

CHAPTER 20

BRIDGING THE GAPS: COLLABORATION IN A FACULTY AND LIBRARIAN COMMUNITY OF PRACTICE ON INFORMATION LITERACY

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INTRODUCTION

Why do students perform poorly on research assignments? How can librarians and faculty best help their students develop confidence and competence in finding and using information? Concerns like these led a number of faculty and librarians at Indiana University Purdue University Indianapolis (IUPUI) to form a community of practice, a voluntary group which met regularly to investigate issues in effective teaching of information literacy (IL) and to propose solutions. Members began with disparate and sometimes conflicting ideas about how to accomplish this goal, including how to quantify the goal in the first place. Does student success equal accurate citation, use of scholarly sources, or expeditious searches in academic databases? Or is it something more amorphous: that through practice and recursive steps, students finally *get it* and are able to select and use disciplinary knowledge in ways that disciplinary experts recognize as valid?

The community members' struggles to understand each other and find common ground exemplify the larger problem that IL practitioners and stakeholders are facing: reconciling one view, that IL is composed of discrete skills and competencies with measurable outcomes, with an alternate view, that IL is comprised of interconnected threshold concepts, where success is more difficult to identify. To IL practitioners, these two points of view are represented by the *Information*

Literacy Competency Standards for Higher Education (IL Standards) (ACRL, 2000), standards which are being superseded by the *Framework for Information Literacy for Higher Education (Framework for IL)* (ACRL, 2015). Although the *IL Standards* and the *Framework for IL* are familiar to most academic librarians, faculty may find that defining, teaching, and assessing IL is puzzling or even futile. Even if librarians thoroughly adopt the *Framework for IL* itself, “Each library and its partners on campus will need to deploy [the] frames to best fit their own situation” (ACRL, 2015). As a result, faculty/librarian cooperation in teaching and promoting IL at the university level is crucial for student success.

Collaboration is difficult, the members of the community of practice discovered, as they worked through misunderstandings, assumptions, and territoriality described in the case study presented later in this chapter. Individual faculty and librarians, nonetheless, grew into a community by discussing their preconceived notions, clarifying shared language, and agreeing to use assessment to investigate current knowledge and to strategize future initiatives. The community of practice has forged a mutually supportive partnership promoting IL on the campus. They have worked together to initiate assessments to discover the campus climate in relation to taking responsibility for IL, and they have sponsored professional development for both faculty and librarians at their home institution and from other institutions across the state.

The work of the community of practice is not yet complete. But this work has opened a new conversation shared by librarians, faculty, and administration on the campus level, a conversation that will help lead students to become confident users of the complicated contemporary world of information. The experience of the community of practice at IUPUI demonstrates ways other institutions can form campus-wide partnerships in order to embed IL into the curriculum. Adding to previous literature about librarian and faculty collaboration, this example of a community of practice model is useful because it shows ways that faculty can partner with librarians in the teaching of IL.

LITERATURE REVIEW

How can librarian/faculty collaboration be bolstered, overcoming the barriers and providing concerted action to improve IL acquisition for all students? Although librarians may be familiar with the literature on student development in IL concepts, many college faculty are not, since much of the IL literature comes from library-related articles and presentations (Artman, Friscaro-Pawlowski & Monge, 2010, p. 95, and as noted by Norgaard & Sinkinson in this collection). Faculty may not have heard about recent research describing students’ actual research practices, librarian-led assessments based on national standards, or even

debates about the place of IL in the curriculum. Faculty are also unlikely to know that librarians sometimes see them as barriers impeding students' opportunities to learn appropriate IL practices. If collaboration between faculty and librarians is crucial, significant collaboration may well mean reading each other's literature in order to unpack assumptions and see more integral relationships between disciplines and their dependence on IL.

