

DEVELOPING AN INFORMATION LITERACY ASSESSMENT RUBRIC

A case study of collaboration, process, and outcomes

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ABSTRACT

A team of four librarians at the University of Houston (UH) Libraries partnered with the UH Office of Institutional Effectiveness and its Director of Assessment and Accreditation Services for General Education to conduct a campus-wide, exploratory assessment of undergraduate information literacy skills. The project evaluated a selection of graduating, senior-level student papers using a rubric developed as part of the collaboration. This paper describes and discusses the collaborative rubric development and rating process, the practical implications for other librarians seeking to conduct a similar assessment, and the impact the project is having on the library instruction program.

INTRODUCTION

A team of four librarians at the University of Houston (UH) Libraries partnered with the UH Office of Institutional Effectiveness and its Director of Assessment and Accreditation Services for General Education to conduct a campus-wide, exploratory assessment of undergraduate information literacy skills. The project's goals were to identify the level of information literacy skills demonstrated by graduating students in order to establish benchmarks for the instruction program and to align library assessment efforts with assessment initiatives and teaching priorities across campus. This paper describes the campus-level collaborative rubric development and rating process, discusses practical implications for other librarians seeking to conduct a similar assessment, and considers how the results of this assessment project are impacting the UH Libraries instruction program.

LITERATURE REVIEW

A review of the literature focuses on two areas: the benefits of rubrics for campus-wide information literacy assessment and case studies that document the rubric development and application process for a rubric based campus-wide information literacy assessment. Currently the library literature is ripe with research attesting to the benefits of authentic assessment in academic libraries because it measures higher order thinking skills rather than simply measuring an acquisition of facts (Knight, 2006; Oakleaf, 2008). Rubrics are an increasingly advantageous "authentic assessment" tool used to measure student performance in products such as papers, bibliographies, and portfolios (Oakleaf, 2008).

The literature suggests that librarians who have measured information literacy skills using rubrics have mainly focused on course level assessment, while only a few have explored campus-wide, collaborative assessments. Oakleaf, Millet, and Kraus (2011, p.833) affirm this finding. Diller and Phelps (2008) discuss a general education assessment of student ePortfolios, while Oakleaf, Millet, and Kraus (2011) discuss strategies for effective campus-wide assessment based on an opportunity driven by accreditation standards. Hoffmann and Wallace (2009) and Hoffmann and LaBronte (2012) outline a grant study of first and third year student work. Lack of time and expertise are often barriers to rubric assessment (Oakleaf, 2008, p. 274), which may hinder campus-wide assessment. Faculty and administrative support is crucial to a successful campus-wide assessment of information literacy skills (Oakleaf, Millet, and Kraus, 2011, p. 833). The challenges associated with generating this level of buy-in may also hinder campus-wide assessment. However, rubrics are particularly effective for campus-wide assessment because, as Oakleaf states, they allow educators to assess skills across multiple disciplines (2008, p. 245). And as Diller and Phelps state, the collaborative process "brought a campus-wide prominence to the importance of information literacy" (2008, p. 78). Hoffmann and LaBonte state that their faculty and librarian collaboration was mutually beneficial in helping the University achieve institutional outcomes for student learning (2012, p. 77).

Further, the library literature offers only a few examples of case studies exploring the rubric development process and practical implications learned from applying the rubric. Knight (2006) notes this scarcity in her literature review and the authors

confirmed this scarcity in a more recent review of the literature. Helvoort (2010) provides the most significant discussion of rubric construction, brainstorming, testing, and evaluation. Helvoort discusses the need for improved inter-rater reliability as well as the consideration of more specific criteria within the rubric. The Diller and Phelps (2008) article mainly focuses on the methodology and results of campus-wide ePortfolio rubric assessment and does not provide specific details about how the rubric was developed. However, their analysis discusses lessons learned based on their experience with the limitations of rubric assessment, including topics such as lack of time, inter-rater reliability, and the effect of assignment instructions on student work. Oakleaf (2009) provides the most significant coverage of inter-rater reliability. Her study compared inter-rater reliability of five different rater groups and concludes that inter-rater reliability can improve with more practice and training, affirming Diller and Phelps' analysis. Hoffmann and Wallace (2009) and Hoffmann and LaBonte (2012) outline the details of rubric development and sample selection and discuss limitations of using rubrics to assess student work when relying on a variety of assignments.

