Moving Beyond Finding and Searching: Putting the Framework to Work in Deepening Information Literacy Learning

Kelly Cannon, Rachel Hamelers, & Jennifer Jarson
Muhlenberg College
PA Forward Information Literacy Summit, July 21, 2016
Agenda

- ACRL Framework for Information Literacy for Higher Education

- Activities Beyond Finding and Searching
  - Assessing Source Types: Authority Is Constructed and Contextual
  - A Quick Read of Primary Scientific Literature: Scholarship as Conversation
  - Shaping and Reflecting on Process: Research as Inquiry

- Adapting Activities and Concepts for Your Own Teaching
ACRL Framework for Information Literacy for Higher Education

(comprised of 6 threshold concepts)
ACRL Framework for Information Literacy for Higher Education

- Authority Is Constructed and Contextual
- Information Creation as a Process
- Information Has Value
- Research as Inquiry
- Scholarship as Conversation
- Searching as Strategic Exploration
Assessing Source Types: Authority Is Constructed and Contextual

Kelly Cannon
Activity

- Imagine you’re an art history student and have been assigned the following:

  Research broadly on an artist and a sample work by that artist, which you will later shape into a thesis. Sources used in your project should be authoritative.

To prepare for this assignment, with your neighbor, list all the source types that could be used for this project (e.g. peer-reviewed journal article, encyclopedia entry).
ACRL Framework: Authority Is Constructed and Contextual

“Authority is constructed in that various communities may recognize different types of authority.”

Available Source Types

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Activity

- With your neighbor, rank the source types, identifying 1) the most authoritative source type and 2) the least authoritative source type, with rationales of why these source types were chosen.

(Assignment: Research broadly on an artist and a sample work by that artist, which you will later shape into a thesis. Sources used in your project should be authoritative.)
Authority is constructed in that various communities may recognize different types of authority.

## Ranking of Source Types

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Student Takeaways

- Is there a single valorized source type that stands above others, and if so, why?
- Within the discipline, to what extent are primary sources viewed as more or less authoritative than secondary sources in this discipline?
- Are there allowances for non-peer reviewed sources, and why?
- Can tertiary sources (encyclopedias) be used, and why?

How Might You Adapt This Idea for Your Teaching?

Think of a course or setting in which you could apply this activity or these concepts.

What would you keep? What would you change?
A Quick Read of Primary Scientific Literature: Scholarship as Conversation

Rachel Hamelers
Scholarship as Conversation

Communities of scholars, researchers, or professionals engage in sustained discourse with new insights and discoveries occurring over time as a result of varied perspectives and interpretations.

Research in scholarly and professional fields is a discursive practice in which ideas are formulated, debated, and weighed against one another over extended periods of time. Instead of seeking discrete answers to complex problems, experts understand that a given issue may be characterized by several competing perspectives as part of an ongoing conversation in which information users and creators come together and negotiate meaning. Experts understand that, while some topics have established answers through this process, a query may not have a single uncontested answer. Experts are therefore inclined to seek out many perspectives, not merely the ones with which they are familiar. These perspectives might be in their own discipline or profession or may be in other fields. While novice learners and experts at all levels can take part in the conversation, established power and authority structures may influence their ability to participate and can privilege certain voices and information. Developing familiarity with the sources of evidence, methods, and modes of discourse in the field assists novice learners to enter the conversation. New forms of scholarly and research conversations provide more avenues in which a wide variety of individuals may have a voice in the conversation. Providing attribution to relevant previous research is also an obligation of participation in the conversation. It enables the conversation to move forward and strengthens one’s voice in the conversation.

Developing familiarity with the sources of evidence, methods, and modes of discourse in the field assists novice learners to enter the conversation.

How to Read Efficiently?

- There is no one answer.
- We are looking at what works for the reader.
- Why do you need this skill?
- The activity builds on what they learned last semester.
The Quick Reading Activity

● As students walk into class – write at least two things each part of a primary article contains
● Review what we did IL-wise last semester, and what we will do this semester
● Post-it over the abstract
● In 2 minutes (for each question) find:
  ○ What is the question of the paper?
  ○ What did they do?
  ○ What did they find?
● How will you make this accessible to yourself in two weeks?
● Assessment
Abstract
Brief summary of entire experiment (does not include specific)
Includes why, aim and question
Is important for examiners
Helps determine whether to read rest of the article
or not?
Sometimes not included

Introduction
Why did the authors conduct the research?
What were the major hypotheses or predictions?
Background information
What led the researchers to want to do this?
Summary of major findings

Method
Design chosen
Experimental design
Materials and equipment

Results
Look at qualitative findings first
质性资料
Additional data
Use tables to display data

Discussion
Argue for why things happened the way they did
Sources
Looking over sources to make sure included what you want
Looks over articles from references to better understand topic
Compare results with other people's research
Make sure you have a solid background of the topic
Can be used for future research

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Shaping and Reflecting on Process: Research as Inquiry

Jennifer Jarson
What Does Your Research Process Look Like?