The IUPUI community of practice began meeting with most members unaware of the concept of "community of practice" beyond its use on campus as an organizing and naming tool. They also did not share the record of two important literatures: studies of the attempts to bridge the librarian-faculty gap and studies of the gap between students' perceptions of IL and the sense shared among faculty and librarians that students don't practice IL very well. A brief review will help to set the context for how the IUPUI community of practice sought to address some of the issues that emerge in that record.

THE GAP BETWEEN STUDENT SELF-PERCEPTION AND FACULTY/LIBRARIAN VIEWS

Faculty often observe that students have less developed research skills than they need for success in college courses, and recent research investigates why. In sum, students do find and use information, but they do not engage in the ways they are using it to make meaning, with the result that they are overconfident in their work, both in the context of courses and their imagined futures.

Project Information Literacy, over a series of six national studies beginning in 2008, found that students brought high school research practices to college, and that many continued to use the same routines and the same limited resources for paper after paper (Head, 2013, p. 475). Not only do college students have difficulty finding manageable topics and locating and evaluating resources (Head, 2013, p. 474), they often don't use the resources effectively. For example, the Citation Project examined papers of first-year writing students and found that most writing from the sample failed to engage source texts in meaningful ways, with 70% of the citations derived from the first two pages of a source and most sources cited only once per paper (Jamieson & Howard, 2011). This superficial use of sources indicates the students may not understand the source ideas well enough to integrate them within their own work. Similarly, the chapters by Katt Blackwell-Starnes and by Miriam Laskin and Cynthia Haller (Chapter 11) describe how students tend to focus on the final product requirement for a minimum number of references, using Google's first page results mechanically to fulfill this requirement without knowing how to gauge the relationship between the sources they cite or knowing how to fit them into ongoing scholarly

discourse. They seem to be operating under the assumption that when IL matters, it will be evaluated only for its representation of a set of discreet skills.

Adding to student confusion about finding and using sources is the increasing amount of information available to students from the Internet. Students may think they can evaluate web resources for reliability and authority, but another study reveals participants used arbitrary and “highly subjective evaluation criteria” (Wang & Arturo, 2005, as cited in Badke, 2012, p. 35). Furthermore, less proficient students have high confidence in their own research skills (Gross & Latham, 2009, p. 336, and in this collection, Blackwell-Starnes). College graduates who bring inexpert research skills to the workplace can frustrate employers (Head, 2013, p. 476). The 2013 LEAP poll of employers conducted by Hart Research Associates found that 70% of employers surveyed wanted universities to place more emphasis on IL knowledge, including “evaluation of information from multiple sources.” Job skills which depend on finding and using information have changed with the proliferation of media technology, as has the very nature of information (Andretta, 2012, pp. 57–58).

The independent, sophisticated, and ethical use of information marks college students and graduates as competent and fluent, even if they are only emerging as experts in a field. The issue that remains undecided in many institutions is when, how, and from whom students are to learn the range of knowledge and practices they need. Students like those interviewed by Melissa Gross and Don Latham (2009, p. 344), who enter college with very little training, often regard themselves as self-taught. Students also learn from peers, including those with whom they have a prior relationship, and “from strangers who appear available to talk and approachable” (Gross & Latham, 2009, p. 343). Some faculty may think student self-instruction is sufficient, or that undergraduates should be able to learn research skills and habits in the process of an assignment, with advice from supervising faculty (McGuinness, 2006, p. 577). However, students who actually do learn the research skills contained within the context of one assignment may not see the transferability of those skills to another course (Saunders, 2013, p. 139).

Where do the information professionals—librarians—fit in this picture? Project Information Literacy found that students do not turn to libraries and librarians very often (Head, 2013, p. 475). These findings point to several gaps: the gap between student self-perception of their skills versus their actual abilities, the gap between faculty goals for student accomplishment in research and lack of faculty instruction to support that accomplishment, and the gap between the availability of research knowledge from librarians and students’ reluctance to call upon librarians for assistance. These gaps lead to the questions of who should teach IL and how it should be taught.