As more librarians realize the value of, and opportunities for, engaging in rubric assessments, the literature will need to offer more case studies and best practices. This paper aims to begin filling this gap with the ideas and practical implications explored in the methods and discussion sections.

BACKGROUND

Information Literacy Assessment at UH

The University of Houston is a large urban

university located at the center of Houston, Texas. Enrollment exceeds 40,000 undergraduate and graduate students and the University is the second most ethnically diverse major research university in the nation (UH at a Glance). In 2008, the University implemented a Quality Enhancement Plan (QEP) as required by its accreditation agency, the Southern Association of Colleges and Schools. The QEP initiative required the University of Houston to develop a focused plan for enhancing student learning with performance indicators that identified QEP successes. Information literacy was selected as one of the QEP competencies and the library was a collaborator. In addition, information literacy, at the time of this project, was one of the University's general education core competencies defined within the parameters of the Texas core curriculum. UH Libraries responded to these initiatives and engaged in many efforts across campus to incorporate information literacy instruction and assessment where possible.

The library instruction program at UH provides information literacy instruction to the campus through a variety of venues, both face-to-face and online. While the instruction program has existed for years, at the time of the 2008 QEP implementation, it lacked an established assessment plan. There were no tools or processes in place to measure systematically the impact of library instruction on student learning, let alone perform a campus-wide assessment of student information literacy skills. Several logistical challenges hindered the development of such an assessment project, including the lack of any common learning experience for students, a high population of transfer students, and an average graduation rate beyond four years.

The challenge of assessing campus-wide information literacy skills was further complicated by the independent administrative culture of UH academic departments. While many faculty valued library instruction for their students and there was an effort to strengthen student information literacy skills resulting from the QEP initiative, there were no university-wide information literacy requirements mandated by the administration or academic department curricular leaders. Without an administrative mandate regarding information literacy instruction and assessment, the library lacked the authority to generate the necessary buy-in from all departments. In addition, UH Libraries lacked staff with both the expertise and the time available to develop and implement campus-wide assessment projects as part of the instruction program. Facing these challenges, in 2010, UH Libraries sought the opportunity to work with a campus partner with the experience and authority to conduct campus-wide assessment.

Collaboration with the UH Office of Institutional Effectiveness

The Director of Assessment and Accreditation Services for General Education (hereafter referred to as the Director) resides within the UH Office of Institutional Effectiveness. The Director is responsible for coordinating, advising, and supporting learning assessment of general education provisions on campus. Prior to initiating the information literacy rubric assessment, the Office of Institutional Effectiveness conducted campus-wide rubric assessments of critical thinking and writing skills. A writing rubric was developed first and used as a model for the critical thinking rubric; later both served as models for the information literacy rubric. For the critical thinking assessment, the Director collected a multi-disciplinary,

random sample of 262 graduating student papers from senior-level courses identified by their academic departments as demonstrating critical thinking skills. Recognizing the opportunity presented by this assessment initiative, UH Libraries partnered with the Director to assess undergraduate students' information literacy skills using the same collection of student papers. The collaboration was mutually beneficial because both units shared interest in gaining insight into students' level of information literacy skills and both units wanted to establish benchmarks for future assessment. The collaboration combined the librarians' knowledge of information literacy and the Director's assessment expertise and access to student papers.

METHODS

Rubric Development

As part of a QEP assessment initiative related to information literacy, the Office of Institutional Effectiveness administered a survey that asked faculty to prioritize information literacy skills using the ACRL information literacy standards and outcomes as a framework. One hundred and seventy-four faculty members participated in the survey. The outcomes rated highest included: define and articulate the need for information; identify a variety of source types; retrieve information online using a variety of methods; summarize the main ideas from information sources; synthesize main ideas and construct new concepts; compare new knowledge with prior knowledge; communicate the information effectively to others; understand the ethical and/or legal aspects of information use; and acknowledge the use of information sources. The results of the survey served as the foundation for developing the information literacy rubric.

