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Writing Instructors' Intentional Integration of the Information Literacy *Framework*

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Abstract

This article presents an exploratory study that examines how 11 first-year writing instructors' conceptualizations of information literacy evolved over the course of their participation in an inquiry group co-developed and co-facilitated by the Libraries' teaching faculty and the Director of Composition & Rhetoric at a public university in the United States. The authors developed a coding schema to identify the presence of information literacy-related themes and practices in pre- and post-program course syllabi and in reflective pieces submitted by instructors. The findings revealed that instructors' use and applications of the ACRL *Framework* increased after the program, showing greater personal engagement as evidenced by more preferential application of frames most relevant to their learning goals. Moreover, instructors integrated those frames more fully into their instructional practices. The authors' analysis of instructor-created artifacts provides a unique lens into disciplinary instructors' conceptualizations of and approaches to information literacy while examining the impact of one path for collaboration and scalability of information literacy integration within a curriculum.

Keywords: information literacy, first-year writing, inquiry groups, intentional integration

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Writing Instructors' Intentional Integration of the Information Literacy *Framework*

The challenges of intentionally incorporating information literacy (IL) into undergraduate students' academic experience and learning are well documented. Librarians are not, nor should they be, solely responsible for supporting student learning in these areas. There are multiple theoretical and practical approaches for information literacy teaching and learning. The Association of College and Research Libraries' (ACRL, 2015) *Framework* for *Information Literacy for Higher Education* provides one path by articulating core conceptual understandings or "frames" central to information literacy. *Framework* authors did not prescribe the document's use but suggested its usefulness for institutional partnerships focused on course/curricula redesign, student success initiatives, pedagogical research, and conversations about and assessment of student learning (ACRL, 2015 para 6). According to the *Framework*, each campus should "deploy these frames to best fit their own situation" (ACRL, 2015, para. 3). For this approach to be effective, disciplinary instructor-librarian collaborations are essential for student success (Kissel et al., 2016).

There is a longstanding and burgeoning conversation exploring the intersections of IL and composition studies. Writing-intensive courses are promising for IL integration because IL and writing are complementary disciplines and processes (Bowles-Terry et al., 2010; Elmborg, 2003; Holliday & Fagerheim, 2006; Johnson & McCracken, 2016; Norgaard, 2003, 2004; Norgaard & Sinkinson, 2016). As both disciplines have evolved, intersections have become increasingly clear, providing fertile ground for collaboration.

A variety of approaches for collaboration between librarians and composition instructors have been documented, many focusing on collaborations within first-year writing (FYW) courses. To tackle challenges of scalability, especially at institutions where the number of FYW sections and instructors far outnumber librarians available to support these classes, "train-the-trainer methods" empower FYW coordinators and instructors to integrate IL with peripheral support from and collaboration with librarians. Educational development programs, including learning communities, communities of practice, and inquiry groups, can facilitate this approach.

This article describes a study designed to explore the impact of a "train-the-trainer" approach for intentional integration of IL into FYW courses at the University of Nebraska-

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Lincoln (UNL), a land-grant R1 university with a population of nearly 20,000 undergraduate students. Working collaboratively, the Director of Composition & Rhetoric and Libraries' teaching faculty facilitated an inquiry group composed of 11 FYW instructors. Authors describe the program they developed, the study's findings, and their iterative methods resulting from the inherent challenges of identifying the *Framework* within instructional materials.

Literature Review

Librarians as Educational Developers

The Professional and Organizational Development (POD) Network (n.d.) defines *educational development* as efforts that enhance the work of colleges and universities, often with a focus on teaching and learning. Academic librarians have argued that educational development work is a promising approach for teaching and integrating information literacy on college and university campuses. (Educational development is often referred to as *faculty development* within the higher education setting, but the former is a more inclusive term.) *Train-the-trainer* or *teach-the-teacher* models of IL support, which emphasize teacher development, collaboration, and consultation, have been presented as a viable alternative to the "one-shot" approach to IL instruction (Bowles-Terry & Donovan, 2016; Cowan & Eva, 2016; Fister, 2009; Flierl et al., 2020; Hartman et al., 2014; Iannuzzi, 1998; Miller & Bell, 2005; Smith, 1997).

In two recent pieces, Hammons thoroughly reviewed and analyzed library and information science (2020) and educational development (2022) literature to explore the benefits and challenges of this approach to IL, claiming that while more assessment is needed to determine long-term impacts, "teaching the teachers" is a promising method for IL integration. When librarians invest energy into educational development efforts for instructors, they can support information literacy integration without shouldering all the instructional responsibility, extending their capacity to reach more teachers and learners. In addition, Hammons (2020) noted that educational development focused on information literacy for graduate teaching assistants has the added benefit of developing a future generation of faculty.

In her review of the faculty development literature, Hammons (2022) presented implications for librarians and IL, including features of educational development programs most likely to be successful. Success is bolstered by relevant content; opportunities for

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instructors to apply learning and interact with peers, effective program design, inclusion of diverse instructional methods, opportunities for reflection and feedback, and sufficient resources. In short, "[educational development] programs may be more successful if they are well-designed, well-resourced, and longer-term" (Hammons, 2022, p. 29).