THE GAP BETWEEN LIBRARIANS AND FACULTY

Examples of partnerships between librarians and discipline faculty in library journals to address those gaps are inspiring, but the successful ones are often the work of pairs or small teams. Barbara D'Angelo and Barry Maid (2004) comment that these efforts "are not sustainable" on a wider scale (p. 213). Examples of campus-wide initiatives, on the other hand, like the IL assessment at Trinity College (Oakleaf, Millet & Kraus, 2011), enjoy administrative support and wide faculty buy-in, but these examples are much more rare. William Badke (2005) summarizes: "The fact is, and the vast literature confirms it, effective [librarian-faculty] collaboration is simply not the norm" (p. 68). The conviction that librarians and faculty share the responsibility for teaching IL is wide-spread, arising from the common-sense idea that the best instruction occurs when students put new knowledge and skills into repeated practice for relevant purposes. However, real collaboration on IL instruction can be difficult to achieve because of two persistent tensions.

First, language can be an impediment to collaboration (Anthony, 2010, p. 84); even the term *information literacy* may confuse the uninitiated. Rolf Norgaard and Caroline Sinkinson, in this collection, stress that a shared definition of IL is "a prerequisite" to conversations between cross-disciplinary colleagues. Norgaard has been pointing to this fundamental barrier to collaboration since his two seminal articles in 2003 and 2004. In them, specifically referring to the fields of IL and Writing Studies, he argues that the lack of familiarity of one another's disciplines can result in misidentifying theoretical connections and lead some to settle for seeing IL the same way that students seem to, as a "neutral, discrete, context-free skill" (p. 125), where success is measured by products, such as successful information searches and correct citation. Instead, Norgaard defines IL in terms of practices that should be an integral part of the writing process, helping writers to solve problems and make meaning through their writing (p. 127). Similarly, Badke (2012) stresses the need for faculty to teach research processes, so that students understand how disciplines identify and use knowledge, learning "to *do* higher education disciplines, rather than acquiring just what constitutes a discipline's knowledge base" (p. 93). To "do" a discipline, he suggests, students must not merely parrot scholarly discourse, but learn to participate in a scholarly conversation in the discipline. Faculty-librarian collaboration can help merge content and process within instruction so that students learn how to *think* in their discipline and recognize themselves as *creators* of knowledge and not merely consumers. The shift from viewing IL as skill to viewing it as practice is unsettling for librarians and faculty, as well as for the students they share.

Second, surveys of both faculty and librarians list some common and conflicting assumptions about each other's roles that impede effective instructional partnerships. Librarians at times have perceived that faculty apathy, time constraints, or culture contribute to difficulties of collaboration. For example, librarians may see faculty as territorial about their classes, limiting librarian access to students (Julien & Given, 2003 and 2005, as cited in McGuinness, 2006, p. 574). On the other hand, faculty may view librarians themselves as territorial, wishing "to retain ownership of information literacy" (Saunders, 2012, p. 227). A related issue is status: Librarians may be suspicious of faculty who encroach or miss the target when faculty seek to "integrate *our* [librarian] standardized skills into *their* curriculum" (Gullikson, 2006, p. 584). In addition, some faculty may not want librarians to teach, thinking that librarians are not trained to instruct, while other faculty may not see themselves as having any responsibility for teaching IL (Saunders, 2013, p. 137).

A Model of Collaboration for Bridging the Gaps

Faculty and librarians alike desire to narrow the gap between their shared perception of students' IL and students' commonly held self-perception. The problem that librarians and faculty both want to solve together is, however, embedded in the problems of their relationship—partly caused by differences in language and focus and partly created by their roles in the institution.

One potential solution to overcome impediments to collaboration in an institution is the community of practice model, which can develop from the grass-roots level and can encourage wide-spread teamwork. The "Community of Practice Design Guide" defines the term: "A community of practice is a group of people who share a common concern, a set of problems, or interest in a topic and who come together to fulfill both individual and group goals" (Cambridge, Kaplan & Suter, 2005, p. 1). Communities of practice are used in businesses, government units, and other policy-driven endeavors, as well as in higher education.