Based on the survey results, a group of faculty members and librarians with a variety of subject expertise, along with assessment staff, worked together to further prioritize information literacy skills with the goal of developing rubric skill descriptors. During discussions a few factors emerged that shaped the rubric. First, some outcomes were already written into the critical thinking and writing rubrics. For example, the critical thinking rubric included the descriptor, “identifies problem, question, or issue,” which equates to “defines and articulates the need for information.” Second, some outcomes, such as “retrieve information online using a variety of methods,” were better assessed through an observational assessment. Based on these factors, the group chose four ACRL skills for the draft rubric as shown in Table 1. The team then revised the language to make it more concise and measurable, widely applicable across disciplines, and less ambiguous for raters (see Table 1).

At this point in the process, the initial group of faculty, librarians, and assessment staff disbanded due to competing priorities. To maintain momentum, a core team of four librarians was formed based on their level of involvement with, and knowledge of, information literacy assessment. This librarian team, with the guidance of the Director, was responsible for developing the criteria descriptors, norming the rubric, and rating the papers.

To start, the team of four librarians reviewed the ACRL information literacy outcomes that matched the five draft descriptors. With the help of the Director and using the ACRL language, they drafted criteria on a three point rating scale of unacceptable, acceptable, and exemplary. To code the ratings easily, a number was assigned to each rating level: 1 to unacceptable, 2 to acceptable, and 3 to exemplary. This followed the model of the writing and critical thinking rubrics and

TABLE 1—ACRL SKILLS FOR THE DRAFT RUBRIC

| ACRL Language | UH Draft Skill Descriptors |
|---|---|
| Identifies a variety of source types and formats | Selects appropriate resources (consider the subject, context and scope of the paper) |
| Identifies a variety of source types and formats | Uses resources of sufficient breadth (consider the subject, context and scope of the paper) |
| Summarize the main ideas from information sources, synthesize main ideas and construct new concepts, compare new knowledge with prior knowledge | Evaluates information sources critically |
| Understands the ethical and/or legal aspects of information use | Attribution is given where it should be |
| Acknowledges the use of information sources | Citations are complete and consistent in format |

created consistency across all campus-wide rubric assessments. The draft criteria were broadly scoped to allow for consistency across different discipline specific papers. The original draft criteria are shown in Appendix A.

To facilitate norming, data gathering, and analyzing, the Director developed a corresponding rating worksheet to record scores for rated papers. The worksheet included an open-ended question to answer upon rating each paper: "What would you say to this student about using information sources?" The open-ended question provided additional information that supplemented the ratings by allowing librarians the opportunity to comment beyond the confines of the rubric and explain why they assigned certain rankings to specific papers. The Director anticipated using these comments to explain the results of the assessment to the faculty.

Sample Selection

An initial 262 papers were obtained by the Director specifically for the critical thinking and writing assessments. The Director contacted academic departments directly and solicited faculty volunteers who taught courses identified as requiring writing. Faculty volunteers submitted student papers to the Director. The Director then selected a random sample of papers from the pool of faculty volunteered courses. This sample totaled 262 papers. Since this selection was not originally collected with information literacy assessment in mind, not all papers required the use of external sources; thus, a sub-sample of the 262 paper sample was selected based on the use of external information sources. The final sample for the information literacy assessment totaled 58. When available, paper samples included a copy of the assignment guidelines, supplied by teaching faculty. The

assignment guidelines, especially details pertaining to instructions on the use of information, were used to inform raters of the scope and nature of the assignments during the rating process.

To ensure confidentiality, all identifiable personal information, including names, grades and instructor comments, was removed and identification codes were assigned to each paper and the corresponding assignment guideline. The four librarians each signed a confidentiality agreement before norming began, stipulating they were not to discuss specific contents of students' papers outside of the rating meetings. Because the papers were originally collected for a purpose other than information literacy assessment, Institutional Review Board approval was not petitioned for this study; thus all results, including patterns learned, can only be shared within the UH community and are not included in this paper. While this stipulation may limit what the authors can publish, it has not limited the ability to engage in meaningful conversations with faculty and stakeholders on campus. Furthermore, the authors feel the experience with the campus-wide collaboration and rubric design produced more meaningful results for the library community than the limited results of the exploratory study.

Norming

After completing the draft rubric and choosing the sample, the librarian rating team, with guidance from the Director, normed the rubric to determine whether its application to the same paper, by different librarians, would produce consistent ratings and whether the rubric required additional revision to avoid ambiguity. The team used a small selection of the 58 paper sample to test the draft rubric. To establish inter-rater reliability, the librarians all evaluated the

same selection of papers, compared their ratings and discussed their rationales. As a group, the librarians debated the criteria descriptors for each skill and reached consensus on the criteria for each rating level. After norming, the testing sample was rotated back into the 58 paper sample and evaluated again using the finalized rubric as part of the actual assessment.