- Draw a representation that characterizes your research process.
- Think back to a specific example or think about what you generally do.
- Your representation might be a flowchart or outline or it might be an illustration/metaphorical representation.
- Your representation might include steps you took (forward and/or backward), key moments of discovery or understanding, the way you felt at key points, etc.
Research as Inquiry in the Framework

“Research is iterative and depends upon asking increasingly complex or new questions whose answers in turn develop additional questions or lines of inquiry in any field.”

Research Process Activity Goals

Students:

- Direct attention to process
- Identify strategies
- Understand iterative process is normal and even desirable
- Promote attitude of flexibility, exploration, and inquiry
- Promote reflection and metacognition

Librarian and faculty:

- Learn about students’ processes
- Identify opportunities for pedagogical improvement
Example Course Context

- 300-level course: Media Theory and Methods
- Required course for major
- Intensive research experience: Literature review
Timeline of Activities

1. Librarian-led information literacy in the classroom (1 of 2)
   a. Research Process Drawing Activity 1
   b. Discuss research as linear vs. iterative process
2. Students begin research
3. Librarian-led information literacy instruction in the classroom (2 of 2)
4. Individual research consultations with some students, as needed
5. In-class writing workshops
6. Submit assignment
   a. Research Process Drawing Activity 2
In the Classroom: Drawing Activity 1

At the start of the project:

- Draw a representation (e.g., picture, outline, flow chart, or diagram) that characterizes your typical research and writing process.

- You might think back to a specific example, like the last time you did a research paper or project, or you might think about what you generally do.

- Your representation might include steps you took (forward and/or backward), key moments of discovery or understanding, the way you felt at key points, etc.
Timeline of Activities

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   a. Research Process Drawing Activity 2
In the Classroom: Research as a Linear Process

Project assigned → Select a topic → Collect sources → Read sources → Write → Submit
In the Classroom: Research as an Iterative Process

“I had a couple [students] come up to me after to say that the inquiry circle really clicked.”

-Faculty
Timeline of Activities

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2. Students begin research
3. Librarian-led information literacy instruction in the classroom (2 of 2)
4. Individual research consultations with some students, as needed
5. In-class writing workshops
6. Submit assignment
   a. Research Process Drawing Activity 2
In the Classroom: Drawing Activity 2

After submitting the final product:

- Draw a representation (e.g., picture or outline or diagram) that represents your research and writing process for the literature review assignment.

- Think back to the very beginning, when you first learned about the assignment and started thinking about what you wanted to work on, all the way to when you submitted your final paper.

- Include information about the steps you took (forward and backward), where you changed direction or encountered problems, the way you felt as you progressed in the assignment, etc.
A Student’s Perspective on Process

Choose Topic → Preliminary Research → Annotated Bibliography

Draft

5 Sources

3 More Sources

Final Draft: Writing

Reading Highlighting

Throw Away One Source

Editing → Turn in

Very Back and Forth

Process was Lengthy, but I Worked on the Majority of It Once.
A Student’s Perspective on Process
A Student’s Perspective on Process

- **Beginning**: Nervous in the beginning because of the large task ahead. I am not a fan of research papers.

- **Middle**: Freaking out because I was still very confused by the instructions and overwhelmed by the amount of articles.

- **End**: Happy that it was over. So tired.
## Evidence of Iterative Inquiry in Students’ Work

**Spring 2016, 22 students**

<table>
<thead>
<tr>
<th>Nature of iteration</th>
<th># Students</th>
<th>% Students</th>
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<tbody>
<tr>
<td>Iterations in writing (revisions, drafts)</td>
<td>12</td>
<td>55%</td>
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<tr>
<td>Iterations in idea/topic/question (revision, negotiating breadth/narrowness, using sources to inform ideas)</td>
<td>8</td>
<td>36%</td>
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<tr>
<td>Organization of information/ideas to manage, synthesize, find connections</td>
<td>7</td>
<td>32%</td>
</tr>
<tr>
<td>Iterations in searching for sources (returning to research in later phases)</td>
<td>4</td>
<td>18%</td>
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<tr>
<td>Discard irrelevant information</td>
<td>2</td>
<td>9%</td>
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Why We Should Talk about Process

Students:

- Direct attention to process
- Identify strategies
- Understand iterative process is normal and even desirable
- Promote attitude of flexibility, exploration, and inquiry
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Librarian and faculty:

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- Identify opportunities for pedagogical improvement
How Might You Adapt This Idea for Your Teaching?

Think of a course or setting in which you could apply this activity or these concepts.

What would you keep? What would you change?
Discussion

Questions?

What are some of the ideas you came up with for adapting these activities and concepts for your own teaching?
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