Complementary processes and disciplines

Collaborations and intersections between libraries and undergraduate composition programs are well-represented in the literature, going back decades, with Elmborg (2003) asserting shared problems and questions as long as the curriculum has existed. Norgaard's (2003, 2004) work was foundational to exploring the intersection of composition studies and IL; Norgaard (2003) introduced *writing information literacy*, a term that bridges the two disciplines in recognition of shared teaching and learning goals and the "intertwined acts of writing, research, and information use" (Baer, 2016, p. 1).

Several edited volumes have acknowledged and explored these complementary disciplines and their theoretical and practical connections (Baer, 2016; D'Angelo et al., 2017; Purdy & McClure, 2014; Veach, 2018). These works cited a variety of examples documenting pedagogical partnerships at the intersection of writing and IL, from development of multisession IL experiences in first-year writing classes, to curricular overhauls informed by the Council of Writing Program Administrators' (CWPA) WPA Outcomes Statement and the ACRL Framework.

Purdy and McClure (2014) claimed researching (i.e., finding, gathering, analyzing, and integrating information) and writing are inseparable, interdependent, processes that should not, and perhaps cannot, be treated separately, but instead should systematically be integrated into students' academic experience. Baer (2016) noted that both librarians and compositionists value the roles of problem-solving and inquiry in the student learning process. Her interviews with four pairs of librarians and writing instructors reflected "the social and political significance" of teaching both writing and IL, as both disciplines seek to help students effectively participate in discourse communities and to responsibly engage in the world beyond academia (Baer, 2016, p. 116).

Shared Challenges and Opportunities

The disciplines also share challenges or "common disjunctures" (Baer, 2016, p. 4). As Norgaard (2003, 2004) introduced writing information literacy, Elmborg (2003) explored similarities and differences between writing and IL, including shared challenges and

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questions related to responsibility: Who teaches writing, information literacy skills, and research-based writing? Who's ultimately responsible for students' learning in these areas? First-year writing programs and their instructors are frequently responsible for teaching introductory research-writing to first-year students (Artman et al., 2010), which is why instruction for first-year writing courses is a feature of almost every academic library's instruction program (Murphy, 2019).

Assessments in writing courses often focus primarily on the procedures and mechanics of writing and research, reducing complex, recursive, and intertwined information, and writing processes to rote and disparate activities. Both research and writing are complex and contextual processes. Librarians visiting writing courses at the invitation of instructors to merely deliver a "one-shot" demonstration focused on how to use the libraries and find sources reinforces professional and disciplinary silos (Baer, 2016; Murphy, 2019).

Murphy's (2019) exploratory case study found that, while new TAs in writing courses wanted students to learn how to evaluate, understand, and synthesize sources, assignments instead emphasized source type and format. Jamieson and Howard (2013) critiqued writing assignments that include "seemingly arbitrary instructors' demands," for example, "You may not cite websites," "All of your sources must be scholarly," and "Your paper must include references to at least two books" (p. 237). Writing assignments like these focus on mechanical performance and encourage, they argued, obedience to assignment directions over research-related activities, thereby missing opportunities for integrating valuable, authentic IL skills and concepts into the research-writing process.

Similar Shifts and Frameworks

Not coincidentally, several compilations exploring the intersection of IL and composition studies were published within several years of ACRL's adoption of the *Framework* (Baer, 2016; D'Angelo et al., 2017; Purdy & McClure, 2014; Veach, 2018). The *Framework* marked a shift from IL's emphasis on isolated skills and standards to a focus on conceptual understandings and dispositions for navigating a complicated information environment. Around this time, key publications that guide writing programs – such as the *Framework for Success in Postsecondary Writing* (CWPA et al., 2011), a revised Writing Program Administrators (2014) *Outcomes Statement for First-Year Composition*, and Adler-Kassner and Wardle's (2015) *Naming What We Know: Threshold Concepts of Writing Studies* – also

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emphasized dispositions and habits of mind in lieu of previous emphasis on mechanics and isolated skills relevant to writing.

The similar approaches outlined in these IL and writing documents reflect similar shifts in the way many librarians and writing instructors were thinking about teaching and learning (Baer, 2016). These provided a common language for library and writing instructor communities, reducing the amount of "code-switching" formerly necessary for communicating, which makes collaboration easier (Anders & Hemstrom, 2016, p. 80). The convergence in approach and common language made way for even richer librarian and writing instructor collaborations.

Norgaard and Sinkinson's (2016) co-authored chapter offered a "retrospective and look ahead" for writing information literacy. Published just over a decade after Norgaard's (2003, 2004) initial introduction to the concept, Norgaard and Sinkinson's (2016) chapter credited the revised *Framework* for its potential to foster new conversations between librarians and writing instructors, claiming that IL found itself at a pivotal moment with much promise for collaboration and conversation in the decade ahead. Hardy et al. (2022) provided a recent example of a rich collaboration and research study at this intersection; the authors applied the term *problem-solving* (in contrast to *answer-getting*) to a set of dispositions described in the *Framework* and coded assignment text and student reflective writing from FYW courses. They reported rates of problem-solving were significantly higher for sections working with the *Framework*. Additionally, they imagined future pedagogical interventions that emphasize critical information literacy concepts or threshold concepts identified in *Naming What We Know* and emphasized that writing instructors and librarians can each bring their own disciplinary perspectives to teaching and the scholarship of teaching and learning focused on research and IL.

