Authoring Wikipedia articles as an information literacy assignment

Eero Sormunen

School of Information Sciences
Know-Id project
Outline

- Wikipedia as a framework for IL instruction
- A pilot study
  - Cases, data and methods
  - Main findings
  - Summary & discussion
- The main study
  - Focus
  - Data collection
Wikipedia framework for IL instruction

- Participative encyclopedia
- Requirements for writers
  - cf. information literacy standards
  - cf. research based writing
- Students use commonly as a source
- Authenticity & realism -> meaningfulness
- A public forum -> perceived requirements
The pilot study

- **Goal**
  - To explore how Wikipedia authoring works as an IL assignment
  - To test data collection methods in the classroom
  - To elaborate research questions for the main study

- **Focus of interest**
  - Flow of the process
  - Collaboration in knowledge construction
  - Information behavior
  - Students’ experiences
Data collection

- Upper secondary school/City of Tampere
  - Spring term 2010
- Pilot 1: Geography (8 weeks)
  - 9 Students
  - Data collection:
    - Pre-questionnaire, pre- and post-interviews
    - Non-participatory observations
    - Instructions, Wikipedia articles, Sources used
- Pilot 2: Biology (8 weeks)
  - 16 Students
  - Data collection
    - Difference: observations replaced by contextual inquiry interviews
- Two teachers, eleven groups, eleven articles
# Phases of the project (8 weeks)

<table>
<thead>
<tr>
<th>Phase Actor</th>
<th>Before the course</th>
<th>Initiation</th>
<th>Working on articles</th>
<th>Uploading articles</th>
<th>Closure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher / Librarian</td>
<td>Course plan</td>
<td>Teacher’s intro intro</td>
<td>Suggested sources</td>
<td>Librarian’s support</td>
<td>Assessment of articles</td>
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<tr>
<td></td>
<td>Task plan</td>
<td>Guidelines Librarian’s intro</td>
<td>Guiding &amp; support</td>
<td></td>
<td>Seminar (B) Exam (G)</td>
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<tr>
<td></td>
<td>Topic ideas</td>
<td></td>
<td>Control</td>
<td></td>
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<tr>
<td></td>
<td>Topic checking</td>
<td></td>
<td>Virtual “help desk”</td>
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<tr>
<td></td>
<td>Materials</td>
<td></td>
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</tr>
<tr>
<td>Students</td>
<td>Enrollment</td>
<td>Participate Hands-on training</td>
<td>Group work (computer class, 6-7</td>
<td>Group work (computer class, one</td>
<td>Self-assessment (B)</td>
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<tr>
<td></td>
<td></td>
<td>(1-2 hours)</td>
<td>hours)</td>
<td>hour)</td>
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</tbody>
</table>

B = in biology, only, G = in geography, only
## Collaboration activity

<table>
<thead>
<tr>
<th>Subtasks</th>
<th>Groups</th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th>Average</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
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<tr>
<td>Planning the article</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Searching information</td>
<td>-1</td>
<td>-1</td>
<td>-1</td>
<td>-1</td>
<td>1</td>
<td>-1</td>
<td>-1</td>
<td>-1</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Selecting sources</td>
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<td>-1</td>
<td>1</td>
<td>-1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-1</td>
<td>0</td>
<td>-1</td>
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<tr>
<td>Writing</td>
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<td>-1</td>
<td>1</td>
<td>-1</td>
<td>0</td>
<td>-1</td>
<td>1</td>
<td>-1</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>Finishing the article</td>
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<td>-1</td>
<td>?</td>
<td>-1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-1</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Uploading to Wikipedia</td>
<td>-1</td>
<td>-1</td>
<td>?</td>
<td>-1</td>
<td>1</td>
<td>-1</td>
<td>1</td>
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<tr>
<td>Average</td>
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<td>-0.7</td>
<td>0.2</td>
<td>-0.7</td>
<td>0.5</td>
<td>0.1</td>
<td>0.4</td>
<td>-1.0</td>
<td>-0.3</td>
<td>-0.6</td>
</tr>
</tbody>
</table>

**Legend**

- **Green** | Active collaboration
- **Red**   | Lack of collaboration
Information sources used* (n = 70)

- Communal sites: 27%
- Goverment sites: 10%
- Reference sources: 9%
- Wikipedia: 7%
- Media: 4%
- Commercial sites: 4%
- Teaching material: 3%
- Student papers: 26%
- Dead link: 10%

*Cited (57) and not cited (13)
Source/article sentences (n = 230*)

- Copy-pasted: 21%
- Mechanical change: 13%
- Rewritten: 14%
- Merging from a single source: 11%
- Merging from multiple sources: 4%
- Direct translation: 6%
- Edited translation: 30%

* 13 sentences not mapped to any source
Citing of sources (n=230)

- 64% at paragraph level
- 17% at article level
- 12% at both levels
- 5% citation incomplete
- 1% citation missing
Students’ experiences

- Learning
  - Wikipedia (tool, writing; assessing and using information)
    - Own topic (but not of other topics)
    - Information and learning skills
- About the assignment
- About the publishing pressure
Summary of findings

- In this case Wikipedia assignment worked
  - Students wrote acceptable articles
  - Students reported relevant learning experiences
  - Wikipedia (publicity) increased motivation & commitment

- Data collection needs some revision
- Base found for more focused research questions
The main study

- Focus on
  - Thick description of the collaborative process
    - Subtasks: Initiation, information searching & selection, information use and writing, closure
    - Collaboration vs. division of work; Kuhlthau’s ISP
  - Quality of the process and outcome
    - Assessment of processes and articles
    - Learning and collaboration experiences
  - Characteristics groups
    - Learning and information orientation, personality & identity, collaboration orientation, social relationships
The main study (cont.)

- Cases (~30 students/class)
  - Literature class; Wikipedia article
  - History class; article for the school’s wiki
  - April - May 2011

- Data collection
  - As in the pilot, plus
    - Extended pre-questionnaire
    - Extended post-questionnaire
    - More focused contextual inquiry interviews
Contact info

- Know-Id project
  - https://www12.uta.fi/blogs/know-id/
- Eero Sormunen
  - eero.sormunen@uta.fi
- UTA/School of Information sciences