



The challenges and successes of Wikibookian experts and Wikibook novices: Classroom and community perspectives

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Wikis in Teaching and Assessment: The M/Cyclopedia Project
 (Drs. Axel Bruns & Sal Humphreys, 2005, Queensland University of Technology)



Wikis present themselves as an interesting tool for enhancing social constructivist learning environments. As non-linear, evolving, complex and networked texts with multiple authors, they can provide a great opportunity for student collaboration, co-production of texts, argument, and interaction...

however, this flexibility and openness can also present significant problems and challenges to students and academics encountering the wiki environment.



Research on Wikipedia

- Evaluation of Wikipedia
 - Accuracy of the content (e.g., Lih, 2004; Rosenzweig, 2006)
 - Formality of language use (Emigh & Herring, 2005)
 - Hackers and trolls (Shachaf & Hara, 2006)
 - Contributions in collaborative authoring environments (Korfiatis, Poulous, & Bokos, 2006)
 - Difference between novices (LPPs) and experts (i.e., Wikipedians) (Bryant, Forte, & Bruckman, 2005)
 - Cultural differences (e.g., Power distance (hierarchies), collectivism vs. individualism, femininity vs. masculinity, etc.) (Pfeil, Zaphiris, & Ang, 2006)


INFORMATION TECHNOLOGY

Can WIKIPEDIA Ever Make the Grade?





Becoming Wikipedian: Transformation of Participation in a Collaborative Online Encyclopedia
 (Bryant, Forte, & Bruckman, 2005)

- Novices (or LPP):
 - Initial edits tend to be focused on individual articles.
 - Fix omissions and weaknesses.
 - See themselves as consumers of information provided at the site.
 - Wikipedia looked at more as a collection of articles with random people adding information here and there, than as "a collection of people talking about, editing, and protecting their efforts to author good work." (i.e., no strong sense of community)



Becoming Wikipedian: Transformation of Participation in a Collaborative Online Encyclopedia
 (Bryant, Forte, & Bruckman, 2005)

- Experts or Wikipedians:
 - Wikipedia is not some random collection of articles but a "community of co-authors who play distinct roles and have distinct talents as they build a resource" (p. 9).
 - Wikipedia as a whole becomes more important than any single article or set of articles.

Becoming Wikipedian: Transformation of Participation in a Collaborative Online Encyclopedia
(Bryant, Forte, & Bruckman, 2005)

– Experts or Wikipedians:

- Once become Wikipedians, the goals expand.
- Perceive work contributing to the greater good.
- See themselves as managers or creators.
- Have a "watchlist" of pages for surveillance (among primary tasks)
- Want to improve the overall quality and character of the site.



Compare Wikipedia and Wikibooks

<http://en.wikipedia.org/wiki/Special:Statistics>
<http://en.wikibooks.org/wiki/Special:Statistics>



Characteristic	Wikipedia	Wikibooks
1. Date Launched	January 15, 2001	July 10, 2003
2. Historical Statistics (as of March 24, 2007):	<p>8,104,148 pages 6.4 million articles</p> <p>1,703,263 articles in English</p> <p>250 languages 121,944,043 edits 15.05 edits per page 700,001 media files 3,932,542 registered users 1,155 systemadmins</p>	<p>71,800 pages 24,985 modules or chapters Over 1,000 books, the largest category in English</p> <p>120 languages 817,941 page edits 11.26 edits per page</p> <p>55,110 registered users, 36 system admins</p>

What is Wikibooks?

- Wikibooks, previously called **Wikimedia Free Textbook Project** and **Wikimedia-Textbooks**, is a wiki for the creation of free content books. It is a Wikimedia Foundation project.
- Wikibooks is a Wikimedia project for collaboratively writing textbooks and related non-fiction books (with supporting books and booklets; such as annotated literary and other classics) about different subjects.

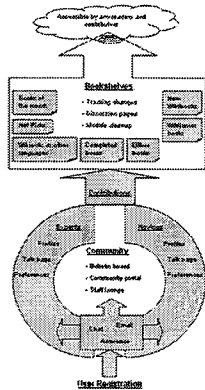


Wikibookian

A Wikibookian is someone who coordinates a Wikibook project.



Think free. Learn free.