The Writing Information Literacy Inquiry Program

University of Nebraska-Lincoln's (UNL's) Writing Information Literacy (WIL) program was an educational development opportunity co-designed and co-facilitated by Libraries' teaching faculty and the Director of Composition and Rhetoric to provide support for FYW instructors' IL integration in their FYW courses. For the Director, the program would help propel a collaborative redesign of the FYW curriculum, and for Libraries' faculty, it provided a path for scaling support, collaboration, and IL integration in FYW courses. With grant funds received in early 2020 from UNL's teaching and learning center, the authors recruited 11 experienced FYW instructors to participate in a seven-week-long inquiry

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group as Writing Information Literacy fellows. These fellows were all English department lecturers or graduate teaching assistants who had taught at least two semesters of 100- and 200-level composition courses and would be teaching them again in the upcoming semester. Participants co-created learning goals, lesson plans, assignments, and other learning objects to be piloted during the fellows' fall 2020 classes, comprising the three courses in UNL's first-year writing sequence: ENGL 150: Writing as Inquiry, ENGL 151: Writing as Argument, and ENGL 254: Writing and Communities. Study authors presented fellows with the ACRL Framework, which serves as the basis for the Libraries' programmatic learning outcomes, and readings related to its main theoretical and pedagogical foundations (Bowen, 2017; Mackey & Jacobson, 2011; Meyer & Land, 2005), explored shared goals and intersections, and provided space, time, and structure to incorporate IL in meaningful ways that felt relevant to their individual teaching and learning goals. The design of the inquiry group was inspired by Garrison's (2016) work on communities of inquiry, or groups of learners who focus on searching for both personal meaning and shared understanding. Before we convened, fellows read Nelson et al.'s (2010) piece on deep conversations within collaborative inquiry groups, which argued these groups are "characterized by a willingness to investigate teaching-learning connections and to identify and negotiate differences and similarities in beliefs about what constitutes good teaching and meaningful learning" (p. 176).

As the program began, participants got to know one another, learned of program goals and deliverables (Appendix A), and developed with teaching librarians shared language related to IL, an essential part of the collaborative process (Anthony, 2010; Bruffee, 1984; Norgaard & Sinkinson, 2016). The first two weeks of the program centered on exploration of the *Framework*, the UNL Libraries learning outcomes (which are an institutional translation of the *Framework*), and perceived connections between these and the WPA *Outcomes Statement*. The third week focused on course design. An instructional designer colleague led a discussion about Wiggins and McTighe's (2005) backward design framework, and fellows began to articulate learning goals centered on IL concepts they wanted to prioritize in their course(s).

Fellows were then provided three weeks of work time, during which they were segmented into three course cohort groups comprised of the three-to-four fellows who would be teaching each of the targeted FYW courses (ENGL 150, ENGL 151, and ENGL 254). During this stage, fellows collaborated both synchronously and asynchronously to craft their syllabi

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and design new assignments, activities, and/or units for their courses. Librarians facilitating the inquiry group consulted with each group, offering feedback at this stage. At the fourth and final meeting, fellows gave five-minute lightning talks summarizing their work in two or three slides. These mini presentations included a brief overview of their approaches to integrating IL in their course, described key takeaways gleaned from cohort members' feedback, and concluded with any outstanding questions about their plan or a particular element needing additional feedback from the group.

Research Questions

Felten and Chick (2018) suggested the scholarship of teaching and learning (SoTL) is a "signature pedagogy" of educational development, a framework for understanding effective educational development and providing a path for understanding, planning, and evaluating educational development work. The scholarship of educational development (SoED), like SoTL, is focused on understanding and improving conditions to support student learning in higher education. SoED, however, is directly focused on the impact of educational development work, including the impact on "teaching beliefs, practices and approaches of instructors" (Kenny at al., 2017, p. 3).

An important facet of this project was to enable and support the emergence of fellows' own understandings and applications of IL in ways they felt were meaningful to their practice of teaching. This IRB-approved study was therefore guided by the following questions:

- RQ1. How did the frames manifest in instructors' definitions and understandings of IL prior to the program?
- RQ2. Did exposure to the *Framework* over the course of the program change the fellows' integration of IL-related concepts into their course syllabi?
- RQ3. Did the fellows' perceptions of IL shift after participation in the program?

Methods

Sources of Data

In order to monitor how fellows' perceptions and classroom applications of IL shifted, study authors conducted a content analysis to identify instances of the *Framework*. The authors gathered four primary sources of data prior to and after participation in the inquiry group program:

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- a pre-program survey in which fellows were asked to share their existing knowledge about IL, where they learned about it, and an assessment of their current IL approaches in their FYW courses
- a post-program reflection on how their conceptions of IL had changed or not, a self-assessment of their ability to achieve the program learning outcomes, and a description of what felt most challenging about incorporating IL into their classes
- a syllabus from a FYW course taught by each fellow prior to the program
- the final syllabus they designed throughout the inquiry group

Coding the *Framework*

Because study authors used the *Framework* as a guiding document for the inquiry program's exploration of information literacy and because the *Framework* serves as the basis for the UNL Libraries' programmatic learning outcomes, the *Framework* was selected as a tool for coding IL-related concepts. The difficulty of identifying concrete examples of the ACRL *Framework* within text documents is well-established (Benallack & Rundels, 2021; Beuoy & Boss, 2019; Dubicki, 2019; Hardy et al., 2022; Hicks & Lloyd, 2023; McGowan et al., 2016). With six conceptual frames presenting 45 knowledge practices and 38 dispositions, the complexity of the *Framework* mirrors the complexity of other information literacy models that emerged during what Hicks and Lloyd (2023) described as a "second wave of constructivist-focused information literacy models," which began appearing in 2010 (p. 283). Though each frame orients around a specific concept, there is considerable overlap and blurring of lines between each item, making it a laborious and ultimately subjective process to code occurrences of the frames. Although some authors have offered content analysis guidance (Benallack & Rundels, 2021; Beuoy & Boss, 2019), just as the *Framework* is nonprescriptive and situational, coding it continues to be as well.