The norming sessions resulted in some significant changes to both the skill descriptors and the criteria descriptors. Because the skills were originally broad in scope, they were edited for clarity and focus, as shown in Table 2. For example,

both “attribution is given where it should be” and “citations are complete and consistent in format” were edited to clarify their focus on the intention to provide attribution, versus the execution of the attribution, respectively. The most notable change was to “evaluates information sources critically.” The librarians had difficulty applying the criteria for this skill and agreed that they could not accurately measure how a student evaluated an information source based on the paper, but rather, the librarians could measure how the student integrated and compared the information to his/her own knowledge. They agreed to rename the skill “integrates

TABLE 2—EDITS MADE TO SKILL DESCRIPTORS

| Draft Skill Descriptors | Final Skill Descriptor | Reason for Change |
|---|--|---|
| Selects appropriate resources (consider the subject, context and scope of the paper) | Selects appropriate resources | Some papers did not include assignment guidelines, thus the scope could not always be determined |
| Uses resources of sufficient breadth (consider the subject, context and scope of the paper) | Uses resources of sufficient breadth | Some papers did not include assignment guidelines, thus the scope could not always be determined |
| Evaluates information sources critically | Integrates information into work | Evaluation of sources could not be determined and was not the goal, but rather the focus was how students integrated and compared information |
| Attribution is given where it should be | Attribution is given where it should be (intends to provide attribution) | Focus on the intention of attribution in order to measure understanding of ethical use |
| Citations are complete and consistent in format | Citations are complete and consistent in format (executes attribution) | Focus on the execution of in-text citations and reference list |

information into work” and edited the criteria to reflect the revision better.

Most of the criteria descriptors were rewritten with more specificity. The nature of the criteria did not change, but rather the increased specificity of the criteria helped ensure better inter-rater reliability, especially for librarians new to rubric assessment. One minor edit to criteria that significantly impacted the overall assessment was the removal of the phrase “in style appropriate for the discipline” in regard to the citation skill. After norming, the librarians determined they did not each possess enough expertise in multiple discipline-specific citation styles to assess this accurately. See Appendix B for all changes to the final rubric criteria and skill descriptors.

PAPER RATING PROCESS

After finalizing the rubric, the team convened to assess the 58 paper sample once a week for four months. The Director facilitated the process by managing the materials and facilitating discussion when confusion or disagreement arose. The Director assigned two librarians to each paper for independent evaluation. Librarians were assigned papers in rotating combinations, using all possible combinations, until all 58 papers were evaluated.

Librarians read the entire paper, including the list of cited sources, to evaluate the selection and use of information. Each librarian completed the rating worksheet. After independently rating each paper, the two librarians assigned to a given paper compared and discussed their scores. In cases where raters assigned different scores, they discussed their justifications until they reached agreement. In the few situations where agreements could not initially be

reached, all four librarians and the Director discussed the skills, rating-level criteria and score justification until the raters could finally agree. The written responses to the question on the rater worksheet were not discussed. Librarians completed a final, collaborative rating sheet to record the final scores for each student paper. The scores on this rating sheet were used for the data analysis. The Director was responsible for tabulating the data and reporting the results of the assessment to the librarians and the UH faculty.

DISCUSSION AND LESSONS LEARNED

Lessons Learned

While the assessment project generated many positive results, a project debrief resulted in several “lessons learned” that may be valuable to others. One drawback with this project was the sample used for assessment. Since the original sample of papers was generated for the critical thinking assessment, the sample size was not truly adequate for making generalizations about information literacy skills across campus. Nonetheless, as an exploratory research project, the assessment generated useful data indicating specific information literacy competencies upon which the library instruction program can focus its efforts. It also established a benchmark against which future iterations of this assessment project can be compared. Hoffmann and LaBonte (2012, p. 77) mention a limitation of their study was not having conducted a “pre-test” study to generate data for comparison, but that the existing data could have provided a stronger foundation for future studies. UH Libraries intend to collaborate with the Office of Institutional Effectiveness to collect a larger, more comprehensive sample that will

more accurately represent the graduating seniors' information literacy competencies, and the data collected from this initial exploratory study will provide a strong foundation for the future assessment.