Sample Wikibooks
http://en.wikibooks.org/wiki/Main_Page

Wikibook Class Project

The screenshot shows a Wikibook page with a title bar, navigation links, and a main content area. The title is "A Toolbox for Student-Centered Learning at a Distance". The page content includes a paragraph about the toolbox and its purpose, followed by a list of items and a section for user comments.

Wikibook Criticisms (Wikipedia, 2007)

- Wikibooks has many incomplete texts.
- Even the comprehensive texts are of poor quality.
- Wiki model encourages abortive book projects
- Hard to find any high-quality, completed books.
- HTML not suitable for the traditional printing of books with fixed page-width and page-length
- Wiki syntax is ill-suited for professional book editing.
- Wiki-style editing.

Our Basic Study

Survey of more than 80 Wikibookians about the creation and coordination of a Wikibook. Issues addressed include ownership, problems encountered, tools to facilitate online collaboration.

Our Sample: Finding Wikibookians

The screenshot shows a user profile for Thomas Strohmann. It includes a profile picture, a bio stating he is a PhD student at the University of Colorado at Boulder, and contact information including his email address and phone number. There are also sections for 'News' and 'Featured Papers'.

Objective and Design

- Explore the potential to use Wikibooks as a new instructional strategy to promote learning collaboration and social interaction across classrooms
- Find the success factors in the development of Wikibooks at the Wikibooks web site in order to improve the implementation of Wikibook projects

Objective and Design

Two-part study:

- I. Wikibook project among 3 classrooms in 3 locations
- II. Wikibooks web site - http://en.wikibooks.org/wiki/Main_Page

Methodology

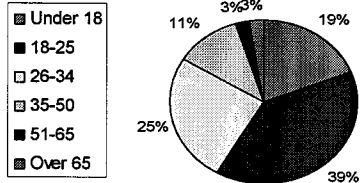
- **Two Surveys for each group**
 - 13 participants of cross-institutional Wikibook project
 - 80 participants of Wikibookians
- **Follow-up questions were sent via email to:**
 - Three people of the Wikibook project
 - Eight people of the Wikibookian group



Findings from Surveys (cont.)

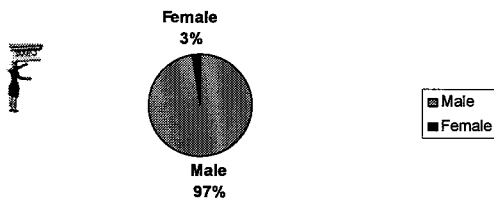
- **Demographical data: 58% of Wikibookians were younger than 25 years old.**

Age of Wikibookians



Demographical data: more than 97% were male

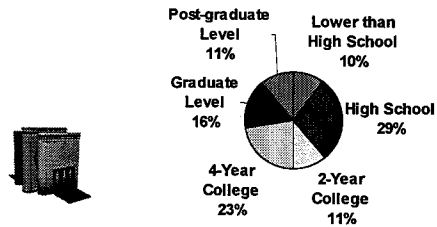
Gender of Wikibookians



Findings from Surveys (cont.)

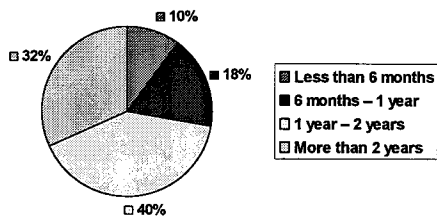
- **Demographical data: many without a college education**

Highest Year of Schooling



Findings from Surveys (cont.)

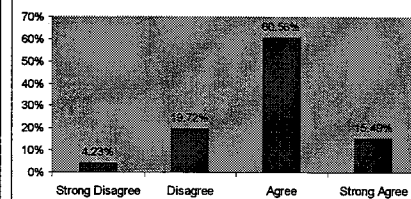
How long been involved in designing or contributing to a Wiki of any kind?



Findings from Surveys (cont.)

- **76% of Wikibookians agree that their recent Wikibook project was successful.**

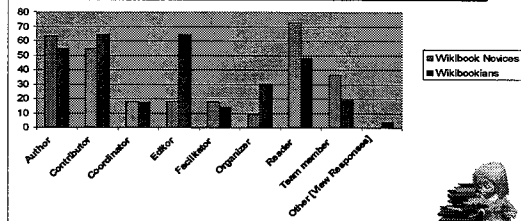
My recent Wikibook project was successful



Findings from Surveys (cont.)