Given these challenges, study authors followed the pragmatist paradigm for coding, which allows researchers to choose "the right tool for the right job" (Saldaña, 2011, p. 178). A coding manual (Appendix B) was iteratively developed based on three main documents: direct review of the *Framework*; the University Libraries' learning outcomes (University of Nebraska-Lincoln Libraries, n.d.); and Benallack and Rundel's (2021) coding examples. After reviewing all materials to familiarize themselves with the content, authors used deductive coding to independently code one participant's document and used consensus to create a

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final coded document. The full team then independently coded the remaining three documents for that participant, again using consensus to develop the final coded document and refine the codebook. Teams of two followed this same iterative process to code the remaining documents. Discrepancies were resolved in discussion with the entire research team.

It is important to note that both manifest and latent coding were used to identify the six ACRL frames throughout the content analysis. Manifest coding, in which a frame is directly referenced or named, helped reveal when instructors were clearly commenting on the *Framework* or inserting IL into their pedagogy. However, there were many more instances detected through latent coding, where surrounding text was used to infer meaning. Additionally, unlike Benallack and Rundel's (2021), mutually exclusive coding was used, in which only one frame was allowed per clause. In these circumstances, contextual cues were used to select the most applicable frame. For example, when references to paraphrasing were made, they were coded as "Information Has Value" if pertaining to source attribution and "Scholarship as Conversation" if describing how researchers engage with sources or arguments in text. Once coding was completed, documents were transferred into MaxQDA software for final markup and analysis. Data analysis was performed using SPSS 25.0, and visuals created using Microsoft's Excel.

A main goal of this exploratory project was to discover what writing instructors' intentional integration of the *Framework* into their teaching practice might look like. The data were analyzed not to test hypotheses or make predictions but rather to help illustrate how the instructors conceptualized and approached IL before and after the inquiry group program. Although a comparative lens was used to guide this review, true comparative assessments or an understanding of an individual participants' change was not the goal for this study, which instead focused on how the *Framework* revealed itself within the corpus of documents.

Results

As shown in Table 1, a total of 498 instances of the frames were identified across all 43 documents received from the 11 fellows (one participant failed to return a post-program reflection). An additional 27 items were identified using an "IL Interesting" code, which was used to mark passages which did not necessarily align with a particular frame yet were deemed broadly relevant to the IL umbrella. Participants' narrative statements in the documents were used to explain and interpret quantitative findings.

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Table 1: Frames Coded in Writing Information Literacy Fellows' Documents

			Document		
Frame	Pre-Syllabi	Pre-Surveys	Post-Syllabi	Post-Reflections	Total
Authority Is Constructed and Contextual	24	19	31	26	100
Information Creation as a Process	30	7	32	8	77
Information Has Value	32	-	29	5	66
Research as Inquiry	43	7	63	21	134
Scholarship as Conversation	19	4	29	3	55
Searching as Strategic Exploration	21	19	16	10	66
Total	169	56	200	73	498

RQ1. How did the frames manifest in instructors' definitions and understandings of IL prior to the fellowship program?

Prior to their participation in the inquiry group, fellows were asked to reflect on and write about their current thinking and knowledge related to IL. Each of the fellows expressed at least a basic level of understanding or awareness of IL, while all described their understanding as insufficient to some degree, with a desire to strengthen their IL teaching practices.

Figure 1 shows where the 56 total instances of the frames appeared within the individual fellows' pre-program surveys, where fellows used terms relating to between one and five frames. Two frames, "Authority Is Constructed and Contextual" and "Searching as Strategic Exploration," were each coded 19 times, comprising 67.8% of total frames referenced. None of the fellows' pre-program survey comments were coded as "Information Has Value."

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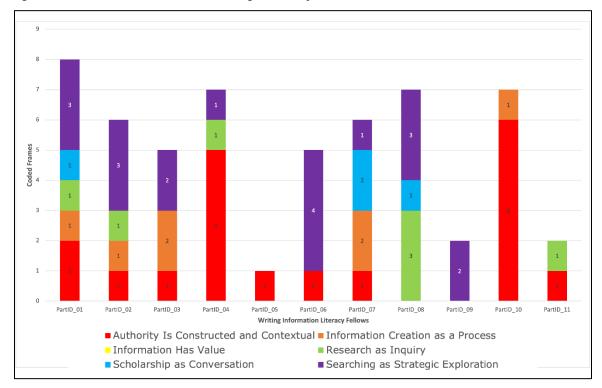


Figure 1: Count of Frames in Fellows' Pre-Program Surveys

"Authority Is Constructed and Contextual" was identified in nine of the 11 fellows' preprogram definitions of IL. Upon examination of how this frame was considered, it appears to be due largely to instructors' remarking on the importance of teaching traditional source evaluation techniques. Their remarks situated IL as a consumer-side practice, using terms such as vetting, finding, understanding, and evaluating existing sources of information, as captured in this participant's definition:

The most important aspects of [information literacy] for me as a teacher, an academic, and a writer, is being able to vet the sources that contain information so as to ascertain how the sources are socially situated and how their biases and mission statements may contribute to the type and quality of information they produce.

