Information literacy in the disciplinary classroom: Three views

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Information Literacy in the Disciplinary Classroom: Three Views

Clarence Maybee & Michael Flierl

PURDUE UNIVERSITY LIBRARIES
Institutional Context
Instruction Matters: Purdue Academic Course Transformation (IMPACT)

· Our Mission
  · Redesign foundational courses by using research findings to create student-centered teaching and learning environments.
SCOPE OF THE PROGRAM

- 289 faculty
- 478 courses

Students Exposed to Redesigned Courses
2011 - 2017

Photo by Tuhin Dey
IMPACT COMMUNITY OF PRACTICE

- 13 weekly meetings

- Teams
  - 3 instructors
  - 1 librarian
  - 1 instructional designer
  - 1 instructional technologist

IMPACT Meeting

Photo by Tuhin Dey
LIBRARIES & IMPACT²

• Librarians
  • Support design process
  • Integrate information literacy

IMPACT Librarians

Photo by Teresa Brown
Examining Libraries’ Interests in IMPACT

1. Teachers’ views of information literacy in active learning environments

2. Student performance, learning climate, & information literacy activities

3. Librarians’ experiences of working with instructors to redesign their courses
Research Question

- How do higher education teachers have their students use information in active learning courses?

- 11 Teachers who completed the IMPACT program

- Semi-structured interviews

- Thematic analysis
TEACHERS’ VIEWS OF INFORMATION LITERACY IN ACTIVE LEARNING ENVIRONMENTS³

Information skills students should know

- Discrete skills

Part of the Process (of learning)

- Applying a process (to learn)

Empowered by disciplinary information practices

- Adopting a stance or perspective (to learn)
Research Question

What are the relationships between the frequency and type of information engagements with which instructors task students, and student motivation and course grades?

Sample

- 102 course sections (44 courses)
- Students (N=3152; 46% response rate)
  - 50% female, 50% male
  - 35% first-year, 26% second-year
PERFORMANCE, LEARNING CLIMATE & IL ACTIVITIES

- Faculty survey

  How often do you have your students:
  - Pose questions
  - Access outside information
  - Evaluate information sources
  - Synthesize information and communicate the results
  - Apply conventions of attribution

- Student survey

  - Learning climate questionnaire (LCQ)
  - Basic psychological needs scale (BPNS)

- Course grades
- Synthesizing information and communicating results
  - statically significant relationship to course grade

- Conventions of attribution
  - negative statically significant relationship to learning climate

- Information literacy predicted 19% of the variance in course grade

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Standardized Coefficients</th>
<th>Model statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Grade</td>
<td>Pose Questions</td>
<td>.089</td>
<td>.19</td>
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<tr>
<td></td>
<td>Access Info outside</td>
<td>.018</td>
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<tr>
<td></td>
<td>Evaluate info</td>
<td>.082</td>
<td></td>
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<tr>
<td></td>
<td>Synthesize info and comm results</td>
<td><strong>.258</strong>*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conventions of attribution</td>
<td>.106</td>
<td></td>
</tr>
</tbody>
</table>

Model statistics:
- F = 4.56
- p < .01
- R² = .19
Research Question:
- What are librarians' experiences of facilitating course re-designs in a faculty development program?

- 7 Librarians who have served on IMPACT teams

- Phenomenographic interviewing & analysis
**LIBRARIANS’ EXPERIENCES**  
**INITIAL FINDINGS**

**Guiding teachers to...**

<table>
<thead>
<tr>
<th>Follow the Path</th>
<th>Gain Insight - the “aha moment”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actions</td>
<td>Listening; facilitating; brainstorming</td>
</tr>
<tr>
<td>Convincing; persuading</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>Integrated when supportive of learning outcomes</td>
</tr>
<tr>
<td>Literacy</td>
<td></td>
</tr>
<tr>
<td>Is a step in the process</td>
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</tbody>
</table>
OVERALL CONCLUSIONS

- Active learning requires students to engage with information differently\(^3\)

- Learning and information use are related\(^4\)

- Librarians support teachers to recognize how using information enables and shapes learning
NEXT STEPS

- New research to investigate...
  - Students’ perceptions of information literacy in active learning courses

- Develop librarians to expand their awareness of how using information enables learning
QUESTIONS

Thank you!
References


