"How Is this Different from Critical Thinking?": The Risks and Rewards of Deepening Faculty Involvement in an Information Literacy Rubric

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Introduction

Rubrics are a rich tool for direct assessment of information literacy because they provide a framework for evaluating students' abilities in the context of rhetoric. Rubrics have also helped librarians review and strengthen information literacy programs. Yet, if a rubric is to be truly effective at program development, it must be accepted and owned by teaching faculty and librarians alike. This paper explores the transition of our information literacy rubric as a tool used by librarians to a nascent campus-wide pedagogical and assessment instrument. We discuss key ways that deepening faculty involvement in information literacy assessment involved risks, revealed divergences, and ultimately led to unanticipated benefits.

Our paper is comprised of three parts. We place our rubric project within the context of information literacy assessment on our campus. Next, we explore the results of our first rubric assessment involving faculty readers, including how we negotiated concerns about our credibility as researchers, differing disciplinary perspectives that came up during the assessment, and the distribution of scores in how faculty and librarians applied the rubric. We wrap up by discussing some of the opportunities for engaging faculty that emerged from the assessment and outline our plans for the rubric moving forward.

We see our work in conversation with other literature on rubric assessment of information literacy, specifically the role of faculty in this endeavor. This literature generally emphasizes the benefits of involving faculty in such assessment, and a subset explores inter-reader reliability between faculty and librarians. When we extended the portfolio reader pool beyond librarians, our attention was especially drawn to what it meant for our assessment and information literacy program to involve faculty in this way. This is our paper's contribution: illuminating the specific political and interpersonal risks and tensions, along with possibilities opened up, inherent in collaborative assessment between faculty and librarians.

Literature Review

Information literacy assessment using rubrics is a growing field of inquiry, but relatively few articles focus exclusively on the experience on involving faculty in these projects.[1] Recently, some key works address this gap, including Oakleaf, Millet, and Kraus's recent article about Trinity College's campus-wide information literacy assessment project and Oakleaf's article on interrater reliability among faculty and librarian readers.[2] However, integrating information literacy into courses and broader curriculum is still the primary focus for most librarians. Yet, norming around

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assessment of information literacy together with faculty in the context of course and institutional goals can in fact advance collaborative instruction goals. Indeed, ACRL asserts that information literacy "best practice" includes integrating information literacy assessment into college-wide curriculum planning.[3]

Much has been written about impediments to librarian-faculty collaboration, in general. Long-standing tensions in the faculty-librarian relationship prohibit closer collaboration around information literacy.[4] Librarians' status on campus can be a barrier.[5] Norgaard warns of problems for information literacy goals when librarians do not collaborate with faculty, particularly the risks of being sidelined and seen as skills-based only.[6] Many librarians use the ACRL Standards to guide the assessment project, but these can be problematic for faculty.[7] Oakleaf, an expert on information literacy assessment, notes that faculty may view ACRL's Standards as library-centric and librarians might want to articulate these for distinct campus contexts.[8] Gullickson writes that while faculty rated most Standards-based outcomes as important, they struggled with the language and found them to be repetitious.[9] When librarians take on collaborative information literacy projects with faculty, they are confronted with external perceptions of information literacy and disconnect over roles: who is responsible for teaching and measuring information literacy?[10] Several authors describe barriers that stand in the way of collaborative assessment: the assumption that information literacy does not need to be taught; lack of access to students for meaningful assessment; information literacy is seen as a library-only concern.[11]

Most of the literature discussing faculty-librarian collaborative rubric assessment follows a case study model. There are more than we can name here but several examples follow. Often librarians collaborate with faculty to develop or administer a rubric for a single program or class. Brown & Kingsley-Wilson write about faculty-librarian collaboration to create an assessment for an advanced journalism course.[12] Emmons and Martin describe partnering with faculty to assess library instruction in concert with the first-year English program.[13] Scharf et. al. partnered with faculty to develop a rubric for a capstone seminar in the humanities.[14] Knight describes designing a rubric together with faculty to assess students' information literacy in a first-year research and writing class.[15] Librarians and faculty more easily collaborate

when librarians are integrated into campus-wide curricular planning with information literacy among the outcomes. When Arizona State University West created a campus-wide assessment team, a librarian was included. D'Angelo writes that the "presence of a librarian on this team enabled the library to keep information competency in the forefront of campus-wide efforts."[16] Diller and Phelps describe their experiences at Washington State University, Vancouver, when the campus developed new learning goals, an ePortfolio system, and faculty and librarians were able to write a campus-wide information literacy learning goal and rubric.[17] These cases serve as useful models, but librarians and faculty often lack the time to glean lessons from more than a few cases or are not yet empowered to co-develop general learning goals for the campus.[18]

