

Topical Subjects Sources as Catalyst for Inquiry-Based Learning

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Topical Subjects Sources as Catalyst for Inquiry-Based Learning

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ACRL Information Literacy Frame: Scholarship as Conversation

Discipline: Arts & Humanities

Subject: English; other Humanities related fields; First-Year Writing; Interdisciplinary

Learning Theories: Social Learning Theory; Social Development Theory

Pedagogies: Bruner's Inquiry-Based Instruction and Procedural Scaffolding; Informed Learning

Instructional Strategies: Vygotsky's Zone of Proximal Development; Metacognitive strategies

Special Populations: International Students; First-Generation College Students; Non-Traditional Students; First-Year Students; Multicultural/Diversity; Undergraduate Students

There is a great deal of power in contention. One short, declarative sentence—“I do not agree!”—began a journey that resulted in the current iteration of this lesson plan. When asked to share the discussion underlying the disagreement, the student making the outburst explained that during a source evaluation lesson he and his partner disagreed about whether a particular source contained any bias. The conversation quickly exploded, igniting the attention of the entire class as we engaged in a larger discussion in which students presented their understanding of bias and debated its presence or absence in context of our source analysis exercises. Watching the chain reaction stemming from a single disagreement served as the pivotal inspiration for reworking the lesson into its current form.

ACRL Information Literacy Frame: Scholarship as Conversation

While the lesson touches on more than one area of the *Framework for Information Literacy for Higher Education*, the predominant tie-in is to the Scholarship as Conversation frame.¹ Within the overall plan, incorporating elements of the frame into learning activities provides an opportunity for students to understand that research is an ongoing conversation—a conversation in which new information is constantly added, synthesized, responded to, and, possibly, rejected. Most important, even among all the experts, students take part in this conversation whether they contribute to the written dialog or not. With that in mind, each learning activity is designed to help novice learners to critically engage with the material. The think-pair-share evaluation criteria are designed to help students start to “critically evaluate contributions made by others in participatory information environments” as well as “identify the contribution that particular articles, books, and other scholarly pieces make to disciplinary knowledge.”² The larger activity, the contentious issue article evaluation, teaches students the value of “citing the contributing work of others in their own information production ...and ...recognize that a given scholarly work may not represent the only or even the majority perspective on the issue.”³

Learning Theories, Pedagogies, and Instructional Strategies

Learning Theories: Social Learning and Social Development

Instructional Strategy: Zone of Proximal Development

Social Learning Theory is often presented as the link between strict behaviorist and cognitivist learning theories because it incorporates the reinforcement of behavior while recognizing the importance of attention, memory, long-term retention, and individual student motivation.⁴ Social Learning Theory and Social Development Theory argue that learning takes place in a social environment in which social interaction reinforces the lessons learned by modeling correct behavior and allowing students to see both a fully formed version as well as the initial constructs attempted by and influenced by their peers.⁵ A crucial element of Vygotsky's Social Development Theory is the idea of the Zone of Proximal Development, or ZPD. A common phrase in learning theory discussion is ZPD+1—that is, a student will experience desirable difficulty and learning gains when asked to perform at the edge of their comfort zone. Basically, students need to be challenged at the right level. If they are pushed too far beyond their current level of knowledge, the student will feel overwhelmed. If the work is too easy, they will tune out.

Pedagogies: Informed Learning & Inquiry-Based Instruction and Procedural Scaffolding

Instructional Strategy: Metacognition

While the lesson utilizes a fair bit of guided discussion and a modified version of discovery learning, it is not wholly influenced by one particular theory. The core idea—wrestling with difficult concepts and controversies—stems from discovery learning and the idea that students teach themselves; we simply provide the opportunity for them to engage with material and link it to their prior knowledge.^{6,7} Strict discovery learning has been criticized for its potential of reinforcing misconceptions and the taxing nature of teaching oneself; however, it is very similar to Piagetian principles and metacognitive strategies, so synthesizing ideas from multiple sources, like informed learning, also serves as a theoretical basis for this lesson plan.^{8,9} The first active learning module is an open-discussion question-and-an-

swer period in which the students are asked via the PowerPoint to define what the term “source” means to them. Then students are asked to name multiple types of source material to help begin the process of expanding their world-view: while an academic journal article is definitely a source, a Beyoncé music video is potentially one, too. This activity leads into the discussion over source applicability and appropriateness. By creating situations that tie in authentic scenarios representing occasions when students might need to use these strategies, ideas of Informed Learning are synthesized into the overall conceptual framework.¹⁰

The intent underlying this lesson plan is not to view first-year students as “tabula rasa” or blank slates but as individuals who have their own knowledge base and experiences.¹¹ The open discussions and peer-to-peer learning activities are designed to engage with the first-year student’s prior knowledge and use it as the foundational building blocks to turn natural curiosity or skepticism into robust critical thinking skills that can assess the value of information and its function in the overall scholarly conversation.^{12–15} The acknowledgment and incorporation of a student’s existing knowledge and experiences create links between these experiences and the current lesson. As an example, when discussing academic peer review, a librarian can reference the students’ own peer-review activities in a writing class. Thus, students have a frame of reference for the discussion, see the parallels and difference in magnitude between the two processes, and retain such information better. Therefore, building on a student’s own knowledge and experience helps with the overall retention of the lesson, development of formal evaluation skills, and understanding the cross-application in other areas of life.