An additional benefit arising from the small sample size was that it gave the team the ability to devote time to both face-to-face norming sessions and face-to-face rating sessions. Diller and Phelps (2008) noted the need for more normalizing activities to ensure raters apply the rubric consistently, especially when those creating the rubric are often not the raters. Their assessment project required a third rater twenty-five percent of the time (p. 82). Oakleaf (2009, p. 981) concluded that librarian raters can become more consistent with additional training. Because the UH team's face-to-face rating meetings gave the librarians additional opportunities to discuss questions about the rubric as they arose, the time served as extra training and improved consistent application of the rubric. Only a few papers needed a third consultation with the Director.

Another lesson deals with the use of instructor-supplied assignment guidelines as part of the evaluation process. Some assignment guidelines provided lists of resources for students to consult and cite within their papers. In several cases, the librarians were initially conflicted on how to rate papers for the competencies "selects appropriate resources" and "uses resources of sufficient breadth" when students were provided with specific resources by their instructors. The issue was further complicated given that some of the resources provided by instructors did not meet the criteria deemed "acceptable" according to the rubric. The experience raised the question of whether this type of paper should have been excluded from the

sample. Ultimately, the librarians agreed to keep this type of paper in the sample. The decision was based on the understanding that the task was to assess the product based on the rubric criteria, not faculty assignment requirements. In doing so, the team gained data that not only provided a benchmark of skills but also insights about faculty expectations of students. In their discussions, the librarians acknowledged that faculty expectations for senior level assignments do not always meet the information literacy expectations librarians hold for graduating senior level work, nor can they expect information literacy goals to feature prominently in the type of assignments collected. The data does, however, provide examples for further analysis when considering how librarians can work more closely with faculty to effectively incorporate information literacy skills and requirements into assignment design. In hindsight, the authors would advise against including these types of papers in a more extensive research study, as it could alter the results. But in an exploratory study such as this, raters could learn valuable lessons from including these types of papers.

One of the more interesting lessons learned deals with citation styles. The final rubric did not specify that a particular citation style was necessary for an acceptable or exemplary rating. It stated only that citations must be complete and consistent. The librarians were sometimes conflicted on how to rate papers when encountering exemplary consistency in style and exemplary attribution but non-standard or seemingly made-up citation styles. The experience raised the question of whether the rubric should have included the criteria "in style appropriate for the discipline" which was removed after norming. An additional consideration is whether seniors

should be held to that standard or simply held to the “consistency in style” standard. The UH librarians plan to edit the rubric based on the results and also gather feedback from faculty about these questions.

A valuable lesson learned came with writing the responses to the opened-ended question “What would you say to this student about using information sources?” Patterns emerged from the comments; these patterns provided depth to the interpretation of the ratings. Shared rater impressions, drawn from their cumulative experiences, led to richer discussions of the assessment results when communicating with faculty and other librarians. Sharing specific examples with faculty, drawn from the comments, reinforced the value and meaning of the data. These conversations, with evidence and concrete examples, can lead to improved teaching and student learning. Furthermore, because the evaluations took place over several weeks, the librarian pair rating a paper would frequently not have an opportunity to discuss rating rationales immediately following independent evaluations. The open-ended question responses provided a summary of rating rationales and thus helped refresh memories and aid consensus discussions.

Finally, when considering developing a rubric for use as an assessment tool, librarians should realize the significant allocation of staff resources and expertise required for the successful completion of the venture. The rubric development, norming, and evaluation processes were time-consuming, challenging tasks. The librarians met regularly, devoting a minimum of two hours a week for nearly six months to the project. The librarians faced the challenge of reaching consensus on the language and interpretation of the descriptors for each information literacy competency. The

Director provided the initial expertise needed to start and teach the process and also served as a mediator during the more difficult conversations. The collaboration gave the librarians greater understanding of information literacy assessment and rubric design, encouraged enlightening conversations about the interdisciplinary nature of information literacy, and strengthened their confidence in both the tool and their assessment work. In this case, the collaboration and dedication to the project was very worth the librarians’ time.

