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Beyond the Checklist Approach: A Librarian-Faculty Collaboration to Teach the BEAM Method of Source Evaluation

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Abstract

Evaluating information is an essential skill, valued across disciplines. While librarians and instructors share the responsibility to teach this skill, they need a common framework in order to collaborate to design assignments that give students multiple opportunities to learn. Librarians and First Year Seminar faculty at Belmont University collaborated to design a unit of instruction on source evaluation using the BEAM method. BEAM requires students to apply a use-based approach to evaluation, to read and engage with sources more closely, and to think about how they might use a source for a specific purpose. Structured annotated bibliographies that included BEAM were assessed, along with student, instructor, and librarian feedback. The BEAM method may be an effective method for teaching information evaluation when paired with other sequenced assignments that guide students through the research and writing process.

Keywords: information literacy, source-based writing, BEAM method, information evaluation, information use, assessment

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Beyond the Checklist Approach: A Librarian-Faculty Collaboration to Teach the BEAM Method of Source Evaluation

Evaluating information is an essential information literacy skill, valued by librarians and faculty alike, but often only addressed with a one-shot library instruction session. Librarians at Belmont University have evolved their instruction on information evaluation for First-Year Seminars (FYS) to better align with the big ideas of the Framework for Information Literacy for Higher Education (Association of College and Research Libraries [ACRL], 2015). However, as students continued to struggle with selecting and using quality sources, in 2019, they made two big changes: 1) collaborate with faculty to design a sequence of assignments for the argument paper and 2) revise their teaching of information evaluation, from a trust-based, checklist approach of criteria to a holistic, use-based approach that includes analyzing how the source will be used to answer a research question or advance a knowledge claim. Using Bizup's (2008) BEAM method, students were taught to focus on what they might do with sources rather than on what sources are. This concept appealed to Belmont librarians who felt that students could find sources to satisfy assignment requirements (use one book, two journal articles, etc.) but then did not know what to do with them. Working with two FYS instructors, librarians proposed a unit of instruction that would introduce the BEAM method to students, give them an opportunity to practice applying the method with example sources in a group setting, and then apply the method to their own topics with an annotated bibliography assignment. Assessment of student work indicates that the BEAM method is an effective way for students to engage with sources. This article presents lessons learned from using BEAM to structure and teach a sequence of assignments that guide students through the process of research and writing.

Literature Review

The skills and habits of mind necessary to evaluate information require a set of integrated abilities. Students must be able to use search engines and library databases to find information sources. They must be able to read a variety of sources critically, including scholarly texts for which they may not have disciplinary knowledge to place into context. They must make decisions about how the information will be used and for what specific purpose. A Project Information Literacy study recognized the difficulty novice student researchers face when they wrote, "Evaluation involves assessment about the potential usefulness of information within a set of circumstances and information needs" (Head & Eisenberg, 2010, p. 9).

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Value of IL

Instructors and librarians agree that information evaluation is a crucial skill for college students across disciplines, but there has been less agreement about who is responsible for teaching these skills, where they fit into the curriculum, and how they should be taught (Moran, 2019; Saunders, 2012). While faculty have been overwhelmingly supportive of IL and have recognized the shared responsibility of teaching IL skills with librarians, faculty have continued to perceive students' information literacy skills to be insufficient (Dubicki, 2013). Integration into the curriculum requires a high level of communication and collaboration across campus, which has been difficult to achieve in practice (Cumming et al., 2016; DaCosta, 2010; Yevelson-Shorsher & Bronstein, 2018). It is evident that evaluation skills need improvement and that more collaboration between faculty and librarians is needed in order to teach these skills well.