Lesson Plan

Learner Analysis

While this lesson plan is fairly universal in that it can be easily tailored to a particular discipline or group, it was originally created to instruct students in the First-Year Writing Program.

The Typical Student

- May be composing academic writing for the first time and using scholarly sources for the first time.

- Will come to class with their own knowledge and experience, which will inform peer-learning.

Special Populations

- As this lesson plan acts as a solid introduction to the idea of Scholarship as Conversation (as well as Authority), this lesson plan would be useful for first-generation students and non-traditional students who may be unfamiliar with overall source evaluation. It provides both populations the opportunity to develop critical-thinking skills and gain understanding and practical experience in assessing the value and role of information in the scholarly conversation.
- This lesson plan has been used with international students. Additional consideration will be needed in selecting articles to be discussed, as students may be coming from a wide variety of international backgrounds and be unfamiliar with certain source selections. Furthermore, the Contentious Subject Article Evaluation may need more time and the librarian may need to provide more support to group discussions.

Limitations for Typical Student

- Students may have limited (or no) background knowledge in relation to the contentious subject the instructor has selected, limiting student buy-in for the activities. As the focus of this lesson plan is on contentious subjects, diverse or underrepresented populations may feel hesitant to speak. The instructor will need to take special care in moderating the conversation to ensure that all students feel comfortable participating while also communicating in a way that is respectful of peers.

Opportunities for Typical Student

- As each student participates with their peers in a group-based evaluation of a source, ideas are shared, refuted, reconstructed, and more in a continual tug-of-war to assess the value of information and where it might fit in the scholarly conversation. In order to come to a conclusion, students may realize that their prior knowledge and experience on which their pre-conceived notion is based may be limited.

- First-year students become immersed in “the gray” or the areas where information does not fit into a perfect pre-conceived box. In these cases, students have to fully deploy critical-thinking skills to come to some sort of resolution in regard to the value of the information and, in turn, become aware of the subjective nature of evaluation as a whole.

Orienting Context and Prerequisites

- There are no pre-instruction learner tasks or prerequisites.

Instructional Context

Pre-Instruction Work for the Instructor

- Regardless of the multiple learning environment scenarios this lesson plan might be used in, the pre-instruction work is fairly the same.
- The instructor will need to determine the contentious subject that will be used as the central topic theme and gather both scholarly and non-scholarly resources for that subject.
- An evaluation criteria-based questionnaire worksheet will need to be developed and given to each group along with one of the pre-determined articles.
- If there is minimal technology available, a handout or display regarding the preliminary evaluation criteria discussion will need to be created. See the Padlet example for ideas (<https://archive.org/services/purl/acrl-dlo/klj12>).

Teaching Environment

- This lesson plan is designed to be adaptable to multiple types of learning environments.
- The use of technology is merely meant to be an aid to improve engagement with the material and with the learners; however, the lesson plan has flexibility built in to handle situations where technology is not available or would be, at best, a hindrance.

Optimal Environment

- A dedicated library instruction classroom
- Computers or suitable equivalents (tablets, etc.) available for each user

- Instructor computer or technology podium
- Projector and screen for instructor's use
- Stable, fast internet connection for instructor and users
- Seating or workstations arranged in a manner that facilitates group learning
- Pre-selected articles and worksheets for group work

Bare Bones Environment

- Instructor
- Students (and places for them to sit)
- Instructional materials (pre-selected articles and worksheets)
- With this scenario, the students would still work within groups using the criteria to evaluate the source that prompts investigative discussion; however, the instructor would also be an active participant within these groups to help bridge background knowledge gaps and provide extra guidance as needed.

Learning Outcomes and Learning Activities

Learning Outcomes

1. Students will recognize the difference between popular and scholarly sources in order to appraise a source's value within their own research.
2. Students will assess a source's original intent, editorial and publication process, and the expertise of its author in order to determine its credibility.

