If the Rubric Fits:
Library Instruction, Teaching Efficacy, and the Practice of Collective Reflection

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Deposited 03/11/2020

Citation of published version:

Link to Published Version: https://www.alastore.ala.org/content/grounded-instruction-librarian-participating-scholarship-teaching-and-learning
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*Library Instruction, Teaching Efficacy, and the Practice of Collective Reflection*

Sara Maurice Whitver

Beliefs of personal efficacy are the foundation of human agency. Unless people believe they can produce desired results by their actions, they have little incentive to act. It affects how they think, feel, act, and motivate themselves. Specifically, such beliefs regulate what people choose to do, how much effort they invest in what they undertake, how long they persevere in the face of obstacles and failure experience…. A high sense of personal efficacy pays off in performance accomplishments and emotional well-being. In group endeavors, people’s shared beliefs in their collective efficacy affects the type of futures they seek to achieve and how much they accomplish as a group.

—Albert Bandura, Social Cognitive Theory

Critical Reflection and Efficacy for Librarian Teachers

As teaching becomes more and more important within the field of librarianship, it is imperative that librarians find ways to develop confidence in their classroom practices. Librarians frequently articulate a desire to improve their skills as teachers and to make their instructional efforts more effective. So how do librarians build personal and collective
efficacy in teaching? What methods are available to librarians within the classroom context that allow them to reflect on teaching and learning effectiveness? And how do librarians cultivate a local community of practice where they can receive peer feedback and develop norms? Albert Bandura’s Social Cognitive Theory correlates belief in ability and effectiveness in praxis; when people believe in their ability, they will be more effective. This translates well to librarian teachers. When librarians believe in their ability to teach, they become more effective teachers. This efficacy can be developed by critically reflecting on one’s teaching practice through the examination of student work.

Personal efficacy, or self-efficacy, can be defined as “an instructor’s belief in their own ability to successfully gather and interpret student data for improving instruction.” Svinicki et al. suggest that teachers can develop self-efficacy by collecting and analyzing student data, and they found that teachers who scored high on self-efficacy were motivated to try new approaches to teaching. Likewise, librarian teachers can improve their efficacy in teaching by centering their inquiry on student learning. Booth suggests librarians can build self-efficacy through conscious self-reflection on student work that will, in turn, impact both the learning environment and student achievement. Booth’s assertion is that within this context self-reflection functions as a tool for iterative design, examining student work for the purpose of improving teaching. This practice is a hallmark quality in the Scholarship of Teaching and Learning (SoTL), as evidenced by O’Brien’s SoTL Compass. Librarians have to focus on improving their practice toward the goal of better student learning because without the student, “teaching” is pointless. O’Brien’s Compass provides a heuristic for practitioners to examine the learning environment, using four foundational questions:

- What will my students learn and why is it worth learning?
- Who are my students and how do students learn effectively?
- What can I do to support students to learn effectively?
- How do I know if my teaching and my students’ learning has been effective?

By using these questions as a frame for reflective inquiry when examining student data, librarians are able to identify problem areas in their lesson plans and recognize areas of difficulty for their students. When individual librarians reflect on work produced within their class sessions, they are able to consider the presentation of material and begin to imagine other ways of approaching concepts that, through a simple analysis of the evidence, appear to be bottlenecks for students. However, individual reflection and analysis is still a solitary and limited view into any one individual’s teaching practice.

Brookfield asserts that in order to understand the complete picture, teachers must examine their practice in a multifaceted approach. He offers four lenses for critical reflection: autobiography, students, colleagues, and theoretical literature. These lenses provide multiple perspectives with which to learn about one’s teaching practice; the act of critically reflecting allows teachers to regard curricula “as constructed and tentative, as framed by human agency and therefore capable of being dismantled and reframed by teachers and students.” Brookfield describes this as “stance and dance,” maintaining
a stance of inquiry toward personal teaching practice while participating in a dance of experimentation and risk in the classroom.\(^7\)

This case study is a snapshot of ongoing, routinized individual and group reflection at The University of Alabama Libraries. Librarians use worksheets as instruments for collecting student data and participate in rubric norming as a way to facilitate critical reflection on their teaching practices. End-of-semester workshops allow librarians to adapt Brookfield’s theoretical framework of critical reflection for communal reflection. Applying O’Brien’s SoTL Compass within each of Brookfield’s lenses helps participants keep the focus of their practice on assessing and improving the learning environments they create for students, increasing both individual and collective efficacy within UA’s library instruction program.