"Searching as Strategic Exploration" was identified in eight of the fellows' IL definitions. Most coded instances referenced classroom instruction centering on the proper use of traditional library resources (e.g., physical collections, databases, archives) for academic work, usually led by a librarian. The fellows defined IL in ways that restricted its value to coursework or academic functions, though one participant provided a more expansive view, writing, "In the most basic sense, information literacy is knowing how to find the

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information you need, and the reason can be personal, educational, or professional in nature."

Surprisingly, none of the survey documents were coded as relating to "Information Has Value." Of all the dispositions and knowledge practices detailed within the *Framework*, instruction on source attribution and citation requirements is perhaps the most standardized within FYW courses. Either the fellows simply failed to comment on this practice, or they did not consider it as being within the scope of IL.

Regardless of the number or type of frames coded in the fellows' surveys, incorporating IL into their classrooms was widely viewed as an important but stressful additional responsibility that competed against their main curricular priorities. Many expressed their desire to greatly "slow down" time spent with students on building IL skills but felt incapable of sacrificing classroom time for such work. In the words of one participant:

Information literacy is basically an entire bachelor's, master's, and doctorate for librarians, so it can easily take over an entire course—and it's important enough to deserve that. But I am also trying to balance that with crafting a writing course that is not only about research, sources, etc.

RQ2. Did exposure to the *Framework* over the course of the program change the fellows' integration of IL-related concepts into their course syllabi?

In the fellows' course syllabi, 169 instances of the frames were coded in the pre-program syllabi and 200 in the post-program syllabi. Despite an overall increase of 18.3%, this was not evenly distributed across the frames (see Figure 2). References to "Searching as Strategic Exploration" and "Information Has Value" both decreased slightly, while instances of the other four frames increased. "Research as Inquiry" was the most coded frame in both preand post-program syllabi, and saw the second largest increase (46.5%), next to "Scholarship as Conversation" (52.6%). Importantly, there were no statistically significant differences in the number or type of frames detected in these documents, as indicated by results from a Wilcoxon Signed Ranks test (Z = -.716, p = 0.474), a nonparametric equivalent of the matched-pairs difference t-test (Coleman, 2018).

The 23.8% decrease in "Searching as Strategic Exploration" codes occurred because the group's post-syllabi included fewer scheduled library sessions than the pre-syllabi. For this study, all library visits were coded under this frame because of its dispositional modeling of "seek guidance from experts, such as librarians, researchers, and professionals." Though it is

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possible that this decrease was intentional, the decline can more likely be attributed to the sudden restrictions in response to the ongoing pandemic, which reduced the length of the semester and forced all classes to be taught remotely, making physical library visits impossible. The change could also reflect a shift in emphasis from search skills and strategy (e.g., keyword development and database searching) to habits and dispositions focused on inquiry and curiosity as drivers of the research process.

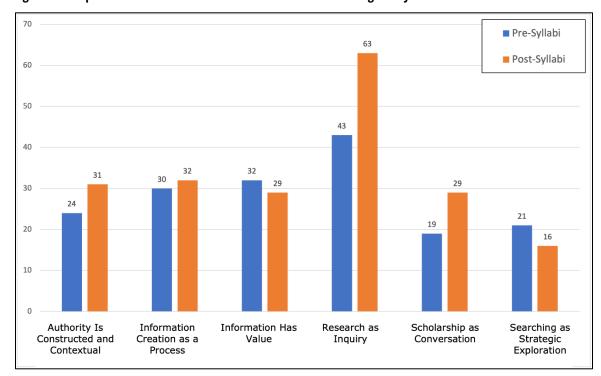


Figure 2: Comparison of Frames Coded in Fellows' Pre- and Post-Program Syllabi

RQ3. Did the fellows' perceptions of IL change after participation in the fellowship program?

Ten of 11 fellows provided post-program reflections. As seen in Figure 3, 73 instances of the frames were identified in these reflections, where each document included between two and five frames. "Authority Is Constructed and Contextual" was identified most, with 26 instances (35.6%), and "Research as Inquiry" second, accruing 21 (28.8%) coded instances.

"Authority Is Constructed and Contextual" was identified in nine of the 10 fellows' responses. While references to using "basic indicators of authority" for source evaluation were still present (e.g. ,"this was [students'] first introduction to peer-reviewed sources"), their reflections suggested a shift towards systems thinking, where fellows worked with students to examine entire bodies of information of all media types, going beyond analyzing

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individual sources for bias to also considering how its value might change dependent on their information need.