Teaching Information Evaluation: The Checklist Approach

For such collaborations to be successful, librarians should first reflect on how they teach information evaluation. Belmont librarians have long taught students to use a list of criteria to evaluate sources using outside markers of quality (e.g., authority, currency, objectivity) to judge a source quickly. Students are often familiar with this approach, but the result, as Lenker (2017) described, is a "mechanical application of the criteria to determine whether a source is 'good' or 'bad.'" (p. 722). Even if students are able to select good sources, when they write their papers, they don't always know what to do with them. The common classroom discourse focused on the idea of finding sources as the goal of the research process is limiting students' critical thinking skills about information. A checklist approach, or a popular vs. scholarly "litmus test approach" does not promote critical thinking (Holliday & Rogers, 2013, p. 264). While instructors want students to go beyond just finding sources, summarizing them, and stringing quotes together, the design of some research assignments do not teach the skills needed to do so. Holliday & Rogers (2013) argued that research assignments should promote a discourse of "learning about" rather than "finding sources" in order to prevent surface research and to teach students how to read and interrogate sources for the purpose of learning (pp. 268–269).

Teaching Information Evaluation: The BEAM Method

The BEAM method was developed by Joseph Bizup, English professor and writing pedagogy scholar. Rather than focusing on what sources *are*, Bizup (2008) proposed a focus on what students might *do* with them. He developed BEAM as a vocabulary that could be used to teach students to think about the functional roles sources might play in a piece of writing: as

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Background, Exhibits, Arguments, and Method. Belmont librarians have observed that instructors often require a certain number of sources by format (books, journal articles, etc.). Bizup urged against this approach, writing, "we lead students astray if we lead them to believe that the mere number or variety of their sources is more important than how well they use them in their texts" (p. 81). Rather than a minimum number of sources, Bizup recommended requiring students to use each source in one or more ways delineated by BEAM. Background sources are those that establish facts or generally accepted information. Writers analyze or interpret Exhibit sources in order to make their own meaning from them. Writers engage in conversation with Argument sources by affirming, extending, or disputing them in some way, and writers use Method sources as a theoretical lens for interpreting evidence or arriving at conclusions.

BEAM in Writing and Rhetoric

The BEAM method has appeared most prominently in the writing and rhetoric literature in works about writing across the disciplines. Bean (2011a) suggested using BEAM to teach research skills to novice students when explaining the function of sources. He also recommended teaming up with a librarian and scaffolding assignments to help students practice how they would derive evidence from exhibits and join an academic conversation by using argument sources (Bean, 2011b). Sura's (2015) approach aligns with Bizup, focusing on "aim-based writing" and writing from sources while also incorporating primary research. Kleinfeld and Wright (2019) found that "students are not making sophisticated decisions about how to integrate sources into their writing" and described brief activities that can be done in a class period to teach students about source use (p. 39). Friedman and Miller (2016) reported that their students have found BEAM to be a good complement to the "moves" outlined in the commonly used writing textbook Rewriting: How to Do Things with Texts by Joseph Harris. Comparing the two systems, they noted that it "helps to know that you 'come to terms' with Background sources...; you 'forward' and 'counter' Argument sources; you 'take an approach' with a Method source" (Friedman & Miller, 2016, p. 200). Troutman and Mullen (2015) re-named Bizup's schema 'I-BEAM,' adding another category, the 'Instance' source, which they defined as deploying "source materials in a constitutive manner, to signal and even to create the particular opportunity the writer is seizing in the work, making clear the work's exigency, importance, and or implications" (Troutman & Mullen, 2015, p. 184).

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BEAM in Library Instruction

Belmont librarians discovered BEAM through the work of Lenker (2017), who argued in favor of a developmentalist approach to information evaluation, one that makes *learning* the central consideration. In other words, a source's value depends on what the user learned from it or how it changed their thinking. He argued that developmentalism should be taught in addition to a trust-based approach (checklist) and use-based approach (BEAM). For instruction librarians, an understanding of BEAM as a use-based approach is a good starting place. Veach (2012) suggested that Bizup's work is a useful introduction for librarians to "rhetorical information literacy pedagogy" (p. 113).