Establishing Community by Articulating Shared Outcomes

Oakleaf’s “Staying on Track with Rubric Assessment” reports that institutions that implemented rubrics saw “substantial improvements in teaching information literacy concepts” and that the use of rubrics has impacted both librarian pedagogy and classroom curriculum.\(^8\) Oakleaf’s study participants reflected that rubrics were “empowering” and that they “facilitated valuable reflection on teaching practice.”\(^9\) While it is popular to use rubrics to assess student learning in information literacy,\(^10\) it has also been noted that rubrics can be difficult to draft in order to produce valid assessment results,\(^11\) and the quality of the results are only as good as the raters. Rubrics are a valued and useful tool for librarians who want to measure the impact that their instruction activities have on student learning, but perhaps they are even more useful as instruments for critical self-reflection and group reflection. When designed to facilitate teacher reflection in addition to measuring student learning,\(^12\) rubrics offer librarians an opportunity to investigate their performance in the classroom, examine the design of their teaching activities, and when used in a group setting, to communicate about teaching practices, including successes and challenges in the classroom.

The University of Alabama is a flagship research university with an enrollment of 38,563 (freshman class of 7,404).\(^13\) Following a model of integrating information literacy across the disciplines, all instruction librarians (a team of about sixteen) participate in the instruction program for first-year writing, partnering specifically with English (EN) 102. There are around 200 sections of EN 102 each academic year. The instruction program for EN 102 is highly structured in that instructors of record select from a menu of library instruction lesson options that have been specifically designed to support the learning goals of the course (see table 18.1). Each of the four “options” is described to the instructor of record as a set of learning outcomes and includes a short paragraph description of the conceptual ideas addressed within that lesson.
### Table 18.1. Session Menu and Learning Outcomes for EN 102 Library Instruction

<table>
<thead>
<tr>
<th>Option</th>
<th>Learning Outcome 1</th>
<th>Learning Outcome 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>Students will use Scout to locate PDF, ebook, and physical book items in order to demonstrate an understanding of the different formats within the library’s collections.</td>
<td>Students demonstrate an understanding of post-search limiters in order to strategically target format types and publication dates.</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Students will break a topic down into smaller components in order to engage in the iterative process of narrowing a research question.</td>
<td>Students will select terms related to their key concepts in order to develop a search strategy.</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Students will recognize different processes of source creation in order to choose sources that appropriately meet their research needs (editorial oversight, intended audience, review process).</td>
<td>Students will determine an author’s expertise and the reputation of a publication in order to assess a source’s credibility within their research assignment.</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>Students will use controlled vocabulary and field-specific search options and limiters in order to retrieve topically relevant sources.</td>
<td>Students will combine search terms with Boolean operators in order to effectively interpret their research question into an effective search query.</td>
</tr>
</tbody>
</table>

EN 102 instructors can request up to three sessions from the menu in any order. Instruction is typically scheduled before the semester begins, and librarians partner with a class for the duration of the semester through both in-class instruction and out of class curriculum support and one-on-one student research consultations.

For the past five years, UA has used rubrics (see Appendix) to guide the lesson planning efforts of librarians who participate in instruction for first-year writing. To develop an assessment for this instruction program, the coordinator of library instruction (the author) drafted a list of skills based on an analysis of the campus’ first-year writing curriculum. Through formal and informal channels, including round-robin draft revisions and informal conversations, a group of librarians then began collectively drafting rubrics that described two learning outcomes for each session option. Rubrics provided a way for librarians to communicate with each other and with instructors of record about learning outcomes. These rubrics help participating librarians to answer O’Brien’s question, “Who are my students and how do students learn effectively?” and offer a way to provide consistency from librarian to librarian and class to class for such a large program. As librarians work to compose performance indicators within rubrics, they actively engage in describing the
skill levels based on their knowledge and experience of student performance as well as an understanding of the learning outcome; reflecting on student performance allows the librarian teachers to understand the learning outcomes through the lens of their experience with individual students.