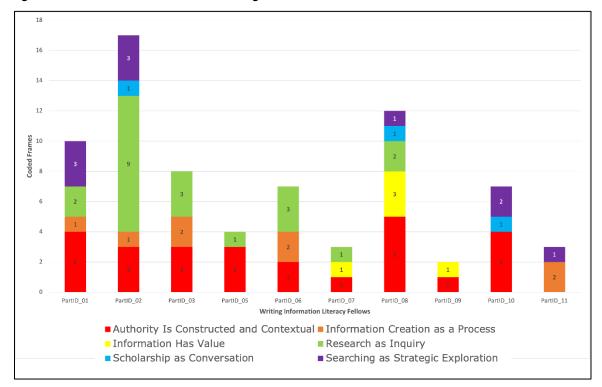


Figure 3: Count of Frames in Fellows' Post-Program Reflections

Seven of the fellows referenced concepts relating to "Research as Inquiry," with four remarking on how its incorporation into their courses resulted in a new perspective on the interconnectedness of research and writing. One fellow described how this also seemed to resonate with their students:

One student, in particular, commented on how, before taking this course, she was always concerned about getting the writing done, while she saw the research for it as a separate and not so crucial component. But now, she argued, she has learned that writing actually comes a lot easier to her, after having devoted enough time to selecting, reading and engaging good sources, and after having given a topic enough thought, by seeing what others have said about it and how they have said it. In other words, she now sees writing and researching as much more co-dependent and mutually beneficial processes.

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"Information Has Value," which was absent from the fellows' pre-program surveys, was identified in three of the post-program reflections. In these instances, one fellow simply referenced integrating this frame into their course, where the other two specifically acknowledged their focus on source attribution.

Despite an extraordinarily challenging semester in which the fellows and their students were deeply affected by the pandemic and harsh political climate, most of the fellows classified their IL work as successful. Nearly all the fellows described transitioning towards more holistic integration of IL throughout their entire semester, rather than compressing it into a single unit or assignment as they had previously done. This integrative work did not appear to be a burden on the fellows, and instead seemed to come naturally, with one fellow stating:

I realized that I was doing this without even directly thinking, "Ok, time to focus on authority!"—it just became a habit when I talked with students...One day in class, a student made an explicit reference to what we'd talked about the previous week regarding Authority as a Construct, and that was when I realized that just having this goal in mind was helping me emphasize it more throughout the semester.

There was also a marked trend in being explicit in their teaching of IL, where fellows directly referenced the *Framework* in their work with students:

I made more of an effort this semester to specifically ground my assignments in the concepts of information literacy. In the past, it's been more "disguised"—that's not quite the right word, since disguised implies an intentional cloaking. The point is, I didn't take pains to frame everything as information literacy in the past, and this time I was more explicit in my discussions about using new kinds of sources and analyzing the sources we use as a form of necessary engagement with information.

This is not to say that all aspects of their work integrating IL were deemed successful. Two fellows commented on their lack of confidence in conveying IL to their students. Both identified a need to scaffold more carefully and simplify their approaches moving forward.

Discussion

Examination of the data revealed evidence of important shifts in fellows' approaches to information literacy. The shifts, summarized by the following three broad themes, help explain how this small cohort understood the *Framework* and its opportunities and

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connections for deep engagement as writing instructors: immersive application of IL throughout the semester; greater integration of frames perceived as most aligned with course learning outcomes; and increased disciplinary framing of IL, enabling more critical engagement with IL's strengths and shortcomings in working with FYW students.

Immersive Application of IL Throughout the Semester

In the pre-program surveys and syllabi, fellows all held a broad awareness of IL that appears more aligned with the ACRL (2000) information literacy competency *Standards* than the *Framework*. For example, coded instances frequently aligned with using checklist approaches for vetting sources and having librarians train students in the mechanics of database searching, such as during a "library research day."

Post-program surveys and syllabi reflect more integrated approaches and a shift in emphasis that mirrors the shift in IL and writing disciplinary documents, from rote, isolated skills to conceptual understandings, dispositions, and habits of mind. This shift and increased emphasis on frames such as "Research as Inquiry" enabled the interconnectedness of research and writing to be clearer. Because fellows were more aware of and intentional about building IL concepts into student writing as opposed to inclusion of researching as a separate skill for preparing to write, for example, IL concepts were addressed more frequently throughout a semester and in ways that were more closely intertwined with learning goals. Articulation of priorities breeds intentionality; as stated by one fellow, "I realized that just having this goal in mind was helping me emphasize it more throughout the semester."

A Reduced Scope Driven by Course Learning Outcomes

Rather than thinking they had to cover the entirety of IL, fellows became more selective in which frames they focused on in their courses. Fellows' conversations surrounding IL after the program underscored their increased sense of agency and ownership in relation to IL. As examples, data revealed more nuanced engagement with "Authority Is Constructed and Contextual," beyond simple vetting of sources. "Authority Is Constructed and Contextual" expanded to include acknowledging one's own bias to understanding inequality in expertise to validating multiple modes of content to argument construction. In pre-program documents, most coded references aligned with "questioning traditional notions of granting authority." "Research as Inquiry," which was largely absent from the pre-program

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documents, became much more prominent as fellows began to see the interconnections between writing and research.

This reduction in scope was likely supported by facilitated articulation of IL-focused learning goals and outcomes based on fellows' existing learning goals. Wiggins and McTighe's (2005) backward design model encourages intentionality by grounding the instructional design process with the articulation of learning priorities. Clearly defined pedagogical priorities benefited student learning and reduced overwhelm for the instructors, nearly all of whom were graduate students balancing teaching with their own study and writing and may have felt dismayed (or "at a loss," per one participant in their preprogram survey) by the task of adding additional learning goals and "teach[ing] other things."