Learning Activities

1. Introduction (*LO1–2, 5 minutes, essential*)
 - The librarian opens the session with a brief didactic lecture that includes introducing oneself and discussing the learning outcomes with the class. Students are given further context about the session as a whole to help them understand how the session ties directly to the work they are doing in the class, emphasizing the importance of source reliability, validity, and applicability.
2. Icebreaker: Open Discussion of Foundational Concepts (*LO1, 5 minutes, optional*)

- Students engage in a librarian-led, open-ended discussion focused on these questions:
 - ▷ What is a source?
 - ▷ What are different types of sources?
 - ▷ What does “relevant” mean when we are talking about a source?
 - ▷ What does “reliable” mean when we are talking about a source?
 - The discussion can be guided to emphasize that while traditional academic articles are definitely sources, a Beyoncé music video could potentially be a source as well.
3. Scholarly versus Popular Criteria Determination (*LO1, 10 minutes, optional*)
- Think-pair-share activity
 - Required: Method for displaying criteria for discussion (example: <http://padlet.com/kljohnson12/criteria> [see figure 36.1])

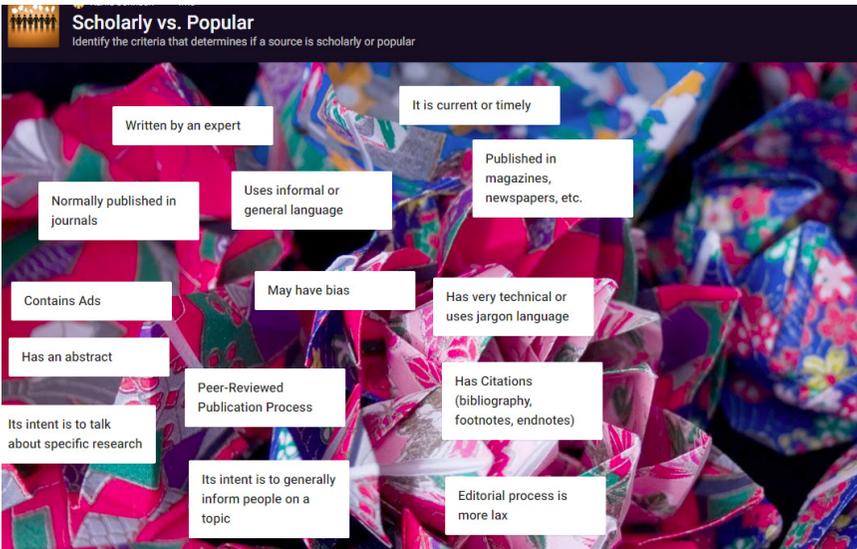


Figure 36.1. Criteria that determines if a source is scholarly or popular

- Students are divided into small groups (two or three students) and given five minutes to determine whether a criterion applies to scholarly or popular sources. They share their

thoughts, and will then participate in a group discussion of each criterion, emphasizing their nuances. The librarian will act as a facilitator during the discussion.

- The following points are generally touched upon in such a discussion:
 - ▷ So what does it mean when we say a source is “scholarly”?
 - ▷ So what is a popular source?
 - ▷ What are examples of popular sources?
 - ▷ What is the intent of a popular source?
 - ▷ Does this mean that a popular source is inferior to a scholarly source?
4. Open Discussion/Didactic Explanation of Evaluation Criteria (*LO1, 5 minutes, optional*)
- This is an extended discussion that can continue from the last activity. The librarian can lead a more in-depth discussion of evaluation criteria (or lecture, depending upon participation). These discussions tend to be organic, but the following points are often included:
 - ▷ purpose/intent of sources
 - ▷ authorship/authority (and their signifiers)
 - ▷ publication process of various sources
 - ▷ peer review and its meaning in an academic context
 - ▷ citations
 - ▷ bias/objectivity
 - ▷ currency
 - ▷ audience/language
5. Contentious Subject Article Evaluation (*LO1–2, 25–30 minutes, essential*)
- Group activity
 - Required: A number of sources on a contentious topic (immigration, climate change, etc.). Articles should range from strictly academic to nebulously popular, preferably including some with questionable reliability.
 - Students are divided into groups of four or five, and each group is given one of the pre-selected articles and a worksheet. The worksheet has questions related to the points included in the previous activity.

- The groups are instructed to evaluate their article using the questions from the worksheet, which emphasizes two points: investigate the publication process of the source to determine peer review and thoroughly investigate the authors.
- In the ten to fifteen minutes during which groups are evaluating and discussing articles, the librarian should circulate the room and listen to the discussions. This allows the librarian to assist with any confusion and to play “devil’s advocate” to prompt further explanation.
- Each group will present their conclusions and explain their process to the class as a whole.

Assessment

Assessment Goals

- The librarian will assess student learning and application of material learned in this session.

Assessment Tools

- For the Contentious Subject Article Evaluation worksheet, the librarian will develop a rubric for assessing the group worksheets.
- While the rubric should work with any set of articles used, the characteristics (scholarly, popular, unreliable, etc.) of the article the group analyzed should be kept in mind during grading.

Success Measurement

- Success will be measured by scoring the worksheets.

Appendix 36A

Articles for Source Evaluation

Contentious Topic: Immigration and Human Smuggling

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Notes

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