A campus community of practice can cross disciplinary boundaries, expand to include several members, operate on a small budget, and result in wide-spread effects. Ongoing meetings help participants build trust as they discuss common concerns, create new knowledge about the focusing issue, and take action through projects or products (Cambridge, Kaplan & Suter, 2005, p. 3). Naturally there are negatives as well; interest in a community's work may wax and wane, depending on the energy of individual members and the quality of the volunteer leadership (Wenger, McDermott & Snyder, 2001). Communities also have life cycles; sometimes the work sputters or a community disbands. However, a vital and growing community of practice can call campus-wide attention

to an issue and begin conversations to investigate causes, enlist other stakeholders, and propose solutions. Such has been the experience of the Community of Practice on Information Literacy at IUPUI.

COMMUNITY OF PRACTICE ON INFORMATION LITERACY AT IUPUI

BACKGROUND

IUPUI is a large, mostly non-residential, research university located in the heart of Indianapolis. IUPUI has a high undergraduate enrollment (21,000 students) as well as graduate and professional schools (8,000 students). The campus's commitment to IL is explicitly incorporated in its foundational Principles of Undergraduate Learning, which were adopted by faculty in 1998 and are consistently used on syllabi across campus. The Principles are similar to the more recent Essential Learning Outcomes of the Association of American Colleges and University's Liberal Education and America's Promise initiative. One outcome of the first principle, Core Communication and Quantitative Skills, is that students will be able to "make effective use of information resources and technology" (Office of Student Data, Analysis, and Evaluation, 2008). As part of the campus commitment to IL, a librarian is assigned to the instructional team of each first-year seminar, reaching 90% of incoming first-time, full-time students in recent years. However, nearly 40% of students earning bachelor degrees are transfer students (Hansen, 2014), and no campus-wide program introduces them to the library or to a librarian. Moreover, the university library does not offer a centralized IL program. Responsibility for IL instruction often falls to individual faculty and librarians, some of whom proactively work to instruct students in research skills on an as-needed basis. However, even with the success of these individual efforts, a needs assessment survey distributed in 2011 to faculty teaching Gateway courses—those courses identified as having the highest numbers of first-time, full-time students—resulted in 95% of respondents agreeing that IL and an introduction to the resources of the academic library were among the most critical needs for their students (University College, 2012).

Communities of practice have been used at IUPUI since 2000 (Chism, Lees & Evenbeck, 2002, p. 39). IUPUI's communities of practice are organizational structures used to emphasize collaborative learning and problem-solving and to capitalize on the small group's work for the sake of the university's mission. Other IUPUI communities have focused on concerns like retention of first-year students, multicultural teaching, and critical thinking. These groups have served as leaders and change agents at IUPUI, bringing attention to campus needs, providing forums for public discussion, studying aspects of an identified

problem, advocating best practices for solutions, and presenting and publishing their findings.

Currently, most campus community of practice groups are supported by the Gateway to Graduation Program, which provides a small budget for materials or speaker fees. Communities which receive Gateway support are expected to hold regular discussion meetings focused on an issue pertinent to students in first-year and gateway courses and to develop scholarly projects that enlarge the body of knowledge about their central question, which then leads to development and dissemination of best practices. The three aspects of the community of practice model—discussion within the group, emphasis on scholarly inquiry, and dissemination of best practices—have been crucial to the formation and work of the IUPUI Community of Practice on Information Literacy.

DEVELOPMENT OF THE COMMUNITY OF PRACTICE ON INFORMATION LITERACY

One faculty member's search to address student needs led to the formation of the Community of Practice on Information Literacy. Realizing that some of the best seniors in her sociology capstone course lacked sufficient skills to find sources for a final paper, Professor Patricia Wittberg was searching for solutions when she attended a conference workshop called "Information Literacy: The Partnership of Sociology Faculty and Social Science Librarians" (Caravello, Kain, Macicak, Kuchi & Weiss, 2007). Wittberg then approached the campus director of writing, urging an "Information Literacy across the Curriculum" program. Prior campus successes with communities of practice led the director to suggest that Wittberg form a group focused on IL. The two solicited members, including both faculty and librarians, and began meetings.

