quantWiki.pdf>

Stvilia, B., Twidale, M. B., Smith, L. C., Gasser, L. (2005). A Framework for Information Quality Assessment. Retrieved 22 March 2007, from http://www.isrl.uiuc.edu/~gasser/papers/stvilia_IQFramework.pdf

WikiEducator. (2007, February 19). In WikiEducator, The Free OER. Retrieved 11 March 2007, from <http://www.wikieducator.org/WikiEducator>About>