Complementary Frameworks and Shared Values

Initially, fellows defined IL in ways that separated or otherwise distanced it from their own disciplinary work. Combined with their broad understandings, fellows were overwhelmed by the thought of being responsible for introducing such an enormous conceptual *Framework* into their already-packed courses. These conceptions seemed to be born of their prior experiences with standalone library instruction, whether as students themselves or in their own classrooms, confirming the one-shot's unintended legacy of perpetuating disciplinary silos as described by Baer (2016) and Murphy (2019).

After the program, fellows saw research and writing as inseparable, interdependent processes to be integrated into the student learning process, as Purdy and McClure (2014) recommended. They saw their teaching and learning goals, as writing instructors, reflected in the teaching and learning goals of their librarian colleagues and in IL more broadly. One motivation for this collaboration between the Director of Composition and Rhetoric and librarians stemmed from the English department's mission focused on "imaginative reasoning: the ability to think hypothetically about the world in all its diversity—the past, present, and future; the local and the global—in order to engage critically with social and political phenomena, envision what is possible, and dream up audacious solutions to seemingly insoluble problems" (University of Nebraska-Lincoln Department of English, n.d.). The authors believe IL is central to imaginative reasoning and core values it supports, including social justice, diversity, empathetic understanding, and civic engagement, reflecting Baer's (2016) finding that librarians and writing instructors recognize "the social and political significance" of teaching writing and IL (p. 116).

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Minimum source requirements were replaced by more thoughtful engagements with information evaluation, reducing students' tendencies towards "satisficing" (Warwick et al., 2008). As fellows began to identify the many overlaps between writing and IL, they no longer perceived IL as a distraction from their curricular goals.

Limitations

As with all studies, there were limitations and complications affecting this work. Most severely, the WIL program kicked off in early 2020, and the pandemic weighed heavily on all involved. The entirety of the seven-week inquiry group had to be conducted virtually, stunting social opportunities and the ability for more informal conversations that are beneficial for collaborative work. While the instructors did their best to focus on the goals and outcomes of the program, many of their post-program reflections centered on the traumas they faced throughout the semester and the challenges of quickly transitioning from face-to-face instruction to remote.

Additional limitations are due to the design of the study and the data gathered. This was an exploratory study with a small sample of participants, as such there is no expectation that the findings are generalizable. There was no control group, nor was there a standardized measure used for gauging participants' IL awareness before and after the program.

Finally, the subjectivity of coding the *Framework* destabilizes the reliability of findings regarding the appearance of specific frames. Although the researchers were careful to follow qualitative coding protocols using iteration and consensus, the replicability of the work is unknown. The coding work is stronger at the aggregate level, and there is evidence that fellows' relationships with IL did change over the course of the WIL program. However, because of the blurry overlap between each of the frames, the changes captured in the quantitative distribution of the coding work for this study could look very different in subsequent studies.

Conclusion

Although there are challenges to intentionally incorporating IL into undergraduate learning experiences, librarians do not need to face them alone. The first-year writing and composition curriculum has emerged as an especially auspicious arena for collaboration, giving credence to Baer's (2016) assertion that "partnerships between librarians and compositionists can be powerful, not only for compositionists' and librarians' own direct teaching, but also for expanding broader curricular efforts across the disciplines" (p. 87).

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This instructor-driven integration, guided by the deliberate openness of the *Framework*, helps to illustrate how, "in so many vital ways, writing makes information literacy robust" (Norgaard, 2004, p. 225). Throughout this project, working alongside this group of talented, thoughtful, and committed writing instructors proved to be both motivating and informative. Through both individual and collective reflection, the reciprocity between the two disciplines described by Norgaard (2004) was clearly revealed. When empowered (i.e., given time, structure, resources, and funding) to internalize and identify pedagogical opportunities for IL within their classrooms, the instructors moved away from disjointed skills-based approaches towards more holistic integration of the practices and dispositions best aligned with their learning outcomes.

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Appendix A: Program Goals, Outcomes, & Deliverables

Program Goals

- Develop a functional definition of "writing information literacy" and student learning outcomes to guide integration in foundational writing courses.
- Increase student learning relevant to information literacy.
- Support the integration of sustainable resources and community relevant to information literacy for foundational writing courses.
- Discover and share at UNL and beyond student and instructor perceptions relevant to information literacy in writing courses, and best practices for integration.

Program Learning Outcomes

- Articulate a shared understanding of information literacy and how it intersects with foundational writing practices.
- Participate in an inquiry learning community, and develop an actionable, shared understanding of "writing information literacy."
- Create learning objects aligning relevant information literacy outcomes within UNL's foundational writing courses.
- Integrate and assess student learning/growth in information literacy across the semester, informed by new approaches.

Program Deliverables

- Participate in all program meetings (June 11, June 18, July 2, July 30) and additional meetings you may schedule within your course cohort groups.
- Engage with others in an inquiry community of learning.
- Complete meeting pre-work (reflections/prompts; readings or videos; discussion board posts) at least 24 hours before our scheduled meetings.
- As a course cohort, articulate a "continuum of learning" for "writing information literacy" for your course. [First draft, not including objects, due July 2.]
- Within your course cohort, identify learning outcomes at various stages, and interventions for the various outcomes you've identified. These interventions could

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include active learning activities, lesson plans, assignments, and other learning objects, and should include assessments of student learning, e.g. rubrics, or other ways of measuring student learning along the continuum. [Partial drafts due July 13, for peer review.]