One initiative undertaken by the community of practice in 2008 and 2009 was a pilot assessment of faculty teaching practices in courses that required research assignments. The focus of this limited study was to identify classroom strategies used to foster IL and to judge the relative success of the pedagogical efforts. To that end, teachers of 14 classes in liberal arts, science, and business disciplines who regularly included IL instruction in their classes were enlisted; those instructors administered an in-class IL pre-test to their students. The pre-test, which consisted of open-ended questions asking them to describe their prior research experience, their methods of topic selection and development, and their processes for finding and evaluating sources, was taken by 478 undergraduate students. Results of the initial in-class surveys were coded by criteria arranged in a matrix to measure levels of student success in research processes. After evaluating the pre-tests, the researchers discovered that students' skills were

poorer than expected, with fewer than 25% reporting practices determined adequate on the matrix. For example, 77% reported minimal, linear steps in topic selection: “Pick topic, research, write paper.” In naming the first source(s) they used in research, 58% said they went to “the internet,” “Google,” “magazines,” or the like, with no further elaboration. When asked how they judged the credibility of online sources or of journal articles, fewer than one-fifth of the students surveyed gave answers to these questions that were evaluated on the matrix as “good.” The pre-test was coded so that it could be matched with a post-test using the same questions. The hope was that by comparing each student’s answers at the beginning and end of the semester, the researchers could identify promising pedagogical methods for teaching IL. However, the post-test results were as abysmal as the pre-test scores; only the students enrolled in six sections of a researched argument course showed any improvement, but their gains were not statistically significant.

Although the survey results were disappointing, these early efforts were important, both for the development of the group as a cohesive community and for campus partnerships about IL. Beginning with a community of practice model, the group developed a librarian-faculty collaboration different from those seen on campus and in the literature. One of the differences was that *faculty* initiated the outreach to librarians, and in so doing affirmed the value of IL as a central issue to academics on our campus. Another difference was the size of the group, which involved several faculty and librarians working together—small-team relationships are the norm for faculty-librarian collaboration on the IUPUI campus and in much of the IL literature. The initial foray into assessment was also critical, as it shaped the group’s understanding of inquiry as a process of discovering how to ask the *right* questions. Therefore, the group committed to further study and development of more effective pedagogical strategies, which built the foundation for the next iteration of the community of practice.

COMMITMENT TO DIALOGUE, SCHOLARLY INQUIRY, AND DISSEMINATION

Because life cycles of communities of practice wax and wane, new members were solicited to the community of practice in 2012 to reinvigorate the work of the group. Those who answered the call for members included an equal number of librarians and faculty. An interest survey indicated that participants were eager to investigate a variety of issues, including their own IL pedagogy, teaching of research practices in other disciplines across the curriculum, current and planned library-sponsored initiatives, students’ understanding of ethical use of intellectual property, and ways faculty were currently collaborating with librarians and using library services. Respondents also mentioned some hesitation about

joining, with one librarian wondering why faculty were leading the group, and an instructor admitting to fears that faculty voices would be lost with so many librarian participants. Fifteen committed to the community of practice goals of dialogue, emphasis on scholarly inquiry, and dissemination of best practices.

Dialogue

Although members found they had much in common in their desires to help students achieve competence in IL, it is not surprising that fault lines began to show up in early meetings. In fact, participants' discussions sometimes echoed the barriers to collaboration mentioned in the library literature: who owns IL? Who is responsible for teaching it? Why won't faculty give librarians more access to their students? Why do librarians *want* to come to class? Are librarians trained to teach? What use is a one-time library session, when IL needs stretch across the semester? Facing these barriers with honest discussion was a positive development for the community, as it helped members uncover assumptions. Rhetorician Kenneth Bruffee "advises that partners undergo an examination of assumptions. . .to avoid misperceptions, misunderstandings, and the like" (Brasley, 2008, p. 73). Working through the assumptions and questions that caused barriers, participants soon agreed on a foundational principle: *all* own IL and *all* bear responsibility to teach it, with the goal of helping students to be successful information users while they are learners at IUPUI and later, in their careers.