Not surprisingly, librarians attest to myriad benefits from collaborative information literacy assessment using rubrics. For instance, the collaboration strengthened the librarian-faculty relationship and elevated librarians out of the service role.[19] Collaboration provides an opportunity to reflect on shared goals, improve instruction, and develop authentic assessments.[20] While information literacy assessment is often collaborative to a lesser or greater degree, we did not come across literature that focused exclusively on the risks and results of involving faculty. Our article aims to fill this gap by considering the uncertainty we experienced engaging in collaborative assessment, as well as the tensions, challenges, and opportunities that arose.

Information Literacy Assessment at Carleton

Following a successful Mellon grant (2000-2003) that focused on information literacy in five departments on campus, information literacy at Carleton has followed a partially embedded model. Rather than pursuing a library-driven information literacy initiative, we decided to focus our efforts on integrating information literacy into existing and emerging faculty-led curricular initiatives. As other critical literacies—visual, quantitative reasoning included—gain traction on campus, librarians are in a position to translate how information literacy connects with these other critical literacies and curricular initiatives.

Much of our early information literacy assessment efforts focused on the development of a first year information literacy survey. Developed in conjunction with three other institutions and a multidisciplinary

group of faculty and librarians, the Research Practices Survey asked incoming students to report on their research experiences, attitudes, and behaviors.[21] The survey also asked students to do several tasks related to using information that were meant to get at their competencies.

These early assessments yielded some interesting data. Not surprisingly, we learned that there is a gap between our students' perceptions of their abilities and their demonstrated information literacy skills. We saw that while our students report understanding citation, for example, they had difficulty distinguishing between citations for book chapters and journal articles. Perhaps most interesting, especially to our faculty, was the difficulty almost half of our students had in determining if publications like *Time* and *Newsweek* could be characterized as "scholarly." This was all useful data for us to consider, and it guided conversations with faculty about student learning, helped us make decisions about the design of our classes, and informed our interactions with students in individual appointments and at the reference desk.

The results of the survey assessment raised additional questions about how our students were making decisions about and evaluating sources that could not be answered by survey data. Our portfolio assessment project, what we call the Information Literacy in Student Writing (ILSW) project, emerged from our desire to learn more about our students' information literacy habits of mind in the context of their written work. The sophomore Writing Portfolios, collected every year and evaluated by faculty and staff, were quickly identified as a potential source of data as these were already being used by another group on campus to evaluate the extent and quality of quantitative reasoning in student writing and assignments across the curriculum. Several librarians had participated in either the campus portfolio assessment or the quantitative reasoning portfolio assessment, so we had a sense of the kinds of questions that arose and the conversations faculty engaged in during these assessments. One librarian had been involved in the development of the quantitative reasoning rubric and provided insights from that process.

In the summer of 2008, the reference department gathered for several days to develop a rubric and read a set of portfolios. Following deep discussion and drawing on other models of rubrics on campus, our own experiences working with students, and

the ACRL Standards for Information Literacy, we crafted a rubric with three primary dimensions and a four-point rating scale for scores. The dimensions were "Implementation of Attribution," "Evaluation of Sources," and "Communication of Evidence." Possible scores ranged from "Very Poor" (1) to "Interferes with Goals" (2) to "Does not Interfere with Goals" (3) to "Very Strong" (4). We also included several qualifiers to be checked by the reader, including asking if the assignment asks for students to use outside evidence, what type of paper it is, and a set of "illustrative issues" such as "over/undercited claims" and "egregious errors in bibliography, in-text citations, notes." During the summers of 2008, 2009, and 2010, librarians read a total of 215 papers, with some of these papers being read multiple times for a total of 250 reads. We made revisions to the rubric and scoring sheet based on our experiences in these three years.