Project Implications

Applying rubrics to evaluate the use of information demonstrated in student papers can yield crucial results for librarians interested in reflecting on current instruction practices. Comparing the assessment results with the established goals and priorities of an instruction program can help identify gaps in alignment between current information literacy instruction efforts and demonstrated student needs (Oakleaf, 2008, p. 246; Oakleaf, 2009, p. 970). The UH Libraries instruction program is using the results of this assessment to identify information literacy competencies that scored lower than desired and is establishing corresponding, targeted programmatic learning outcomes. Finally, the results served as a benchmark and an environmental scan that informed the development of an overall Instruction Program Assessment Plan.

Assessment results are also valuable for reinforcing librarians’ roles within the campus community. Communicating the results of this type of assessment to faculty and partner units on campus can lead to campus-level and librarian-faculty discussions surrounding student information literacy competencies and curricular instruction (Oakleaf, 2008, p. 246; Oakleaf,

2009, p. 970). UH instruction librarians are using the results of this assessment project to engage in conversation with faculty stakeholder groups and individual faculty about the incorporation of information literacy into the curriculum through library led instruction, faculty-led instruction, and assignment (re)design. Furthermore, the partnership and the project as a whole reaffirmed librarians as information literacy experts and positioned them as effective partners for campus-wide curriculum initiatives.

In addition to the assessment results, the information literacy rubric also serves as a valuable collaboration and teaching tool for faculty. The rubric reflects those skills identified as important to faculty. The document, applied to multidisciplinary papers, provides a common set of information literacy descriptors that faculty can embrace, regardless of discipline. Thus, faculty can use the rubric to communicate performance expectations with students. Providing the rubric for this process facilitates curriculum-embedded information literacy instruction and reinforces the value of information literacy for both faculty and students. Furthermore, a common rubric with standardized language, from which faculty can draw, contributes to the provision of a cross-disciplinary, common learning experience for students.

CONCLUSION

This exploratory information literacy assessment project established benchmarks for information literacy education across the University. By leveraging the existing sample of student papers collected for the critical thinking assessment, the librarians were able to raise awareness about the importance of information literacy and its integral relation to critical thinking and

writing. The collaboration provided the essential expertise and authority needed to complete the project. While the rubric development and rating process was time-consuming, the experience was extremely beneficial in teaching librarians about rubric development, sample selection, norming, and general assessment best practices. Furthermore, the rubric is being reused and revised for additional information literacy assessments and is helping to build a greater culture of assessment around information literacy. Perhaps even more important, the results are now an essential component of how librarians communicate with faculty when planning information literacy instruction. The results are generating more campus-wide discussions on how to strengthen information literacy education, and the project as a whole cultivated a shared understanding of librarian and faculty concerns regarding information literacy.

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APPENDIX A — DRAFT DESCRIPTORS

| Information Literacy Skill | Unacceptable | Acceptable | Exemplary |
|--|---|---|--|
| Selects appropriate resources (Consider the subject, context and scope of the paper) | <p>Selection of resources suggests a lack of understanding of the nature of information needed for the topic/question at hand</p> <p>Sources cited are weak in timeliness, objectivity, authority, credibility and/or relevancy</p> <p>Demonstrates lack of judgment in selecting sources</p> | <p>Selection of resources shows a general understanding of the nature of information needed for the topic/question at hand</p> <p>Sources cited demonstrate timeliness, objectivity, authority, credibility and/or relevancy however there is room for improvement</p> <p>Demonstrates generally adequate judgment in selecting sources</p> | <p>Selection of resources shows thorough understanding of the nature of information needed for the topic/question at hand</p> <p>Sources cited demonstrate high level of timeliness, objectivity, authority, credibility and relevancy</p> <p>Selection of sources shows excellent understanding of context and the domain of the discipline</p> |
| Uses resources of sufficient breadth (Consider the subject, context and scope of the paper) | <p>Extent of information is inadequate for the topic/question at hand</p> <p>Cites only one type of resource (websites, journals, books, media resources) although several types are evidently available</p> <p>Resources do not show appropriate breadth in time frame, point of view, and/or primary/secondary origin</p> | <p>Extent of information is adequate for the topic/question at hand</p> <p>Uses more than one type of resource, but not the full range of appropriate sources</p> <p>Resources show some variety in time frame, point of view, and/or primary/secondary origin</p> | <p>Provides comprehensive information for the topic/question at hand</p> <p>Uses the full range of resources appropriate for the topic.</p> <p>Resources reflect the full appropriate breadth of time frame, viewpoint, and/or primary/secondary origin</p> |
| Evaluates information sources critically | <p>Demonstrates lack of judgment in weighing and using sources</p> <p>Sources used are biased in point of view, not evidence based</p> | <p>Demonstrates some level of critical reading of information and uses them appropriate in paper.</p> <p>Primarily uses information based on evidence and not based on emotion</p> | <p>Demonstrates critical reading/reviewing of information and artfully synthesizes them in paper</p> <p>Uses evidence-based information to support argument</p> |
| Attribution is given where it should be | <p>Failure to attribute</p> <p>Plagiarism</p> <p>Inappropriate attribution (Over-citing or under-citing)</p> | <p>Makes attribution but with some minor errors</p> | <p>Fully and correctly attributed</p> |
| Citations are complete and consistent in format | <p>No citations</p> <p>Poor/inconsistent format</p> <p>Writer demonstrates insufficient understanding of how to cite</p> | <p>A few minor errors</p> | <p>Completely correct in style appropriate to the discipline</p> |