Promoting Personal Efficacy Through Reflection

In her blog post, “The Ballad of the Sad Instruction Librarian,” Farkas asserts, “I think about the people who want to improve, but don’t have the time within their work day to develop professionally and improve or just don’t know where to start.” Farkas mourns the lack of librarians’ efficacy in teaching, suggesting that institutions should support librarians through the provision of time for reflection on teaching and opportunities to develop the practice of teaching. The anecdotes in Farkas’ post serve to further highlight how alienated and unsupported librarians generally feel in the classroom.

One of the goals of practicing individual and group reflection is to increase the individual efficacy of librarian teachers participating in instruction for first-year writing. Self-efficacy is developed through looking at student work and asking the questions, “Did these students understand what I was trying to teach them? And where am I encountering bottlenecks?” Brookfield recommends beginning critical reflections practices with the autobiographical lens asserting, “Insight and meaning for teaching that we draw from these deep experiences are likely to have a profound and long-lasting influence.” At UA, each librarian has the opportunity to use the rubric for lesson planning, in-class assessment, and, if they collect classroom artifacts of student work, as an evaluative measure for their teaching. When librarians use the established rubrics to score classroom artifacts such as worksheets, they are able to answer O’Brien’s question, “How do I know if my teaching and my students’ learning have been effective?” Librarians at UA practice holistic scoring of student responses using Oakleaf’s rubrics methodology in order to facilitate reflection on their classroom behavior. The results of this scoring practice enable librarians to make incremental changes to their personal teaching practice as well as informs programmatic adjustments. For example, one librarian teacher scored a set of worksheets and noticed that students had collectively scored lower when responding to questions about the publication process of a newspaper. This signaled an opportunity to refine questions about newspapers for class discussion. Another librarian recognized that worksheets were consistently left incomplete, leading to the realization that there was a pacing problem. This librarian was able to adjust the pacing within class and was also able to bring the issue up during rubric norming to see if anyone else was having difficulty covering the material within one class period. Each of these changes, while small in themselves, had a marked impact on the team.

Drafting rubrics in iterative collaboration has allowed participating librarians at UA to work as a team to achieve shared learning outcomes in which they have each invested. Worksheets are generated using these outcomes in order to facilitate the collection of student work for self-reflection and collective norming. Each librarian is responsible for
submitting student work at designated points throughout the semester. While librarians are free to create original worksheets (see table 18.2), templates are also available. Worksheet templates suggest an order in which each learning outcome and associated skills and concepts might be addressed, but they do not dictate how.

**Table 18.2. Examples of Topic Analysis (LO 1: Students will break a topic down into smaller components)**

**Narrowing Your Topic and Using Reference Tools**
In this exercise, you will narrow your paper topic and prepare to start searching for sources. The steps in this exercise will not only aid you in narrowing your topic, they will prepare you to begin library research. This is not intended to be busy work, but rather a process of systematically preparing you for searching.

**Step 1:** Spend about 5 minutes freewriting to explore your paper topic. Think about what interests you about your topic, and also what you don’t know. Freewriting is a type of brainstorming, and you are not expected to know everything. Just try to get some ideas onto the page—this exercise is the foundation for the rest of our class today!

State’s rights depend on the issue at hand. There are many topics that states disagree on. For example, some states disagree with Obama’s Affordable Care Act. Other states disagree with the idea of same-sex marriage. These two issues involve state’s rights. Although the supreme court approved these two issues, some states disagree with one or both. So the question is, where do state rights lie?

**Part 2: Narrowing Down Your Research Topic**

<table>
<thead>
<tr>
<th>WHEN?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Now</td>
<td>Future</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHERE?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>College University United States</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHO?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>College Athletes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHAT?</th>
<th></th>
</tr>
</thead>
</table>
| Should college athletes receive pay?