• Sense of community*

What were your primary roles in developing a Wikibook?

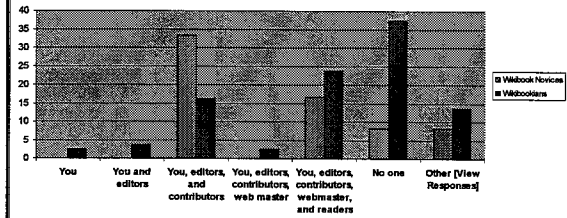


*Data is displayed by ratio

Findings from Surveys (cont.)

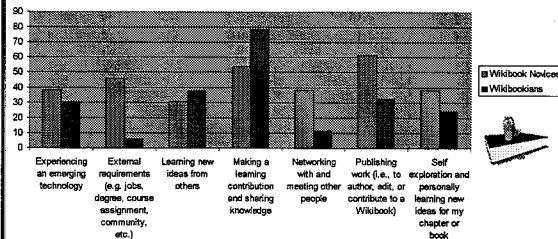
• Control and ownership

Who are the owners of a Wikibook?



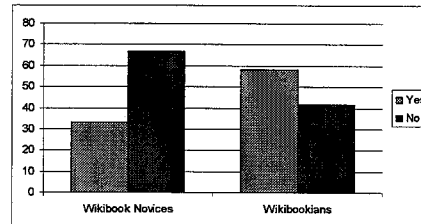
Findings from Surveys (cont.)

• Inspiration to work on Wikibooks



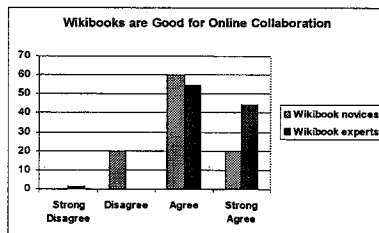
Findings from Surveys (cont.)

• Wikibook Completion: Can a Wikibook ever be completed? 58% of Experts and 33% of Novices



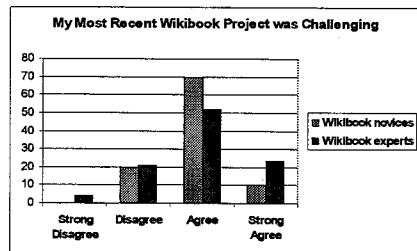
Findings from Surveys (cont.)

• Collaboration: 99% of Wikibookian Experts and 80% of Wikibook Novices agreed Wikibooks promotes online collaboration.



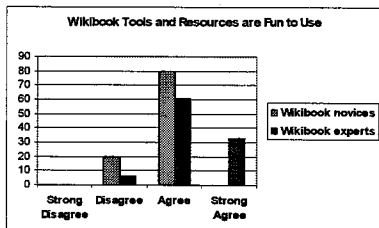
Findings from Surveys (cont.)

• Challenging: 80% Wikibook Novices and 75% Wikibookian Experts agreed.



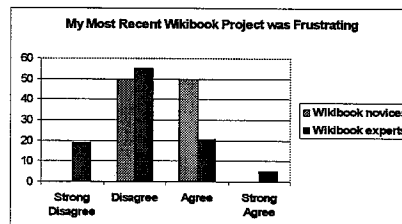
Findings from Surveys (cont.)

- **Fun to use:** 94 percent of Wikibookian Experts agreed or strongly agreed, as did 80 percent of the Wikibook Novices.

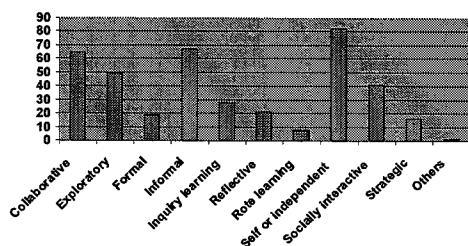


Findings from Surveys (cont.)

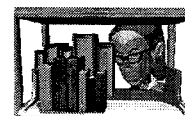
- **Frustration:** 50% of novices found the Wikibook project frustrating; but only 25% of Wikibookian Experts



What type of learning does a Wikibook foster?