Several librarians have shared practical applications of teaching with BEAM. Rubick (2015) shared a lesson in which students were introduced to BEAM and then analyzed selected portions of text and citations in an article during an in-class group activity. A Google search conducted by the authors using the keywords *BEAM*, *Bizup*, and *libguide* returned numerous examples of librarians promoting BEAM. While these instances provide evidence of BEAM's adoption in the field of information literacy, there are no examples in the literature assessing student work using BEAM. This study hopes to fill that gap by gathering feedback from students on their perceptions of BEAM and analyzing their application of it in an annotated bibliography assignment.

Information Literacy at Belmont University

As a teaching institution that prides itself on a high-touch approach to liberal education, Belmont's general education program is well-developed and extensive. FYS is the foundational general education course for information literacy. Over the past five years, librarians reached almost 90% of the more than 70 sections of FYS. FYS is taught by faculty from all disciplines, with each section taking a unique approach to the overarching theme "ways of knowing" by exploring "the nature of knowledge, how it differs from mere belief, and the various ways in which human beings construct and evaluate knowledge claims" (Belmont University, n.d., First-Year Seminar section).

FYS includes common assignments across all sections, including an argument paper that requires students to use at least five "substantial" sources. Instructors have varying understandings of what constitutes a substantial source; some interpret this with rigid guidelines and limit students to peer-reviewed sources, while others allow a variety of source types and encourage a more flexible approach. The latter interpretation is becoming more common, creating an opening for

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librarians to provide expertise as a partner in teaching these skills. The question of "what is a substantial source?" is the focus of IL sessions for this course, connecting the lesson to the argument paper assignment.

Evolution of Information Literacy for First Year Seminar

Since adoption of the *Framework*, the lesson for FYS has evolved to move beyond a checklist of criteria in order to get students to think about how they might use a source for a specific purpose. The changes were informed by the work of Bizup (2008) and Lenker (2017) but originally did not include teaching BEAM explicitly. Students were taught to evaluate information holistically by focusing on two ideas: 1) evaluate for credibility based on outside markers of quality, the checklist approach, and 2) evaluate information based on usefulness, or what purpose it serves and how it helps address or answer the research question. In other words, find information that is both substantial *and* useful. The lesson plan was modified with these goals in mind and student feedback was encouraging. The language of BEAM seemed to resonate with students, so the librarians wanted to teach it explicitly as part of a sequence of assignments.

Designing and Implementing a Sequenced Research Paper Assignment

A team of three librarians collaborated with two FYS instructors to design a sequence of assignments for the argument paper that would include BEAM. We wanted to scaffold the paper so that first-year students would be less overwhelmed and also support new FYS faculty, many teaching an argument paper for the first time. Four units of instruction comprised the toolkit: defining the concept of an argument, selecting a topic, choosing and using sources, and thesis statements and outlines. The BEAM method was taught in the unit on choosing and using sources. First, students were introduced to BEAM with a video before the in-class session led by a librarian. In a departure from previous lessons, students were not asked to find their own sources to evaluate in class. Rather, a course reading was used to examine another writer's use of sources to develop an argument. The librarian reviewed the BEAM method and led the class through an example using one of the sources cited in the course reading. Together, the class looked at a citation, first evaluating it for credibility using the checklist approach and then considering how the author used the source, what purpose it served, and finally categorizing it according to BEAM. The librarian led the class in writing a sample annotation for the source that would be similar to the annotated bibliography assignment to follow, with each annotation including three elements: Summarize, Assess, Reflect ("Annotated Bibliographies," n.d.). Students practiced writing annotations and categorizing sources using BEAM in small groups and then

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reported out to class. Following the class session, students completed a structured annotated bibliography assignment on their own topics. See Appendix A for the lesson plan.

Assessment Methods and Findings

An application for IRB review was submitted and exempt status was approved to work with students in two sections of FYS during the fall 2019 semester. Assessments included two student surveys, one immediately following the librarian-led BEAM session and one after they turned in their argument papers at the end of the semester, and a rubric assessment of annotated bibliographies.

