Librarians Matter!* Librarian Impact on First-Year Information Literacy Skills at Five Liberal Arts Colleges

**Research Question**

“What impact (if any) does librarian intervention in first-year courses have on IL performance in student work?”

**Methodology**

- **Courses:** 5 Liberal Arts College First-Year Seminar/Experience programs
  - Claremont McKenna College, Pitzer College, Pomona College, Scripps College, Harvey Mudd College
  - Courses have different learning outcomes and assignments
  - BUT all require use of outside sources and are able to be scored using IL rubric
- **Librarian Collaboration:** Papers coded by Level of Librarian Collaboration in Course
  - 1 = None
  - 2 = Low (one-shot)
  - 3 = Moderate (multiple sessions, moderate syllabus/assignment collaboration)
  - 4 = High (multiple sessions, online tutorial & quiz, significant syllabus/assignment collaboration)
- **Papers:** 521 Papers
  - 17 interrater pairs
  - Jan-July, 2014
- **Rubric:** Rubric evaluation of papers: 3 areas
  - Attribution
  - Evaluation
  - Communication
  - Rubric Levels
    - 1 = initial
    - 2 = emerging
    - 3 = developed
    - 4 = highly developed
- **Original adaptation from rubric at Carleton College Gould Library Reference and Instruction Department: Information Literacy in Student Writing Rubric and Codebook.” Northfield, MN: Carleton College 2012 http://libguides.libraries.claremont.edu/AiA

**Data**

**Overall Results**

<table>
<thead>
<tr>
<th>Librarian Collaboration Level</th>
<th>Attribution</th>
<th>Evaluation</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Shot (Level 2)</td>
<td>2.13</td>
<td>2.61</td>
<td>2.38</td>
</tr>
<tr>
<td>High (Level 3-4)</td>
<td>2.35</td>
<td>2.82</td>
<td>2.89</td>
</tr>
</tbody>
</table>

**Rubric Levels:**

- p-value (one shot v. high) 0.000000016 0.000000008375 0.0000000408
- < .05 is statistically significant

**College Specific-Results**

**College A:** by Collaboration Level

Papers from 11 of 31 sections (n=72). Most collaborations are one-shots.

<table>
<thead>
<tr>
<th>1-Shot (Level 2)</th>
<th>High (Level 3-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribution</td>
<td>2.05</td>
</tr>
<tr>
<td>Evaluation</td>
<td>2.43</td>
</tr>
<tr>
<td>Communication</td>
<td>2.72</td>
</tr>
</tbody>
</table>

**p-value (one shot v. high):**

- 0.05019
- 0.28632
- 0.014926

**College B:** by Collaboration Level

Papers from 17 of 17 sections (n=162). All collaborations higher than one-shots (Level 3 or 4).

<table>
<thead>
<tr>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribution</td>
<td>2.61</td>
</tr>
<tr>
<td>Evaluation</td>
<td>2.65</td>
</tr>
<tr>
<td>Communication</td>
<td>2.75</td>
</tr>
</tbody>
</table>

**p-value (3 v. 4):**

- 0.000052
- 0.0000000000016
- 0.0000000000000000016

**Results**

- Students in courses with Level 2 (one-shot) Librarian Collaboration scored lower (statistically significantly lower) in all three Information Literacy rubric skill areas than those in courses with Level 3 and 4 Librarian Collaboration.
- No statistically significant difference overall between student’s IL skills in Level 3 vs. Level 4 courses. Is there a library instruction “sweet spot”?
- Not enough Level 1 collaboration papers received to make any conclusions about students’ IL skills in classes with no Librarian Collaboration.

**Conclusion**

While it has long been suspected that the one-shot is not as effective as more intensive collaborations on students’ Information Literacy skills in the long-term, this project provides evidence that this is the case.

In short, the more collaborative and scaffolded the instruction, the more effective library instruction appears to be. Based on these results, we recommend librarians (and faculty) continue (or increase) their efforts to design assignments and syllabi in collaboration as well as strategically involve librarians in the classroom.

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**http://libguides.libraries.claremont.edu/AiA**

**College C:** by Collaboration Level

Papers from 15 of 19 sections (n=151). 95% confidence level (5% margin of error). Equal balance of one-shot and higher level collaborations.

**College D:** total scores

Papers from 2 (one each Level 2 and Level 3) of 11 sections (n=31). Most courses do not collaborate with librarians. Sample size not large enough.

**College E:** by Collaboration Level

Papers from 9 of 13 sections (n=103). Most courses have higher level collaborations.

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*Special thanks to Dani Brecher, Instructional Design and Technology Librarian, Claremont Colleges, for the Librarians Matter! Infographic of pilot study results. See: http://bit.ly/CCL_infographic*