As the group moved toward articulating common objectives and a plan of work, they found that language was also a barrier. Bruffee's work emphasizes "shared language" as an essential part of the collaborative process in order to communicate fully and reach consensus" (Brasley, 2008, p. 73). To begin with, members needed to figure out what all meant by the term *information literacy*. To do so, they focused on the Association of College and Research Libraries (ACRL) definition of IL as "a set of abilities requiring individuals to 'recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information'" (ACRL, 2013). However, faculty from different disciplines interpreted the phrase *information literacy* differently. What some found difficult in that discussion was the meaning of *literacy* as part of the term. Is IL a set of skills or a set of practices? These were differently problematized depending upon the role each thought they played in relation to the ACRL definition—whether one asked students to do something or taught them how to do it. Inevitably, members also asked, "What is information?" How has technology changed the nature of information and transformed information users and producers? Although the group did not fully resolve the definition questions, they felt confident that a shared understanding of what was at stake could now lead them toward learning what they wanted to assess and to share with colleagues across the campus.

Self-assessment

To further solidify their shared understanding of the ACRL's conceptualization of IL, both librarians and faculty agreed to participate in a pilot assessment intended to ultimately shape questions and procedures for a campus-wide assessment. In the process, faculty grappled with the five *IL Standards*, as well as the 22 performance indicators and 87 student learning outcomes supporting the standards. This study, an environmental scan led by the university library's Instructional Services Council, asked participants to carefully examine one of their courses by looking at all 87 outcomes. Faculty were asked to determine whether they teach each outcome (i.e., in class, online, through assigned reading, or through some other approach); whether the faculty member assesses the outcome (either by direct or indirect measures); whether a librarian teaches or assesses the outcome for that specific course; whether no one addresses it; or if the outcome does not apply to the course. Since each outcome was included on the survey instrument, taking the survey was time-intensive, a barrier to faculty participation also noted by Gullikson (2008, p. 585), which ultimately led to a more streamlined faculty survey instrument.

The value of participation in the pilot study for faculty in the community of practice was that the instrument forced reflection on their teaching practices, which led to a clearer understanding of the scope of the ACRL *IL Standards* and the interconnectedness of the IL practices with their own curriculum. The actual results of the survey were controversial in group discussion. Faculty taught or assessed 59.5% of the 87 outcomes, while librarians taught 2.5%. Was this difference the result of faculty territoriality, denying librarians access to their students? Were faculty teaching effectively? Were the *IL Standards* an effective way to describe or to measure IL, or would the *Framework for IL*, then in draft mode, be more helpful in understanding IL learning for IUPUI's students? The discussion ultimately led to a greater development of trust within the community of practice, as it affirmed the importance of librarians' responsibility to teach the teachers as well as the students—preparing faculty to address IL concerns in their own courses. In fact, through dialogue, the community of practice became a support system for one another with meetings as a safe place to share ideas and goals.

Campus-level Assessment

The pilot study using the ACRL *IL Standards* was part of a much broader initiative conducted by the library's Instructional Services Council and funded by a grant from the campus Program Review and Assessment Committee. This initiative intended to gather information on faculty collaboration, student learning, and adherence to campus-wide assessment and evaluation initiatives

because little historical information is available at the campus level. The purpose of the initial assessments, according to the Instructional Services Council, was to shape a more intentional IL instruction program at IUPUI and engage in deeper, meaningful conversations about student learning outcomes and goals at the class, course, and departmental levels.