Student Surveys

Student reaction to the librarian-led session on the BEAM method was very positive. An ACRL Project Outcome survey was sent to 44 students immediately following the instruction and was completed by 23 students for a response rate of 52%. Eighty-seven percent of students reported they learned something new, 92% intended to apply what they learned, and 78% felt more confident about completing assignments. Students were asked to respond to an open-ended question about BEAM, and the majority of the comments were positive statements about how BEAM will help them think more critically about sources. Several commented on the usefulness of categorizing sources to reflect on what type of evidence they had in their papers and what they might be missing. One student elaborated on this point, writing:

I think the BEAM method will help me find sources that do a variety of uses for my paper. Mostly, when I have done research papers in the past, I have used all of my sources in the same way (usually in argument). This will help me find an array of sources to make my paper even more complete.

Another wrote:

I do think the BEAM method will help me succeed because it looks at sources in a new way. You can understand the author's purpose of the source and then compare it to your method of use which helps you know how you will use the source in your paper.

Several students made positive comments on the novelty of the BEAM method, a new and different way to evaluate information than what they had been taught previously. While most comments were positive, a few students struggled with BEAM. One wrote "I think it will be partially helpful. I was more focused on trying to figure out what category of BEAM the article fit

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in," revealing that some students may revert back to categorizing what the source *is* rather than what it *does* as they were used to doing with a checklist approach.

Students were surveyed again at the end of the semester. Thirty-eight students completed this survey about the entire sequenced research paper. A question on the helpfulness of the individual assignments was illuminating. Out of the sequence of six assignments, students were asked to rank the three they found most helpful. The majority chose the research proposal, the librarian-led BEAM activity, and the annotated bibliography using BEAM, as shown in Figure 1.

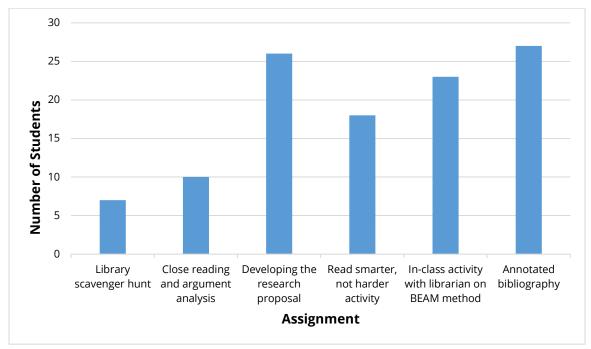


Figure 1: Most Helpful Assignments

When asked to describe how one assignment directly impacted their papers the majority of students commented on the research proposal or the annotated bibliography, which required students to reflect on how the source would be used and then to classify it according to BEAM. Several students commented directly about BEAM, with one writing, "The BEAM activity helped me to identify my sources to then be able to put them into my paper in a cohesive way." Another wrote, "In learning about the BEAM method, I was able to sort through the sources I had and solidify which ones were the most helpful to my paper."

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Annotated Bibliographies

In addition to the surveys, 38 annotated bibliography assignments were assessed using a rubric developed by the librarians, which uses the language adapted from the Purdue OWL's description of an annotated bibliography ("Annotated Bibliography," n.d.). See Appendix B for the rubric. The course instructors provided feedback to students using the same language and graded for completion; the rubric was only used in assessing student work for this study. After a norming session in which librarians scored student work together in order to reach consensus on the rubric application, the majority of student work was scored independently by two librarians, whose scores were averaged. The librarians kept notes on their findings including examples of things students did well and areas needing improvement. The majority of students scored in the "developing" category in their ability to summarize, assess, and reflect on their sources, as shown in Figure 2.