Though the ILSW project began as an assessment within the library, we imagined it as a campus endeavor from the beginning because we designed the rubric and organized the methodology with our campus in mind. While the first years of ILSW assessment included librarian readers only, we began seeking feedback from faculty about the project soon after our first reading. We met one-on-one with several faculty members who were themselves engaged in rubric assessment to talk about the rubric design. Our rubric was introduced to the campus during a lunchtime session sponsored by the Learning and Teaching Center. Part of our presentation involved having participants take a shot at applying part of the rubric to a short paper we had selected. Faculty attendees generally accepted the rubric and found it useful, suggesting mostly minor changes. Their input along with our own notes about our readings informed small changes and tweaks to our rubric and scoring sheet to enhance usability. These included tightening the language to reflect what we could actually observe, making the scores across dimensions more consistent, and reversing the placement of the scale. We also made more prominent the checkbox for whether or not the paper could be evaluated for information literacy. The college's move to assess campus-wide learning goals provided an opportunity for us, long sought, to more fully involve faculty in our assessment project. In 2011, the college solicited data from select campus departments to evaluate how well the college prepares students to analyze evidence. As part of this effort, librarians were

funded to host a faculty reading with the information literacy rubric. In August 2011, we spent eight hours across two morning reading papers and using the rubric with faculty. During the first morning, we introduced the rubric and read four sample papers selected as illustrative of a range of scores within the three dimensions or raised particularly useful questions about using the rubric. This paper describes what we learned from this 2011 reading and scores.

Results and Discussion

Even as the timing appeared perfect and we were aware that opening the Information Literacy in Student Writing (ILSW) project to faculty would allow for a potentially richer assessment, we were also mindful that there was a certain amount of risk to involving our faculty colleagues. Similarly, an interplay of risk and reward was illustrated in the discussions that took place during the reading. Despite the concerns that were raised at the time, our confidence in the rubric and the project as a whole was bolstered by just how closely the faculty and librarians scored the papers. The following two-part analysis summarizes and discusses our experience, beginning with issues that arose simply from reading together and then comparing how faculty and librarians actually scored papers.

Together, the discussion of the reading and the scores illustrate the benefits and risks of collaborative information literacy assessment. As such, our quantitative analysis will not focus on student scores themselves, but rather interrater reliability across the dimensions. The extent to which a mixed group could reach consensus in discussion and scores was an indication to us of the integrity of the instrument.

Learning from the Reading

We went into the reading anticipating questions about the dimensions of the rubric and about information literacy as a learning goal. To our surprise, faculty accepted the dimensions of the rubric without reservation and these were not a topic of discussion. Faculty also voiced support for information literacy, as defined on the rubric, as a campus-wide goal and personally important. For the most part, faculty did not have trouble using the scoring sheet according to the four-point scale and the illustrative characteristics.

In fact, most conversation during the reading centered on what we would characterize as research design. The richest debates were around these questions: how and whether information literacy appeared in student writing; if we were looking at habits of mind, didn't we need to look at "habituation" for individual students, not single papers across a cohort?; were we primarily concerned with evaluating the evidence students used or the quality of their arguments?; and finally, did the problem of setting aside papers we could not evaluate for information literacy mean we were introducing bias into the exercise?

The abundant questions about our research design could have derailed us. However, this type of conversation is consistent with the challenges that characterize cross-disciplinary collaboration, such as varied understanding and perspectives of the concepts raised. And yet, this particular kind of collaboration is complicated by tensions that arise as we academic staff position ourselves as education researchers on campus. Presenting ourselves in this way while we are still exploring these roles for ourselves can be uncomfortable. We are mindful that we lack the methodological "chops" and status of our faculty colleagues, and yet we are also aware that we have important contributions to make in the scholarship of teaching and learning. This dance of inviting comment and relying on our faculty colleagues' expertise while also projecting confidence in the project is a tricky one. Our biggest fear has been losing hard-earned credibility in other arenas of our work together. We have asked ourselves if we want to expend our "credibility points" on this project.

Despite these potential challenges, the ILSW project provides an opportunity for us to engage deeply with faculty on questions of teaching, learning, and research. First, this project allows us to show faculty our pedagogical orientation. Our librarians and faculty are accustomed to coming together to prepare students for learning, but faculty typically encounter librarians in a single class or with specific library requests like placing a book on course reserve. We are lucky in our small liberal arts college setting to have occasion to engage with faculty beyond traditional roles, such as in events sponsored by the campus learning and teaching center. Still, many faculty do not recognize us as co-teachers since we operate in a different sphere than they do and much of our teaching happens outside the classroom.