- In fall 2020, pilot learning objects (assignments, activities, lessons, etc.) you've created, and share as you're ready (but before end of calendar year please) for inclusion in materials for future FYW instructors.
- Participate in a debrief/reflection activity at the end of the semester.

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Appendix B: Codebook

For reference:

- ACRL Framework for Information Literacy for Higher Education
- Benallack & Rundels (2021) Appendix B. Coding Examples
- UNL Libraries Learning Outcomes

When coding, examine for "thrust" of sentence for meaning, and move past identifying standalone key terms.

Ignore reproduced language from standard syllabi, but code any non-standard policy language.

Authority Is Constructed and Contextual – RED

Information resources reflect their creators' expertise and credibility and are evaluated based on the information need and the context in which the information will be used. Authority is constructed in that various communities may recognize different types of authority. It is contextual in that the information need may help to determine the level of authority required.

Evaluating information in a complex information environment

Terms/adjectives/keywords

Socially situated

Positionality

Credibility

Reliability

Knowledge context

Bias (author-creator bias or personally held bias)

Peer-reviewed (conferring expertise)

Scholarly

Expert

Ethos (consumer-side as related to perceived authority)

Vetting/vet (item- or source-level evaluation)

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Examples

- "How sources are socially situated and how their biases/mission statements may contribute to the type and quality of information they produce"
- "When I taught 151, our discussion about ethos really shifted how my students consumed information and how they thought about the information they put out into the social atmosphere." (This is a contextual example of constructed authority.)
- "Understanding the difference between peer reviewed and non-peer reviewed sources"
- "In the context of this class, I define 'text' as something written, yes, but also any kind of curated material (published texts, TV, film, music, social media, fashion, art, etc.)"

Information Creation as a Process — ORANGE

Information in any format is produced to convey a message and is shared via a selected delivery method. The iterative processes of researching, creating, revising, and disseminating information vary, and the resulting product reflects these differences.

Recognizing, discerning, and selecting among a variety of information types, formats, and genres

Terms/adjectives/keywords

Disseminate
Share
Publish
Audience awareness
Peer-review (process)
Genre
Format

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Ethos - production-side

Examples

- How to effectively utilize and disseminate information
- How they thought about information they put into the social atmosphere

Information Has Value - YELLOW

Information possesses several dimensions of value, including as a commodity, as a means of education, as a means to influence, and as a means of negotiating and understanding the world. Legal and socioeconomic interests influence information production and dissemination.

Understanding the social, legal, ethical, and economic contexts influencing information creation and use

Terms/adjectives/keywords

Cites

Attributes/attribution

Stylistic convention

Ethics/ethical (per use, reuse, access of published information)

Academic integrity

Honesty

Access/lack of access

Cost/paywall

Digital divide

Information privilege

Paraphrase (related to source attribution)

Examples

• All assignments must conform to current MLA standards

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Research as Inquiry – GREEN

Research is iterative and depends upon asking increasingly complex or new questions whose answers in turn develop additional questions or lines of inquiry in any field.

Engaging in research as a process of questioning, reflecting, assessing, and revising

Terms/adjectives/keywords	Terms/	'adjec	tives/	'keyw	ords
---------------------------	--------	--------	--------	-------	------

Interprets
Interrogates
Synthesizes
Analyze
Explores
Exploration
Curiosity
Annotating/annotate

Examples

- How to analyze and interpret the information
- Annotated bibliographies (per Benallack & Rundells)
- Are you trying to synthesize any new ideas?

Scholarship as Conversation – BLUE

Communities of scholars, researchers, or professionals engage in sustained discourse with new insights and discoveries occurring over time as a result of varied perspectives and interpretations.

Appreciating, using, and participating ethically in scholarly conversations

Terms/adjectives/keywords

Engages Dialogue

Refutes

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Questions

Situates

Paraphrasing (evidence of interacting with sources)

Seeing oneself as an information creator (from *Framework*: "see themselves as contributors to scholarship rather than only consumers of it")

Examples

- It is how we engage with information
- Learn to build knowledge about particular topics through dialogue (articulating relationships among diverse opinions, ideas, and positions on a subject).

Searching as Strategic Exploration — PURPLE

Searching for information is often nonlinear and iterative, requiring the evaluation of a range of information sources and the mental flexibility to pursue alternate avenues as new understanding develops.

Searching strategically and effectively for information in closed and open information systems

Terms/adjectives/keywords

Locate

Finds

Consume

Relevance

Vets or Evaluates (search result level evaluation)

Strategies/strategic

Filters

Examples

- How to locate or find the information they need
- Filters for various information types depending on need
- Three out of the five sources had to be scholarly

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Information Literacy — Interesting — LIGHT GRAY HIGHLIGHT

A passage related to information literacy that cannot be coded for a particular frame, e.g. participant's own articulated definition of information literacy.

Examples

- "This course will thus be an exercise in the strengthening of your "information literacy"—that is, your ability to reflect upon and understand how information is produced and valued, and how information is used to create knowledge."
- "how to swim in the ocean of information we are immersed in, especially when doing research, forming opinions and writing about a topic"

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