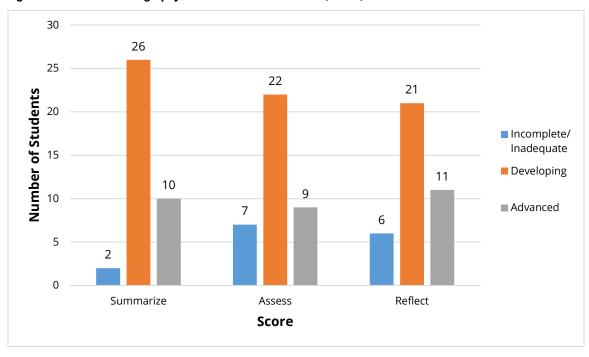


Figure 2: Annotated Bibliography Rubric Assessment Results (n = 38)

Note. Average scores: Summarize = 2.8, Assess = 2.3, Reflect = 2.6

Students scored highest on the "summarize" portion of the annotations, but one common area of weakness was superficial summaries of the purpose of a source. For example, one student summarized a source by writing, "It is an extremely informative source that presents a lot of important information." Students struggled most with the "assess" category, often with misplaced

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focus on bias and objectivity while missing the main purpose of the source. Many students' main assessment of a source was that it was objective because it provided "facts and evidence." For example, one student wrote, "This piece is not biased because it was made solely to inform." When discussing reliability, many students mentioned the "facts" found in the text but did not mention the credentials or experience of the author, their methods, or the credentials of the source itself. Most students were able to identify peer-reviewed journal articles, although a few misidentified websites that cited multiple scholarly sources as scholarly. Students had more trouble assessing websites or other types of periodicals, sometimes asserting that the information was reliable by simply naming the periodical title or website without providing any further details on why it was a reliable source.

Students performed better on the "reflect" portion of the annotations, with 29% scoring in the advanced category and 55% in developing. Students did best at identifying background and argument sources. One student wrote:

This source gives a lot of background and context of the situation with eating disorders in athletes so I think I would use this as background and also as evidence for my argument. The source was very helpful in giving more context for the issue and also including why this research is important.

Many students were able to identify one or two sources that were most helpful in forming their argument, some even saying a certain source formed the basis of their argument. Many commented on how the sources related to one another. Several students commented on a source's shortcomings. For example, a source might be relevant to their topic and partly useful but may not provide the best evidence they could find. Others commented on what they learned from the source, such as new terminology, and how it would further their research. Student success in identifying exhibit sources was more mixed. Several students did this well. For example, one student identified a source with two interviews as an exhibit because they analyzed the two differing perspectives presented. Another labeled a journal article as an exhibit because they interpreted the results of the study in relation to their topic. Conversely, a few students described their use of study results and data in a similar way but labeled all such scholarly articles as argument sources. They were able to articulate why and how they would use the source, but the label did not match.

There were also students who clearly did not have a good understanding of BEAM in this first attempt to apply it to source analysis, especially the exhibit and method categories. Students were instructed to focus on background, exhibit, and argument sources in this assignment, but some

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attempted to use the method label, most unsuccessfully. There was also some confusion about what constitutes an exhibit source, with some students labeling anything that included a statistic as an exhibit or confusing a background source that provided context with an exhibit.

Discussion

The librarians and two FYS instructors found BEAM to be a useful method of information evaluation when used as part of an intentional sequence of assignments that guided students through the research process. They were pleased with the students' reaction and application of BEAM and see potential in using this method in FYS and other courses. The language of BEAM is accessible, and so it may be particularly useful for FYS, which is taught by faculty from all disciplines. BEAM contributed to the way each of the instructors thought about teaching information evaluation. Although they had taught evaluation skills in previous courses, the types of assignments were different, and in one case, the instructor taught more practical applications, such as evaluating information in order to select teaching tools. The other instructor had more experience teaching traditional research papers but had focused on identifying academic sources rather than teaching students how to use a source effectively.

Sequencing the Argument Paper

Both instructors reported that they greatly benefited from the collaboration in terms of the design and sequence of the assignments. For example, one instructor, who had always assigned research as a step-by-step process, changed the order of her sequenced assignments. Previously, she instructed students to write their thesis prior to conducting research and before the annotated bibliography. As a result of the collaboration, she has re-ordered the assignments to reflect a focus on the research process in formulating a true thesis statement.