Similarly, collaborating in research is new territory for us. Much library research is about practice and

pedagogy, dissimilar from the bulk of faculty research. As librarians, we may not have experience doing our own research or we may come from a methodology different than the inquiry in which we find ourselves engaged. For example, those of us trained as humanists may find gaps in our expertise with quantitative methods. Most faculty either do not know librarians do research or they are unsure what this research would concern. By working together, we support the idea that librarians are also educational researchers while benefiting from the expertise of strong collaborators.

Given our marginal status as both researchers and teachers on campus, we have felt pressure to present a highly polished product when working with faculty. We wondered if we could feel comfortable pursuing this research if faculty had substantial reservations about any part of our research design—from the assumptions underlying our project to our methodology. Perhaps, more significantly, we worried that questions raised might affect our credibility with faculty as partners in teaching on campus. Even so, by inviting faculty to engage with us as partners, the critiques that they posed about the project were similar to questions they would ask of one other, which was an indication that we had not lost credibility but may have even gained some. In fact, some of the faculty became engaged in a new way with information literacy. There was a rich enough response that we have yet to follow up on all of the possibilities.

As we anticipated, collaborating with researchers from different disciplinary backgrounds invited questions of epistemology. We observed that faculty brought distinct disciplinary lenses to the reading.[22] We had a mix of faculty from across the divisions of the college.[23] One social scientist suggested that instead of focusing on information literacy broadly, we should pick the measures we care most about and that are most easily observed. Another predominant concern was whether or not an outside reader could truly determine what evidence was appropriate for that assignment or that field. One humanist questioned how information literacy was distinct from critical thinking if it is about more than selection of outside sources. Faculty proposed different solutions to their uncertainty, including developing multiple rubrics for different disciplines, limiting the sample, and excluding certain kinds of papers, or requiring students to submit the prompt (most papers did not include

the originating assignment). Observing faculty's disciplinary orientation helped us to recognize and feel confident in our own disciplinary perspective.

Among ourselves, we librarians had reached common understanding on the majority of the questions raised when constructing the rubric and during subsequent readings. We, too, struggled the most with the task of evaluating how successfully students' evidence supported claims outside familiar disciplines and using a common rubric across fields of study. We resolved our reservations by expanding our concept of evidence beyond standard secondary sources. We could evaluate students' selection of sources, even when the paper was not a traditional research paper, by contextual clues such as framing and citation. Thus, the only papers we felt we could not evaluate for information literacy were observational. Since one of our goals was to seed across campus the notion that information literacy was present and needed in more than just a research paper, we remained committed to a rubric that accommodates different paper types. This was particularly because we wanted to advance information literacy across the curriculum. If we limited the rubric to assessing only the standard research paper, we risked narrowly defining information literacy and boxing our work into narrow confines.[24]

Comparing the Scores

At the faculty-librarian reading in 2011, eighteen participants read papers. Of these, eleven were faculty, four were librarians, and three were non-librarian staff. A total of 339 readings of 173 papers were analyzed.[25] Of these 339 readings, 236 (70%) were scored by faculty, 64 (19%) by librarians, and 39 (11%) by non-librarian staff. For the purposes of this comparative analysis, we excluded the readings done by the two non-librarian staff, leaving 300 readings for comparison of the scoring done by librarians and faculty.[26]

During the readings, each paper was read twice. If two readers disagreed about whether the paper could be evaluated for information literacy, the paper was read a third time. In these cases, if the tiebreaker determined that the paper could be included, the dissenting score was discarded. If the tiebreaker determined that the paper could not be evaluated, all three reads were thrown out. Thirteen of the 173, or 7.5%, of the papers were read a third time and retained. This process insured that only papers that made sense to include in this assessment remained in the pool. It also