APPENDIX B—FINAL RUBRIC

| Information Literacy Skill | Unacceptable | Acceptable | Exemplary |
|--|--|---|--|
| Selects appropriate resources | <p>Cites search engine as source, like Google or ask.com</p> <p>Sources not credible or timely, or irrelevant to topic</p> <p>Use of sources without regard for author's credential, or for timeliness of source</p> <p>Sources are emotional, not factual</p> <p>No primary sources, though they would be expected</p> | <p>Uses credible sources having proper authority</p> <p>Uses relevant sources appropriate for topic</p> <p>Uses primary and secondary sources as appropriate</p> | <p>Uses highly appropriate and relevant sources</p> <p>Cites authorities in the discipline</p> <p>Selection and use of information shows that student understands context and knows the domain</p> <p>Excellent usage of primary and secondary sources when appropriate</p> |
| Uses resources of sufficient breadth | <p>Extent of information is inadequate for the topic/question at hand</p> <p>Work cites only one type of resource (websites, journals, books, media resources) although several types of resources are available</p> <p>Resources do not show appropriate breadth in time frame, point of view, and/or primary/secondary origin</p> <p>Cites only websites or only non-reviewed/non-scholarly material when reviewed material would be expected</p> <p>So limited to one point of view that it is not clear that writer is aware that another viewpoint exists</p> | <p>Extent of information is adequate for the topic/question at hand</p> <p>Sources are timely/from appropriate timeframe</p> <p>Uses acceptable breadth of source types</p> <p>Shows awareness of other points of view, though the presentation of them may be less than balanced</p> | <p>Provides comprehensive information for the topic/question at hand</p> <p>Uses a full range of high-quality sources appropriate for the topic</p> <p>Selects resources examining both sides, or all sides, of the topic</p> <p>Use of resources demonstrates understanding of the material and its limits, with consequent adjustments</p> <p>Sources used reflect appropriate breadth of time frame, viewpoint, and/or primary/secondary origin</p> |
| Integrates information into work | <p>Rather than a critical usage of information, paper is a "knowledge dump"</p> <p>Writer cuts and pastes from sources without appearing to recognize the sources or their content</p> | <p>Engages with information, rather than simply "dumping" information</p> <p>Some attempt at integrating the information into the work</p> | <p>Critically reviews both/several points of view</p> <p>New iterations</p> |
| Attribution is given where it should be (intends to provide attribution) | <p>Failure to attribute when appropriate</p> <p>Plagiarism</p> <p>Over-citing or under-citing</p> <p>Does not seem to understand when citing is appropriate</p> | <p>Attribution is provided, with a few minor errors</p> <p>Appears to understand the general purpose of citing</p> | <p>Fully attributed</p> |
| <p>Citations are complete* and consistent in format (executes attribution)</p> <p>*Note: A website citation that is only a URL is incomplete. Author and title (as possible) are required in the event a link is broken, information may still be retrieved.</p> | <p>Sources cannot be located from citations provided</p> <p>Poor/inconsistent format or no citations provided</p> | <p>A few minor errors, but sources are identified and can be located</p> | <p>All citations are complete and consistent</p> |