**Part 3: Write your research question.**

Do college athletes in the United States deserve to be paid for their ability in the future?
For example, in Option 2: Methods for Approaching Research (see table 18.1), one librarian usually prompts students to analyze their research topic using W questions, while another typically chooses to ask students to participate in five minutes of free writing on their topic. While there is a lot of variation between these two classroom activities, both activities address the learning outcome: “Students will break a topic down into smaller components in order to engage in the iterative process of narrowing a topic” (see table 18.1). This diversity in teaching is captured through worksheets which are scanned and submitted for assessment. Worksheets allow librarians to arrange and present material according to their own teaching style, which is a priority in UA’s program.

As librarians are assigned new liaison roles and take jobs at other libraries, the use of rubrics allows UA’s program some consistency. Rotation is expected at a large university library, and while the number of librarians has remained constant, a few have participated only for about one year; some librarians have rotated out and then back into the program. The act of drafting and revising a rubric each semester also allows new librarians to gain an understanding of the existing program of instruction and connect with seasoned librarians who have participated for years. These activities have facilitated a deeper understanding of the goals and character of the program, achieving sustainability while promoting personal efficacy in teaching.

Iterative Design and Peer Feedback

The reflective practice of rubric norming within rubric drafting is an iterative process. Brookfield notes that “our colleagues serve as critical mirrors reflecting back to us images of our actions that often take us by surprise,” suggesting that sometimes it is only through the joys and frustrations experienced by a peer that one can recognize successes and challenges within one’s practice. The act of teaching can be isolating and lonely; without support, librarian teachers can easily become disheartened and disconnected from the rest of their team. It is essential that librarians have dedicated time, not only to engage in personal reflection but also to be able to talk through their experience in the classroom, share ideas, and problem solve.

Half of a day is set aside as a norming session to facilitate formal group conversations about teaching throughout the semester. Worksheets, which have been completed by students throughout the semester, allow librarians to capture student data. Librarians scan and submit completed worksheets to the coordinator of library instruction by the end of the semester. Worksheets are important to UA’s program because they allow librarians to demonstrate their diverse approaches within the classroom.

According to Holmes and Oakleaf’s rules for norming rubrics, the norming facilitator (usually the coordinator of library instruction) creates grading packets of selected worksheets from each of the four instruction options (table 18.1) and distributes them by email to librarians at least one week in advance of holding a rubric norming workshop. Holmes and Oakleaf assert that “the goal of norming is for the raters to come to consensus, not for the raters to agree with the facilitator,” but sometimes even consensus among raters
is difficult to achieve. Norming activities are a cornerstone of the assessment plan, and librarians who participate in teaching first-year writing library instruction are required to participate. However, individual scores are not tabulated for students or librarian teachers. Rather, the exercise of norming is used as a platform for reflecting on teaching practices and examining student responses with the intention of improving instruction in the next semester.

During norming sessions, participating librarians discuss their individual approach to each of the sessions’ learning outcomes. The norming facilitator takes detailed notes and asks specific questions (e.g., “Can you describe how you address this learning outcome or skill?” “Can you tell us more about the language you use to discuss this part of your lesson?”). It is essential during these workshops that the facilitator focuses the line of questioning to generate discussion about each librarian’s approach to teaching specific areas of a given worksheet, prompt librarians to objectively discuss the connection between an area of the worksheet and its correlation to the rubric, and provide librarians with a platform for problem-solving and sharing successes in the classroom.

At the end of the session, participating librarians have the opportunity to make specific revision recommendations. Sometimes these recommendations have resulted in small adjustments in a performance indicator and sometimes in major revision or redrafting of a learning outcome. Before each semester begins, the coordinator of library instruction sends the revised rubrics to the entire team for final comments. Significantly, this formal documentation of the evolution of the program bears witness to the dedication and diversity of the librarians who have participated in this practice over the past five years. Influences on learning outcomes and performance indicators are visible from librarians who have been gone for several years; even if a librarian leaves, parts of their practice lives on with their colleagues through the revision of rubrics and worksheets. Over the years, participating librarians have been heavily influenced by the discourse surrounding approaches to concepts within a learning outcome. During one early norming session, it became apparent that each librarian at the table was struggling with teaching broad and narrow search terms. While only two librarians who participated in that conversation still participate in the program, the solutions that were brainstormed through that conversation have fortified the practice of brand-new librarians who enter the program years later. Experiences like these really illustrate the benefits of collective reflection.