As previous researchers have discovered (Latham & Gross, 2012, p. 580, and Blackwell-Starnes in this collection), students tend to rate their abilities to find and evaluate information as higher than they really are. To conduct a campus-wide assessment of student perceptions of their IL knowledge, the library's Instructional Services Council worked with IUPUI's Office of Institutional Research to add questions to a biennial cross-campus assessment called the Continuing Student Satisfaction and Priorities Survey. Previous student surveys had included minimal references to IL skills; for example, respondents were asked how effective they felt they were at reading and understanding books, articles, and instruction manuals, or how effectively they believed they could recognize which ideas or materials need to be fully acknowledged to avoid plagiarizing (Institutional Research Office, 2012).

The expanded student survey was administered in spring 2013 to a randomly selected group of IUPUI undergraduates, 22% of whom responded. Student self-satisfaction with their IL abilities was high: about 9 out of 10 rated themselves as effective or very effective at identifying sources of information most appropriate for a project and at knowing how to acknowledge sources to avoid plagiarism (Graunke, 2013, p. 2). More than 80% were confident in their ability to distinguish between popular and scholarly sources, to choose and evaluate relevant information for a specific assignment, and to use reference materials appropriate to the discipline. Interestingly, although 92% claimed to have visited the library, only 33% of respondents had attended a class taught by librarians, only 21% had attended a library workshop, and fewer than 16% had made an appointment with a librarian. Despite the lack of interaction with actual librarians, 65% thought they were effective or very effective at finding contact information for a subject librarian (Graunke, 2013, p. 3). These data, although limited because they represent student self-ratings rather than actual measurement of student knowledge, are valuable because understanding student self-perception can shape new pedagogical approaches to improving information use in papers and projects.

Another campus-wide assessment collected data about faculty efforts to teach IL by adding items to a faculty satisfaction survey. Agreeing that data collection about faculty teaching of IL concepts was important, the Institutional Research Office assisted community of practice members to select and refine questions, which were then added to the 2015 version of the survey instrument. Although

the IL items on the faculty survey were companion items to those on the student survey, faculty were asked, not about student competence, but about concepts they teach in a typical class. The survey was sent to all campus faculty and had an overall response rate of 43%. Results from the 795 respondents (excluding teaching librarians from this analysis) showed that the majority do intentionally teach IL concepts. The highest ranked items in the faculty survey were selecting appropriate sources of information for a topic or question (67%) and recognizing what constitutes plagiarism and how to avoid it (63%) (S. Lowe, personal communication, April 28, 2015). These items correspond with the highest ranked items on the student self-satisfaction survey, at approximately 90% each (Graunke, 2013, p. 2). The correlation suggests that students may be learning about IL concepts from faculty efforts. On the other hand, when students reported the helpfulness of various entities in their development of IL, their most helpful means of developing IL skills was self-instruction, a finding that is widely echoed in library literature. On the campus level, this gap between what faculty think they teach and how students believe they learn might be usefully examined from an instructional design standpoint to uncover new practices.

One of the benefits of the inclusion of IL concepts in both campus-wide surveys is increased visibility of the need for IL instruction across departments and schools. The survey also indicates a receptive attitude toward IL at the institutional level; administrators are aware of the work and very interested in the outcomes. Universities are feeling pressure from multiple stakeholders, including state legislators and employers, to strengthen students' lifelong uses of information. These goals are also emphasized in the Lumina Foundation's Degree Qualifications Profile, in the Liberal Education and America's Promise campaign of the Association of American Colleges and Universities, and by accrediting associations, including the Middle States Commission on Higher Education (Mounce, 2010, p. 306). These documents are opening up new discussions about the shared work of educating citizens and about the conflicts, not dissimilar to the conflicts faced by the community of practice at the outset, that continue to call all stakeholders to negotiate the meanings of degrees and of higher education itself.