Based on the student feedback, the most important sequence of assignments was the research proposal, the librarian-led session on BEAM, and the annotated bibliography. Going forward, this three-assignment unit of instruction will be recommended to all FYS instructors. One of the lessons learned from this initial collaboration and piloting of the assignments is that the librarians and faculty must have a good understanding of BEAM and an opportunity to practice applying it to the use of sources. The librarians created a brief video to introduce BEAM to students and provided sample annotations. In addition to these materials, the Bizup (2008) and Lenker (2017) articles were shared with instructors, but they could have benefitted from additional training workshops to discuss BEAM categories and how it can be used to help students select topics, evaluate sources, and as a tool to review drafts.

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Modifying Instruction to Improve Students' Understanding of Texts and BEAM

Based on the assessment of students' annotated bibliographies, the authors identified two areas of improvement needed for students: 1) reading and understanding texts and 2) understanding BEAM categories. Many students struggled with the "assess" portion of the annotations, making superficial assessments of the credibility of a source, indicating a reluctance to give up the habit of using the old checklist approach of evaluation. They struggled to engage deeply with sources and instead relied on buzz words: bias, facts, evidence, etc. The instructors and librarians realize they need to be more intentional about bridging the gap from where students are, recognizing what they have probably already learned about information evaluation, acknowledging the checklist approach and its value, and then giving them opportunities to read and understand texts in a group setting. The "Choosing and Using Sources" unit included an optional assignment on critically reading scholarly articles, called "Read Smarter, Not Harder!" that may be an important part of the sequence of assignments. See Appendix C for this assignment. The annotated bibliography assignment also included three examples of annotated sources. The librarians could wrap up the in-class session by reviewing these annotations to demonstrate the level of deep reading and assessment required to truly understand a source.

When it came to applying BEAM categories, most students demonstrated a developing understanding of background and argument sources, and these two source types appeared the most in the annotated bibliographies. In particular, most students were able to recognize that peer-reviewed journal articles often advance an argument. However, there was more confusion about other types of sources, especially non-scholarly sources found on the Web, and exhibit sources. It seems that students have had less experience analyzing exhibits in order to develop a thesis or argument. This is revealing to instructors who are hoping that students will attempt to enter scholarly conversations by developing their own novel arguments rather than merely patchwriting and pulling quotes from sources, resulting in simplistic final papers (Howard et al., 2010). An exhibit source could be anything the student analyzes or interprets such as a primary source document, a literary text, a song, data, etc., anything that requires further explication in order to make some meaning of the source and that helps to develop or advance the argument or claim being made. Because of this variety of possibilities and the fact that there isn't a "typical" exhibit source, students had trouble identifying exhibit sources. The use of exhibits may be a big missing piece in the design of argument paper assignments. Designing the argument paper assignment to require at least one exhibit and teaching students about exhibit sources explicitly, by providing examples as they are developing their topics and examining how other writers use exhibits, could significantly impact how students understand the purpose of the paper: it is about

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inquiry, and they can and should assert their own voice into the conversation. Bizup (2008) argued that BEAM can be used to help students develop novel research questions by recommending a bottom-up approach, asking students to develop lines of inquiry around specific exhibits or argument sources. His rule of thumb, "If you start with an exhibit, look for argument sources to engage; if you start with argument sources, look for exhibits to interpret" (Bizup, 2008, p. 82). There may be disagreement about whether first-year students have the capacity to analyze exhibits in detail. This may be a valid concern, but using exhibit sources may address another common mistake students make: looking for the "perfect source" that addresses their research question directly or even answers it for them. Using exhibits or examples requires more imagination than simply entering their research question into a search box to look for that perfect source. With guidance, students should imagine what kinds of evidence or examples they could use to help support their claim.