TABLE 1
Implementation of Attribution and
Reader Status Crosstabulation

			Reader Status		Total
			Faculty	**Librarians**	
Implementation of Attribution	1	Count	39_a	6_a	45
		% within Reader Status	16.7%	9.4%	15.2%
	2	Count	54_a	15_a	69
		% within Reader Status	23.2%	23.4%	23.2%
	3	Count	78_a	31_b	109
		% within Reader Status	33.5%	48.4%	36.7%
	4	Count	62_a	12a	74
		% within Reader Status	26.6%	18.8%	24.9%
Total		Count	233	64	297
		% within Reader Status	100.0%	100.0%	100.0%

Subscripts are used to indicate the results of comparing the column proportions using a z test. If a pair of values is significantly different at the .05 level, the values have different subscript letters assigned to them.

resulted in a much richer dataset than we had been able to create in past readings with potential for exploring correlations and patterns.

We found that overall, faculty and librarians were similar in the proportional distribution of scores they assigned in each of the three dimensions (e.g., in one dimension, did librarians assign a similar proportion of 2's as did faculty?). We compared the proportional distribution of scores of librarians and faculty readers using z-tests for each of the three dimensions of the rubric (see tables 1-3). This allowed us to identify whether there was a statistically significant difference in the application of scores across the groups. Of the 12 possible ratings (1-4 on each of three dimensions), only two failed to disprove the null hypothesis and showed significant difference. In the Implementation of Attribution dimension, librarians assigned a greater percentage of 3's than faculty. In the Evaluation of Sources di-

TABLE 2
Evaluation of Sources and Reader Status Crosstabulation

			Reader Status		Total
			Faculty	**Librarians**	
Evaluation of Sources	Cannot Evaluate	Count	34_a	11_a	45
		% within Reader Status	14.4%	17.2%	15.0%
	1	Count	14_a	4_a	18
		% within Reader Status	5.9%	6.3%	6.0%
	2	Count	67_a	18_a	85
		% within Reader Status	28.4%	28.1%	28.3%
	3	Count	66_a	24_a	90
		% within Reader Status	28.0%	37.5%	30.0%
	4	Count	55_a	7_b	62
		% within Reader Status	23.3%	10.9%	20.7%
Total		Count	236	64	300
		% within Reader Status	100.0%	100.0%	100.0%

Subscripts are used to indicate the results of comparing the column proportions using a z test. If a pair of values is significantly different at the .05 level, the values have different subscript letters assigned to them.

TABLE 3
Communication of Evidence and Reader Status Crosstabulation

			Reader Status		Total
			Faculty	Librarians	
Communication of Evidence	1	Count	25$_a$	3$_a$	28
		% within Reader Status	10.6%	4.7%	9.4%
	2	Count	63$_a$	21$_a$	84
		% within Reader Status	26.8%	32.8%	28.1%
	3	Count	78$_a$	26$_a$	104
		% within Reader Status	33.2%	40.6%	34.8%
	4	Count	69$_a$	14$_a$	83
		% within Reader Status	29.4%	21.9%	27.8%
Total		Count	235	64	299
		% within Reader Status	100.0%	100.0%	100.0%

Subscripts are used to indicate the results of comparing the column proportions using a z test. If a pair of values is significantly different at the .05 level, the values have different subscript letters assigned to them.
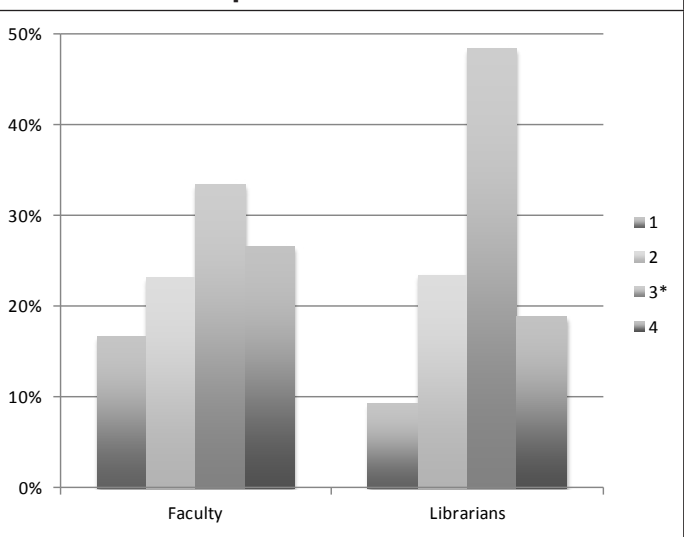
mension, faculty assigned significantly more 4's than librarians. Otherwise, these z-tests showed remarkable consistency of scoring between the two groups.

