How much do new students learn about information literacy in their first months of college?

A comparison of nursing and teacher education students at a Norwegian university
Library IL-courses

• Searching

• «Evaluating and citing sources»
Two surveys

1. Before library course
   Evaluating and citing sources

2. After library course and after writing an academic paper
Survey topics

- Evaluating sources
- Avoiding plagiarism
- Citing sources
Methods

• Questback
• Only those who completed survey 1 received survey 2
• 12 (nearly identical) questions
• Librarian present
• Anonymous
• 5-17 weeks between surveys
Results from first survey


evaluating sources

avoiding plagiarism

citing sources
### Selection of respondents

<table>
<thead>
<tr>
<th>Campus</th>
<th>Survey 1</th>
<th>Survey 2</th>
<th>Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamar (teacher ed.)</td>
<td>227</td>
<td>155</td>
<td>68%</td>
</tr>
<tr>
<td>Elverum (nursing)</td>
<td>134</td>
<td>44</td>
<td>33%</td>
</tr>
<tr>
<td>Rena (business adm.)</td>
<td>55</td>
<td>6</td>
<td>11%</td>
</tr>
<tr>
<td>Evenstad (forestry/wildlife)</td>
<td>18</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>n=361</td>
<td>n=199</td>
<td></td>
</tr>
</tbody>
</table>
3 research questions

1. How much did nursing and teacher education students learn about the 3 topics in their first months of higher education?

2. How did their self-assessed skill levels in these topics change?

3. Which differences are there between nursing and teacher education students?
Evaluating sources: Self-assessment

“How do you estimate your ability to critically evaluate sources of information?”

Survey 1 (n=361)
Mean=3.52

Survey 2 (n=199)
Mean=3.93
Nursing vs. teacher education students

Those who estimated that they were good or very good at critically evaluating sources

<table>
<thead>
<tr>
<th></th>
<th>Survey 1</th>
<th>Survey 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing students</td>
<td>42%</td>
<td>75%</td>
</tr>
<tr>
<td>Teacher ed. students</td>
<td>42%</td>
<td>60%</td>
</tr>
</tbody>
</table>
Why do nursing students have more self-confidence?

Possible explanations:

• Parallel instruction in “evidence-based practice”

• Health science librarians teach students that all articles found in certain databases are reliable

• (result of low response rates?)
Evaluating sources: Learning outcome

- Significant learning in 3 of 5 questions

- No evidence of learning in the 2 other questions
  - identifying scholarly articles
  - recognizing when research should be cited

- No difference in knowledge levels (despite differing self-assessments)
Avoiding plagiarism: Self-assessment

"How do you estimate your ability to avoid plagiarism when writing?"

Survey 1 (n=361)
Mean=3.93

Survey 2 (n=199)
Mean=4.03
## Nursing vs. teacher education students

Those who estimated that they were good or very good at avoiding plagiarism

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</thead>
<tbody>
<tr>
<td>Nursing students</td>
<td>69%</td>
<td>77%</td>
</tr>
<tr>
<td>Teacher ed. students</td>
<td>60%</td>
<td>77%</td>
</tr>
</tbody>
</table>
Avoiding plagiarism: Learning outcome

• Significant learning in all questions – both formal and ethical aspects of plagiarism

• Overestimated abilities

• Little difference in knowledge levels between nursing and teacher education students
Citing sources: Self-assessment

"How do you estimate your ability to cite sources in the correct manner?"

Survey 1 (n=361)
Mean=3.24

Survey 2 (n=199)
Mean=3.66
Nursing vs. teacher education students

Those who estimated that they were good or very good at citing sources correctly

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</thead>
<tbody>
<tr>
<td>Nursing students</td>
<td>33%</td>
<td>57%</td>
</tr>
<tr>
<td>Teacher ed. students</td>
<td>35%</td>
<td>50%</td>
</tr>
</tbody>
</table>
Citing sources: Learning outcome

- Significant learning in all questions

- Nursing students cite sources more often than teacher ed. students
1: Learning outcome

Significant learning in all 3 topics

- most – citing sources
- least – evaluating sources
2: Self-assessments

- higher self-assessments in second survey in all 3 topics, especially for evaluating and citing sources
- most confident – avoiding plagiarism
- least confident – citing sources
- (overestimated their abilities to evaluate sources and avoid plagiarism)
3: Differences between nursing and teacher education students

- nursing students cite sources more often
- nursing students are more confident, especially in their ability to evaluate sources
Future research

- analyze results from individual students over time
- compare with students at other universities
Thank you for your attention!

Photo: Ellen Nierenberg

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