Using BEAM for Teaching and Assessment

The instructors felt that students produced better annotated bibliographies as a result of using the BEAM method. It motivated students to read and assess sources more critically and provided a meaningful and structured way for instructors to evaluate bibliographies and provide feedback. Going forward, instructors plan to be more intentional with their use of BEAM when designing the sequenced assignments. First, instructors may require that students analyze at least one exhibit source for their paper, and if so, they will provide additional instruction by looking at other pieces of writing for examples of exhibit source use. Next, instructors plan to use the language of BEAM as an evaluation tool, in written feedback for annotated bibliographies, in student conferences, and as a peer review exercise when evaluating drafts or final papers. The rubric may also be used for grading the annotated bibliographies and as an early peer review exercise in the sequence of assignments. Bizup (2008) argued that BEAM can help with evaluating drafts. Asking students if they have both exhibit and argument sources can lead to substantive changes, and BEAM can "serve as a critical vocabulary in written comments, workshops, and student conferences" (Bizup, 2008, p. 82). To reinforce BEAM and source use, students could be asked to reflect on their source use towards the end of the writing process. Students could identify all the possible ways a source could be used as that may change as the student writes the paper. With a draft submission, students could identify how each source was used in the paper, or they could revisit the bibliography after the completion of the paper to reanalyze the use of sources as their research question and thesis evolved throughout the process. Bizup (2009) noted that categories of source use can "shade into one another," which can cause

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some troubling ambiguity for students (p. 77). Understanding these distinctions may depend on how much repeated use students have with BEAM. For first-year students, BEAM is a more nuanced approach to source evaluation than the checklist approach, and repeated use of BEAM throughout the course may allow for more layers of understanding.

Conclusion

As with any new instructional method that leads to deeper learning, the major challenge in using BEAM is the time required to implement it. First, the collaboration between instructors and librarians in order to understand BEAM and design assignments takes time, and secondly, students need multiple opportunities to apply the method in practice. BEAM may not be appropriate in all contexts, but librarians may recommend it as a solution to instructors who are looking for ways to re-design traditional research paper assignments. The language of BEAM is accessible, from first-year students and beyond and to faculty across disciplines. The absence of disciplinary jargon could provide a needed common vocabulary for librarians and instructors to begin a conversation about information literacy across the disciplines. Such collaborations will improve the professional knowledge of librarians and instructors who value information literacy but have been unsure about how to teach and assess source evaluation. For students, understanding how a source might be used (Background, Exhibit, Argument, Method) can make research and decision making more efficient, effective, and sound. Learning to utilize this method can provide students with a tool to help them sift through the enormous amount of research and sources available and to consider how best to use information gleaned from a source and identify areas of weakness within their own research and writing.

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Appendix A: Lesson Plan: Choosing and Using Sources

Many students have experience evaluating information sources using a checklist approach (author, publication, date, etc.) in order to select sources that meet assignment parameters (x number of books, scholarly articles, "no Wikipedia!", etc.), but they still struggle to choose quality sources and use them effectively. A more effective approach might be to focus on the functional use of sources rather than on source type. This lesson will help students with one of the criteria for the argument paper:

The paper must use at least five substantial sources, which relate, in a credible way, to the topic and thesis. The cited sources should advance the argument, not merely give background information.

We propose using the BEAM Method as a way to categorize the different types of sources necessary to support an argument.

Step 1: Flipped content: Introduce students to the BEAM method with a brief video before class.

How will your sources support your argument? Introduction to the BEAM method

Step 2: In class activity led by a librarian: Analyze how another writer uses a variety of sources.

- Using a reading from the course anthology, "The Culture of Contempt" by Arthur Brooks, evaluate the first citation in the essay in 2 ways:
- 1. Evaluate for credibility: checklist approach what are the outside markers of quality that indicate the source is credible?
- 2. Evaluate for usefulness: BEAM method how did Brooks use the source in his essay? What purpose did it serve? What BEAM category?
 - Students will be placed into groups of 3–5. Each group will evaluate another source cited in the reading, as assigned by the librarian.
 - Students will begin writing an annotation, responding to the 3 prompts as shown below: Summarize, Assess, Reflect. Groups will share their work through Google Docs.
 - Class discussion.