Qualitative Themes from Email Interviews



Theme #1: Introduction to Wikibook

- *I helped found Wikibooks when I started writing an Organic Chemistry textbook on Wikipedia. Jimmy Wales agreed to start another site where we could write textbooks.*
- *I found Wikibooks about Wikipedia, after I realised that my project on which I was working got to long for Wikipedia.*



Theme #2: Initial Expectations about Wikibook

- *My expectation was to help create a free, collaboratively written textbook. At this point I have done almost all of the work on the book. Admittedly, word about the book hasn't gotten out, but hopefully once it does others will begin to contribute. Until that happens, my expectations will not, technically, have been met.*



Theme #3: Important Features and Activities Necessary for Collaborative Environments from a Wikibookian's Perspective

- *A way for people to communicate with each other, a way to track the contributions of each person, a way to make the information accessible to newcomers, a simple interface that an average person can learn very quickly or even use intuitively.*
- a special area where one set group of people can take over a book for a time, for example, to enable one class or one group of professors develop materials



Theme #4: Differences Between the Wikibook Environment and Other Collaborative Environments Online

- *"Working with people I've never met...Typically, the people I collaborate with at Wikibooks differ from my perspective more than people I would collaborate with in a more traditional context."*
- *"There is not one person in charge..."*



Theme #5: The Notion of Wikibook Not as a Product but a Process

- No wiki is ever complete, because it is ever evolving. That's one of the best things about wiki's. I personally think that paper is dead and in many ways the ideas contained within them too. I want my ideas and thought evolved and allowing others to improve them makes the work alive.
- Theoretically a wikibook could be complete, depending on the subject. If, for instance, the book is about the Iran/Contra scandal...



Theme #6: Toward Collaborative Knowledge Construction: Issues of Ownership and Disputes over Editing

- So revert it :) It's a Wiki, so everybody can edit it. When s.o.'s edit doesn't apply to my standards, I can revert it. And that person can revert me too. When we both find it important, we can start talking through the talkpage...
- This has happened to me. In my experience, changing the material back is pointless, and will just cause dispute.



Theme #7: Suggestions for Promoting Learning Collaboration in Wikibook Environments

- I would suggest a better organized starting of books. I think authors have to make concepts before they write a book and think about it, because it's not only an article like in Wikipedia.
- Start with planning, and work on existing books rather than create a new one.



Theme #8: Advantages and Disadvantages of Wikibooks

- Advantages: Openness, accountability, record of changes and attributions, easiness of use, free license, formatting buttons, levels of permissions, formatting shortcuts, templates, and navigation, ...
- Disadvantages: There are not mechanisms in place that convince educators of the value of Wikibooks as a teaching or learning tool. No structured way to lead groups by the hand through the collaborative book-writing process.



Theme #9: Wikibook Recommendations

- I'd suggest getting several co-authors from the get go and deciding on a template for the book chapters so it is uniform from the beginning. It's bound to change over time, but you may as well start with a plan.
- Get help. Don't try to do it on your own, it's a too big amount of work and you will definitely lose the overview.



Theme #10: The Future of Wikibooks and Other Comments

- Community-written textbooks in every American classroom as well as around the world, students and teachers involved in the production of textbooks on occasion as a part of the development process, better textbooks than we have ever had before, teaching materials shared for free in many languages all over the globe, the end or dramatic change of much of the textbook industry (cartel) as it currently exists.
- I don't think the concept will catch on except among small niches until there are some very well-developed textbooks available on the site.



Huge Gap in Use as Class Project or Community Project

- Classroom:
 - Optional Wikibook activities do not work well.
 - Students were hesitant to share their rough ideas in Wikibooks environment
 - Selecting topic is a 'class task' in Wikibook projects.
 - Part-time vs. full-time students
 - Do it for reward and publication—externally motivated.
 - Publish or perish structures outweigh general knowledge sharing opportunities.



Huge Gap in Use as Class Project or Community Project

- Community
 - Internally motivated to do book.
 - Still needing help from others (do not do this alone).
 - Takes more time than expected.
 - Do it to make contribution.
 - Perhaps a Wikibook project cannot be designed but can only be formed voluntarily.
 - No one owns.



Limitations

- Volunteer sample
- Most Wikibooks not yet completed
- What is an expert vs. what is a novice?
- Email-based interviews
- 13 survey responses from those in class vs. 80 Wikibookians responses
- Lack of success with Wikibook class project



Final Participant Quotes and Paper

"Go rockin' on!"

"I love wikis they're truly the closest example of the purest form of democracy."

For paper, see <http://wiki-riki.wikispaces.com>