Conclusion

Rubric norming is improved with practice, and although the rubrics have been in use for almost five years, this practice is not perfected. This case study has demonstrated that setting time aside for critically reflecting on teaching and learning through the use of rubric norming fosters community and shared practices that impact the program for years to come. Questions like O’Brien’s “What can I do to support students to learn effectively?” are most effective when asked from a collective position supported through organizational values. Much the same as Gola et al. note, norming sessions at The University of Alabama Libraries
often result in significant revisions to the performance indicators within the rubrics, and sometimes even the replacement of learning outcomes, as over the years librarians come to a clearer understanding of the needs of students. However, real benefits are seen when value is placed on the conversation that the rubric and worksheets generate among librarian teachers rather than seeking a perfect rubric with perfect performance indicators.
Appendix 18A: Rubrics for First Year Writing Instruction

Option 1: Searching Basics
In this session, students will learn to read Scout records to determine the material format, type, and location of the items within records, and how to sort and filter to search more strategically using post-search limiters. This session will not cover controlled vocabulary or keywords (covered in Option 2), or advanced search strategies in Scout or in individual databases (covered in Option 4)

Class activities for this session can include:
- Scout scavenger hunt for items of a specific format or material type
- Peer demonstration of multiple strategies for completing assigned basic search tasks
- Locating and retrieving a book from the shelf (encourages using the location limiter)

<table>
<thead>
<tr>
<th>Activity</th>
<th>No Attempt (0)</th>
<th>Beginner(1)</th>
<th>Intermediate(2)</th>
<th>Advanced(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will use Scout to locate PDF, ebook, and physical book items in order to demonstrate an understanding of the different formats within the library’s collections</td>
<td>Student uses the names of formats (“PDF”; “ebook”) as search terms in order to locate an item of that format in Scout..</td>
<td>Student recognizes the material type of content described in a Scout record, but might not understand when they encounter an index record or a record with a hyperlink in it.</td>
<td>Student understands how to access different item types within Scout; attempts to locate items described in Scout records that do not have items attached.</td>
<td></td>
</tr>
<tr>
<td>Students demonstrate an understanding of post-search limiters in order to strategically target format types and publication dates.</td>
<td>Student uses limiters but does not demonstrate an understanding of strategy for finding materials by format type or publication date.</td>
<td>Student uses limiters and indicates some strategy for finding materials by format type or publication date.</td>
<td>Student demonstrates the ability to apply limiters strategically to find materials by format type or publication date.</td>
<td></td>
</tr>
</tbody>
</table>
### Option 2: Methods for Approaching Research

In this session, students will learn how to analyze a topic, use reference resources, and develop a search strategy for finding sources for their writing assignments.

Class activities for narrowing a topic or research question and identifying narrow and broad search terms can include:

- Diagramming a topic to identify subcategories
- Listing topically related narrow and broad search terms in a hierarchical list
- Answering 3-4 “w” questions (who, what, where, when)
- Negotiating these activities to develop a more narrowly-focused, answerable research question.

<table>
<thead>
<tr>
<th>Students will break a topic down into smaller components in order to engage in the iterative process of narrowing a research question.</th>
<th>No Attempt (0)</th>
<th>Beginner (0)</th>
<th>Intermediate (1)</th>
<th>Advanced (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student identifies a broad research topic, but struggles to engage in narrowing activities.</td>
<td>Student engages in narrowing a topic through brainstorming but fails to appropriately narrow areas of focus.</td>
<td>Student successfully identifies components of a balanced research topic and is able to articulate it in an answerable question.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students will select terms related to their key concepts in order to develop a search strategy.</th>
<th>No Attempt (0)</th>
<th>Beginner (0)</th>
<th>Intermediate (1)</th>
<th>Advanced (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student extracts some obvious keywords or search terms from a topic.</td>
<td>Student extracts obvious keywords/search terms from topic and identifies related search terms.</td>
<td>Student demonstrates keyword development skills by identifying relevant keywords as well as related broad and narrow terms that are topically relevant.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student continues to use natural language and broad search terms to conduct research.</td>
<td>Student includes words that describe measurement such as greater, less, increase or words like complicated or challenges.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Option 3: Evaluating Sources

In this session, students will learn to assess a source for relevancy and authority to decide whether it meets the needs of their writing assignment. Students will engage in activities and conversations throughout this session to help them understand the nature of popular and academic publishing.