This strong consistency in scoring surprised us because we had not yet formally normed with faculty from across campus around information literacy standards. These scores told us that librarians and faculty were strikingly similar in how we judged students' ability. Even though there were suggestions during the reading about only looking at papers from some disciplines or certain kinds of papers, faculty and librarians alike were able to consistently assess a broad range of papers. These data supported the strength of the rubric and our conviction that a broad rubric for information literacy could be applied across disciplines. While librarians independently developed the rubric, we involved faculty in revisions along the way. Also, in our liaison role, we were able to marry conversations from across campus with information literacy best practices.
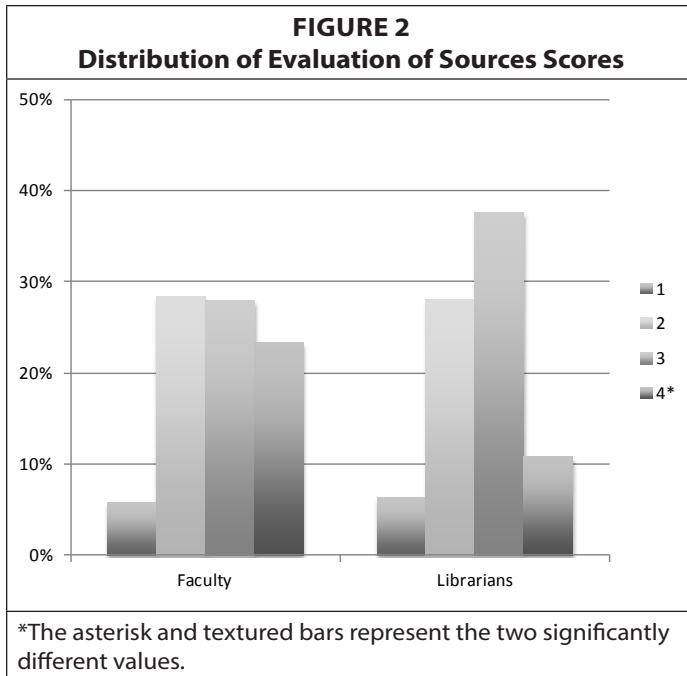
Going forward, we can also learn from the two ratings where faculty and librarians did diverge. We can gain insights into faculty's expectations around information literacy when we reflect on those differences. We suspect that the difference in 3's for the Implementation of Attribution dimension is partly because the practice of attribution is assumed to be more straightforward or "objective"

than the other dimensions. Stated another way, attribution is sometimes thought to be one of the more visible aspects of research. Looking at the distribution of scores from this dimension, the 15 point difference between the librarians' and faculty's application of 3's is split almost perfectly in half between scores of 1 and 4 (see fig. 1). What made faculty see more variation in quality of these papers than librarians? Perhaps this is a function of expertise that faculty gain from grading. Since, of the three, this dimension is most familiar to readers as something expected of students and articulated in assignments, faculty can rely on their experiences grading students on the mechanics of their attribution. Another way to make sense of the difference in assignment of 3's is that faculty may be applying disciplinary citation conventions where librarians are accustomed to helping a broad swath of students cite across assignment types, disciplinary norms, and individual faculty preferences. Librarians may be less concerned with me-

FIGURE 1
Distribution of Implementation of Attribution Scores

*The asterisk and textured bars represent the two significantly different values.

FIGURE 2
Distribution of Evaluation of Sources Scores

*The asterisk and textured bars represent the two significantly different values.

field are appropriate for a claim, they can read as a generalist for communication of that evidence. Perhaps the shared ability to read all papers from a more general perspective lends consistency to scoring in this dimension, despite the discomfort expressed by some readers during norming.