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- **Step 3**: Annotated bibliography assignment: Students will annotate sources for their own research using the same structured annotation format as in class.
 - 1. **Summarize**: Summarize the source. What are the main arguments? What is the point of this book or article? What topics are covered? If someone asked what this article/book is about, what would you say?
 - 2. **Assess**: After summarizing a source, evaluate it. What type of source is it? How does it compare with other sources in your bibliography? Is the information reliable? Is this source biased or objective? What is the goal of this source?
 - 3. **Reflect**: Once you've summarized and assessed a source, you need to ask how it fits into your research. Was this source helpful to you? How does it help you shape your argument? How can you use this source in your research project? Has it changed how you think about your topic? Label it with at least one BEAM category and explain how you will use it.

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Appendix B: Annotated Bibliography Rubric

	Advanced (4–5 points)	Developing (2–3 points)	Incomplete/Inadequate (0–1 points)
Summarize	Conveys a deep	Conveys a basic	Does not summarize topic
	understanding of the	understanding of the	or oversimplification of
	main arguments or	main argument or	topic.
	main purpose of the	main purpose of the	
	text through the	text.	
	summary.		
Assess	Evaluates the source	Evaluates the source,	Does not evaluate the
	holistically, including	identifying outside	source or misjudges the
	the type of source,	markers of quality but	quality of the source.
	how it compares with	does not compare it	
	others in the	with other sources or	
	bibliography, why it's	include its purpose.	
	reliable, and its		
	purpose.		
Reflect	Fully describes how	Describes how the	Briefly describes the
	the source was useful	source was useful in	source's usefulness but does
	and for what specific	broad terms and labels	not label with a BEAM
	purpose and labels	the source with a	category.
	with appropriate	BEAM category.	
	BEAM category.		

Appendix C: Optional Assignment: Read Smarter, Not Harder!

Instead of passively reading a text from start to finish, strategically read parts of the article (title, abstract, introduction, section headings, and conclusion) to look for the main point(s) or argument. Once you have a firm grip on these parts and on how the source will be useful, you can decide which parts of the main text you need to spend the most time reading.

Choose one scholarly article on your topic to read. Enter the citation of the article here:

DON'T READ THE ENTIRE ARTICLE BEFORE DOING THIS ACTIVITY!

Follow the prompts below to strategically read different parts of the article.

- Read the title (and nothing else!). What do you think the article will be about?
 (Tip: the title often includes the subject matter and the methodology or how the author will approach the subject matter.)
- 2. Read the **abstract** and see if you can identify the following:
 - The main problem or question the article addresses
 - The author's approach (how they did the work to enable them to write the article)
 - The author's conclusions
 - Why people should care about the work

(Tip: the abstract is very important! It's usually one paragraph at the beginning of the article that encapsulates the main points)

3. Read the **introduction**. What more did you learn about the article?

(Tip: The introduction serves the same function as the abstract but with more details. Don't breeze through the introduction in order to get to the "meat" of the text. In fact, do the opposite! Take time to understand the introduction because it could summarize the whole piece, present the main idea, tell us why we should care, and may even offer a road map for the rest of the article. Oh, and sometimes the introduction is obviously labeled, "Introduction," but sometimes not. See if you can find it!)

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- 4. **Section headings**. Does the article include section headings? Do they help you to see the trajectory of the article?
- 5. **Conclusion**. What does the author conclude?

(Tip: Pay close attention to the conclusion! It can help make sure you've understood the Introduction. Even a slight re-phrasing can help you understand the author's arguments in an important, new way.)

6. **Relevance to your purpose.** When you have a general understanding of the text's different parts and of the main argument, think about what relevance the article has to your own purpose. How might you use ideas from the text to "enter the conversation" about the topic or questions at hand.

Done! For this exercise you don't need to read the entire text. When strategically reading on your own in this way, hopefully you will be able to understand the different parts of the text and the writer's main argument and then use the information to see how and where you can enter the conversation. In addition, keep your own agenda as a researcher in mind as you do this work. Happy reading!

This activity was adapted from "Reading Games: Strategies for Reading Scholarly Sources" by Karen Rosenberg, licensed under CC BY-NC-SA 3.0 US

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