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Information literacy in the disciplinary classroom: Three views

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Information Literacy in the Disciplinary Classroom: Three Views

Clarence Maybee & Michael Flierl
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.

IMPACT Partnership

Logo by Alejandra Carrillo-Munoz
**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
TEACHERS’ VIEWS OF INFORMATION LITERACY IN ACTIVE LEARNING ENVIRONMENTS

- 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
- Part of the Process (of learning)
- Empowered by disciplinary information practices

Discrete skills
Applying a process (to learn)
Adopting a stance or perspective (to learn)
PERFORMANCE, LEARNING CLIMATE, & IL ACTIVITIES

- **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>Course Grade</th>
<th>Independent Variable</th>
<th>Standardized Coefficients</th>
<th>Model statistics</th>
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<tbody>
<tr>
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<tr>
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<td>Conventions of attribution</td>
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LIBRARIANS’ EXPERIENCES
WORKING WITH INSTRUCTORS TO REDESIGN COURSES

- 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
## Guiding teachers to...

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