Issues of “Source Creation” can include:
- Primary and secondary sources (archival research will not be covered in this session)
- Publishing/review processes including editorial oversight (peer review; role of an editor of a magazine or newspaper; web publishing for a nonprofit or government site;)
- Intended audience and original purpose of the source, and means of original dissemination

<table>
<thead>
<tr>
<th>Students will recognize different processes of source creation in order to choose sources that appropriately meet their research needs.</th>
<th>No Attempt (0)</th>
<th>Beginner (1)</th>
<th>Intermediate (2)</th>
<th>Advanced (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Editorial oversight</td>
<td>Student is unable to recognize the difference between various review processes or intended audience</td>
<td>Student is able to respond to questions about an editor’s role and intended audience and make some general comments about the role of an editor and the review process.</td>
<td>Student is able to articulate how publication process valued within academic research.</td>
<td>Student is able to comment on how sources can be leveraged contents within their research needs to fulfill different needs for their assignment.</td>
</tr>
<tr>
<td>• Intended audience</td>
<td>Student is unable to determine if a source meets the criteria outlined in the assignment.</td>
<td>Student attempts to understand why these issues influence the source criteria outlined in their assignment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Review process</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Student will determine an author’s expertise and the reputation of a publication in order to assess a source’s credibility within their research assignment.</th>
<th>No Attempt (0)</th>
<th>Beginner (1)</th>
<th>Intermediate (2)</th>
<th>Advanced (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Student makes basic assumptions about a source’s credibility but struggles to engage with metrics such as an author’s background and the reputation of a publication.</td>
<td>Student is able to identify an author’s expertise and background and moderately assess a publication’s reputation but struggles to contextualize a source’s value.</td>
<td>Student engage issues of author expertise and publication reputation and is able to successfully artifact different values – “credibility” within different context.</td>
<td></td>
</tr>
</tbody>
</table>
**Option 4: Searching Strategically**

In this session, students will be taught to execute advanced searches in selected databases and resources. Databases will be selected when the session is scheduled, and advanced options will be chosen according to the needs of the class topic and assignment.

<table>
<thead>
<tr>
<th></th>
<th>No Attempt (0)</th>
<th>Beginner (0)</th>
<th>Intermediate (0.5)</th>
<th>Advanced (1.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students will use controlled vocabulary and field-specific search options and limiters in order to retrieve topically relevant sources</strong></td>
<td>Student struggles to differentiate keywords from controlled vocabulary; student still incorporates elements of natural language; student is only aware of basic limiters.</td>
<td>Student identifies relevant subject terms and applies it appropriately using a search field OR student effectively locates limiters to strategically narrow their search.</td>
<td>Student identifies relevant subject terms and applies it appropriately using a search field AND student effectively locates limiters to strategically narrow their search.</td>
<td></td>
</tr>
<tr>
<td><strong>Students will combine search terms with boolean operators in order to effectively interpret their research question into an effective search query</strong></td>
<td>Student understands how to choose keywords but struggles to combine with operators.</td>
<td>Student uses AND effectively to combine their search terms.</td>
<td>Student is able to effectively use more than one operator; student is able to combine field searches with Boolean operators to execute a search that targets a focused set of results.</td>
<td></td>
</tr>
</tbody>
</table>

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**ENDNOTES**


7. Ibid., 42.


9. Oakleaf, “Staying on Track.”

10. Debra Hoffmann and Kristen LaBonte, “Meeting Information Literacy Outcomes: Partnering with Faculty to Create Effective Information Literacy Assessment,” *Journal of Information Literacy* 6, no. 2 (2012): 73.


16. Ibid.


18. Ibid.

19. Ibid.


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Hoffmann, Debra, and Kristen LaBonte. “Meeting Information Literacy Outcomes: Partnering