Moving Forward and Conclusions

During the reading, faculty mentioned a variety of ways they saw their potential involvement in the project, useful to our goal of engaging faculty more deeply but also some suggestions that illustrate ambiguity over roles. A simple question was whether or not faculty could use this rubric for their classes (answer: yes). In addition to helping students, professors felt doing so would help them to give direction and set goals. We were also urged to bring in more faculty, even if it complicated interrater reliability, because a broad swath of faculty should define information literacy for the campus and its role across disciplines. Faculty noted that the college curriculum committee was in the midst of setting goals for "evaluating evidence" and faculty have not yet had a broad-based discussion. Interestingly, from the librarians' perspective, the ongoing work of the college's curriculum committee lent us urgency to get our unique perspective in front of faculty. Faculty's notion of their role highlighted faculty's perspective on how curriculum should develop, along with their uncertainty about where librarians and information literacy fit into that conversation.[28] Fol-

chanics. Thus, faculty expect students to have more facility with the details of citation, and librarians have a different set of expectations.
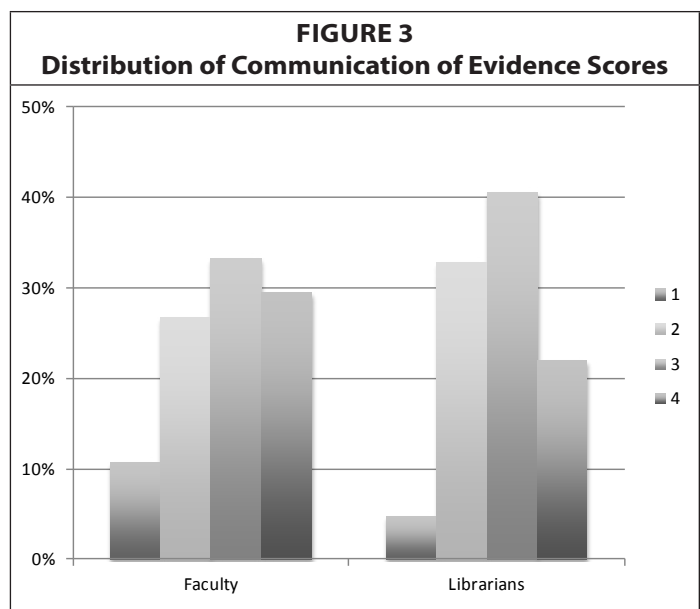
We are not surprised to see a divergence around Evaluation of Sources because this dimension received the most attention during the reading (see fig. 2). Also, in our development of the rubric, Evaluation of Sources demanded the most thought and ultimately this thinking expanded our departmental definition of information literacy.[27] We know from conversation during the reading that faculty were uncomfortable assessing papers in this dimension outside their own expertise. We suspect this difference is due to librarians' length of time norming. Also, librarians teach students across disciplines and are accustomed to relying on communication signals to assess source quality. If faculty are unsure of their ability to assess evidence, they may be more generous than otherwise. On the other hand, faculty's knowledge of their field may lead them to see quality that was less visible to librarians.

The third dimension of Communication of Evidence may be the most consistent between scoring groups because, the way it is defined in the rubric, it is the easiest to separate from a disciplinary perspective (see fig. 3). That is, while a reader may not feel comfortable rating the successful implementation of an unfamiliar citation style or judging whether sources from an unfamiliar

FIGURE 3
Distribution of Communication of Evidence Scores

lowing this reading, we feel empowered to participate in curricular discussions because we have not only normed around information literacy but also have quantitative evidence that faculty and librarians share expectations.

We provided a report to the college learning goal committee highlighting student scores and providing an analysis of these, but we had not yet analyzed faculty-librarian interrater reliability. Nonetheless, the report was well received and the data and analysis cited as a core document for assessing students' use of evidence. The ILSW rubric will be used again when the "Analyze Evidence" goal is re-assessed in five years. In the meantime, as a department, we face decisions about the project moving forward.

We are continuing to read papers every year. We hope to again use faculty readers in the future to deepen our understanding. More tests can be done to insure interrater reliability especially since we had two distinct groups of readers, librarians and faculty, and because each paper in 2011 was read twice. Besides helping us improve our instrument, any points of difference between these groups point us to specific ways in which we can improve our shared understanding of measuring information literacy on our campus. Having multiple years of data from both faculty and librarian readers can only increase the potential for what we can learn from this exercise. We also hope to further explore facets of the data such as how scores in one dimension correlate to scores in other dimensions, student academic performance, or our performance as instructors. Another potentially rich avenue for inquiring is extending the use of the rubric (or a similar one) to other peer institutions and comparing findings. What happens when a mixed group of faculty and staff measures students from across institutions? Or, what might we learn from using the rubric across institution types? We face questions of priorities and energy, such as seeking outside funding.