Dissemination

Discussion within the community of practice about assessment resulted in an action plan to increase student empowerment in the information world by enlisting other faculty and librarians in this important endeavor. Two campus-wide workshops have brought IL experts to IUPUI to share useful and relevant strategies. After all, any plans created collaboratively by librarians and faculty must still be operationalized in classrooms and course work, using measurable learning

outcomes. Building those learning outcomes and incorporating IL pedagogy in actual classroom work became the focus of the first hands-on workshop, led by Anne Zald, Head of Educational Initiatives at the University of Las Vegas libraries. Zald led a series of exercises scaffolded to allow participants to identify IL learning outcomes in an assignment or activity, then to identify the criteria for successful student work, and then to scale the criteria for grading. This first workshop was a turning point for the community of practice, bringing increased interest and energy from the campus to the community's work. Hosting a large group of librarians and faculty in the same room, all using the same language and sharing the same concerns, was remarkable, showing the inherent value of the community of practice. The workshop was also a good recruitment tool, bringing more members, which prompted a new phase in the community life cycle to continue the collaborative work of improving IL instruction across the curriculum.

A second workshop in 2014 featuring William Badke, author of *Teaching Research Processes: The Faculty Role in the Development of Skilled Researchers* (2012), drew participants from six institutions in central and southern Indiana. Badke's presentation emphasized that threshold concepts in a particular discipline include its research processes, which should be taught as centrally as the content of the discipline. Badke helped participants to understand the literacy issue inherent in the term *information literacy*, pointing out that the term denotes more than just stand-alone skills—students must be brought into the academic culture and into the cultures of their disciplines in order to learn the habits of mind and practices that constitute information literacy. This second workshop continued the transformative work of the community of practice, bringing faculty and librarians together to investigate strategies to improve students' command of research processes.

NEXT STEPS

Both workshops, Badke's and Zald's, while seemingly focused on the two different views of IL—the *IL Standards* view and the *Framework for IL* view—shape the next steps for the Community of Practice on Information Literacy. As Megan Oakleaf (2014) affirms in "A Roadmap for Assessing Student Learning Using the New Framework for Information Literacy for Higher Education," the threshold concepts identified as critical at the local level need to be "transform[ed]" into learning outcomes so that the learning can be assessed (p. 512). Oakleaf recommends that librarians seek agreement on outcomes with all stakeholders involved in the particular learning situation (p. 512). For example, if a librarian designs an IL outcome on the program level, those who administer and instruct in the program should also agree on the outcome. IUPUI librarians and

faculty in the community of practice are eager to explore the potential for the *Framework for IL* to shape new understandings of teaching and learning IL in Indianapolis.

Another next step for the community of practice is analysis and dissemination of the student and faculty survey results. For the first time, the IUPUI campus has data about student perceptions of their own skills at finding, evaluating, using, and citing sources, and corresponding data about faculty efforts to teach IL. This collected data should be shared with stakeholders and followed up with more targeted inquiry as the community of practice pursues its inquiry into best pedagogical practices. Another plan for dissemination is to add to an existing online collection of sample assignments and teaching strategies that have worked well on IUPUI's campus.

At IUPUI, the Community of Practice on Information Literacy brought librarians, faculty, and administrators together to promote IL engagement. While the work is far from finished, the community continues to evolve, adding points of focus as individual members bring their own classroom experiences and research interests into the collaboration. Perhaps the most valuable benefit of the community of practice is the transformation of the pedagogy of individual members who, with increasing confidence, can facilitate real growth in students' information-using behaviors.

CONCLUSION

Other chapters in this volume have highlighted the need for conversation between librarians and disciplinary faculty, conversations that can lead to collaboration for the benefit of students. (See Scheidt et al., Norgaard & Sinkinson, Feekery, Emerson & Skyrme, and Bensen, Woetzel, Wu & Hashmi in this collection, for examples.) The community of practice model could be valuable for other institutions, helping to open up conversations about students' needs, instructional roles, and strategies for learning. Since group members determine the work to be conducted, the community of practice model can fit varying local situations. A community of practice can jump-start ideas, turning them into action, and it can lead the way to real discovery and real professional development, in the end, closing instructional gaps and benefitting students.

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