Finding commonalities between faculty and librarians elevates information literacy to a core competency that we all take responsibility for and do not presume is being taught "by someone else." This ensures that information literacy is not the sole province of librarians or select faculty and departments. Also, we want students to become information literate regardless of their major. Engaging faculty in information literacy assessment helped us to begin to norm across departments on campus. Even if faculty

did not commit to anything as a part of our reading, our hope is that conversations like these provide entry into broader curricular discussions and lay the groundwork for us to participate in those discussions and also to ultimately implement formal change.

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16. D'Angelo, Barbara. "Integrating and Assessing Information Competencies in a Gateway Course." *Reference Services Review* 29, no. 4 (2001): 283.

17. Diller, Karen R., and Sue F. Phelps. "Learning Outcomes, Portfolios, and Rubrics, Oh My! Authentic Assessment of an Information Literacy Program." *portal: Libraries and the Academy* 8, no. 1 (2008): 75-89.

18. Gilchrist, Debra, and Megan Oakleaf. 2012. "An Essential Partner : The Librarian's Role in Student Learning Assessment." *National Institute for Learning Outcomes Assessment —Occasional Paper #14* (April): 14.

19. Emmons and Martin, "Engaging Conversation," 560.

20. Gilchrist and Oakleaf. "An Essential Partner," 11, 13; D' Angelo, "Integrating and assessing information competencies," 288; Diller and Phelps, "Learning Outcomes, Portfolios, and Rubrics, Oh My!" 78.

21. A detailed description of this project is available here: http://apps.carleton.edu/campus/library/about/infolit/projects/research_practices_survey/. The Research Practices Survey is now administered by the HEDS Consortium, and has undergone revision in the years since it was first administered. Information about the latest version of the survey is found here: http://www.hedsconsortium.org/research-practices-survey/.

22. For instance, Rutz and Lauer-Glebov found disciplinary differences among Carleton College faculty in expectations around "critical thinking" as applied to writing assessment. Rutz, Carol, and Jacqulyn Lauer-Glebov. "Assessment and Innovation: One Darn Thing Leads to Another." *Assessing Writing* 10, no. 2 (2005): 91.

23. Of the eleven faculty, five were from the humanities, four were from the social sciences, and two were from the sciences. Though there were more readers from the humanities, these faculty on average read fewer papers (19) than those from the social sciences (30), which balances a possible over-representation of those from the humanities. We would, however, have preferred to have more representation from the sciences in our readers.

24. Condon, in discussing assessment of writing (as cited by Elmborg, who finds writing assessment to be similar to research assessment) writes: "As long as we fall for the positivists' notion that the way to measure a complex construct is to reduce it to its simplest components and then measure each independently of the others, we will be unable to measure a construct as complicated as writing and seriously at sea trying to measure the even more complex effects of a WAC program." Condon, William. "Accommodating Complexity: WAC Program Evaluation in the Age of Accountability." In *WAC for the New Millennium: Strategies for Continuing Writing-Across-the-Curriculum Programs*, edited by S. H. McLeod, E. Miraglia, M. Soven and C. Thassis, 32-33. (North Carolina: Carolina Academic Press, 2001); Elmborg, James K. "Information Literacy and Writing across the Curriculum: Sharing the Vision." *Reference Services Review* 31, no. 1 (2003): 78.

25. Sixty-one additional reads were excluded due to incomplete data or disagreement over whether they could be evaluated for evidence of information literacy.

26. A close reader of figures 1-3 will notice that the total number of cases diverges slightly from 300 in the Implementation of Attribution and Communication of Evidence cross tabulations. This is due to a small number of readings where one of the three dimensions was left un-scored even though the rater felt the paper overall could be evaluated for information literacy.

27. Iris Jastram, Danya Leebaw, and Heather Tompkins, "CSI(L) Carleton: Forensic Librarians and Reflective Practices," *In the Library with the Lead Pipe*, Last modified December 14, 2011.

28. See Sajdak, "Let the Faculty Do It," for a full discussion of how faculty-librarian roles shaped their approach to rolling out an information literacy assessment project at Smith College.

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