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Assessing the Affective

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Heather James and Rebecca Nowacek

Introduction

Although they are the products of two distinct professional organizations, the 2015 *Framework for Information Literacy for Higher Education* of the Association of College and Research Libraries (hereafter ACRL Framework) and the 2011 *Framework for Success in Postsecondary Writing* of the Council of Writing Program Administrators (CPWA), National Council of Teachers of English (NCTE), and National Writing Project (NWP) 2011 (hereafter WPA Framework) converge on several fundamental interests. In both documents, the focus is on the mindsets students develop as we librarians, writing center staff, and writing instructors support their research and writing projects. The WPA Framework “Habits of Mind” (4–5) map remarkably well onto the ACRL Framework “Dispositions,” both functioning as affective outcomes as well as predispositions that set students up for success. Likewise, the ACRL Framework’s “Knowledge Practices” complement the WPA Framework’s “Experiences with Writing, Reading, and Critical Analysis” (6–10) as both suggest approaches to implementation.

This convergence is hardly surprising given the increasing number of organizations putting forth disciplinary documents that incorporate information literacy components (Kuglitsch 2015) and the inherent relatedness of research and writing. Upon the release of the WPA Framework, *College English* ran a special issue soliciting responses to the document. Carol Severino (2012) articulated in this special issue how research and writing are integrated processes, arguing that in order to become “good national and global citizens as well as good classroom citizens,” students need “knowledge not only of national and international events and controversies, but also how to research them if more knowledge is required” (2).

As with any overarching guiding document, there has been pushback and criticism of both the WPA and ACRL Frameworks. In the library community, the response to the ACRL Framework document has been varied (Beilin 2015), but much of the criticism seems concerned with the Framework's departure from the focus on performance measures that were the core of the previous guiding document, the *ACRL Standards for Information Literacy* published in 2000. However, this moving away from a checklist of skills toward a conceptual foundation is exactly what brings the ACRL Framework into line with the way in which many librarians conceptualize information literacy instruction. As one librarian has described it:

As applied by institutions, the [ACRL] standards from 2000 often remained a stand-alone process taught by librarians, with students left to their own devices as to how to apply what they'd learned to the subjects they were studying....The [ACRL] [F]ramework views information literacy as a shared responsibility that requires collaboration with faculty across disciplines in order to integrate information literacy teaching throughout the curriculum. Embedding cognitive, affective, and behavioral learning domains within information literacy teaching is essential. (Keiser 2014, 28)

This shift away from "application" of a single lesson to ongoing integration within the fabric of a course is visible in multiple ways.

The introduction of threshold concepts and the structure of the ACRL Framework document into frames with dispositions and knowledge practices together articulate the elements of expertise that librarians bring to scholarly collaborations in a way that should allow librarians to integrate information literacy more fully and deeply into the research and scholarship of our faculty and students in their disciplines (Kuglitsch 2015). Where the previous standards were often, mistakenly, relegated to the realm of first-year undergraduate skills, and most often expected them to be learned fully during a first-year writing course (Knapp and Brower 2014), the ACRL Framework actively encompasses the ongoing information needs of novice as well as expert researchers and the reality that many students rely on Google for all their research needs with varying levels of success (Carncross 2015; Gibson and Jacobsen 2014). The shift from concrete, skills-based information literacy instruction to concepts

as underlying foundations for instruction planning amounts to shifting librarians' perspective from 10,000 to 30,000 feet, yet this new perspective ironically (and thankfully) does not burden librarians with overarching universal outcomes: "Paradoxically, by using [an ACRL] Framework that exhorts us *not* to focus on lifelong learning and other impossibly large goals, we might find ourselves doing a better job supporting these larger outcomes" (Kuglitsch 2015, 468).

Likewise, the approach of the organizations that developed the WPA Framework—the CWPA, NCTE, and NWP—was to extend the influence of the WPA *Outcomes Statement for First-Year Writing* through a holistic perspective that did not prescribe outcomes and performance measures to be layered on top of the Outcomes Statement and the Common Core State Standards (McComiskey 2012; O'Neill et. al 2012). As it is a document that reaches in both directions, to secondary education teachers and post-secondary instructors incorporating writing throughout the undergraduate curriculum, it makes sense that any prescribed outcomes or measures that were overly specific or granular would be less than useful for such a wide community of practitioners.

Focusing instead on dispositions or habits of mind that can continue to be fostered through approaches that can be tailored, scaffolded, and repeated in multiple contexts makes the most sense: "[T]hese qualities are much more vital to college success than, say, target SAT scores or recommended high school course sequences or even rhetorical knowledge and knowledge of writing conventions, which are mentioned later in the document (and are, of course, also important)" (Sullivan 2012, 547). Through the focus on underlying mindsets and approaches, both Frameworks imply a shift in priorities from skills-based to conceptual, metacognitive instruction (Gibson and Jacobsen 2014, 250), and they refuse to spell out a universal approach to prioritization, implementation, or assessment. This shift makes sense in that the priority of these documents moves away from checklists toward varied and contextual integrations of many components based on the needs of a program, an assignment, or an individual. The expectation is that institutions, programs, and individual librarians, writing instructors, and writing center directors will determine locally the appropriate incorporation, sequencing, and approach to implementing these components into their work and instruction.

Yet this opportunity to determine locally how to implement these guiding documents brings with it a burden of figuring out how to do so.

One concern expressed in reaction to the ACRL Framework has been how to measure through this Framework the impact librarians have in the classroom in a way that can be reported to the wider campus audience. Similarly, a number of reactions to the WPA Framework addressed assessment as a key concern, either hopefully postulating that the meta-cognitive document would help stem the reliance on formulaic writing assessments (McComiskey 2012) or dubiously concerned that habits of mind and writing proficiency may not be directly related (Hansen 2012). These frustrations are not surprising given that assessment is a crucial component of every program—writing and information literacy, curricular and support services—yet it often feels reductive and limited given the expansive and abstract nature of both writing and literacy (information or other).

In the majority of higher education settings, neither writing nor information literacy specialists are granted enough spotlight to effectively disseminate our own disciplinary expertise; instead, performance measures become a default assessment approach—for example, can students perform a database search or write a coherent thesis statement? To many of us, these questions are rife with reductive assumptions about the processes involved in mastering research and writing (let alone information literacy and written communication). To the extent that affective outcomes have been assessed, they are usually assessed via interviews, surveys, and reflections. However, there can be a significant disconnect between students' self-reported description of their work processes and mindsets and their actual processes and attitudes. It is not uncommon for students to enthusiastically report having learned and used best practices in self-reports. Yet without verifying the evidence in their submitted work, these types of assessment can lead to skewed narratives about the success of our efforts.

The question then becomes how can we shift our practices and assumptions about assessment in an effort to capture evidence of students' progress within the guiding priorities of the Framework documents? In this chapter, we will share our joint approach, as librarian and writing center director, in attempting a retrospective assessment of our collaborative work with an interdisciplinary research course. Though our assessment approach may be uncommon, we believe our process and tools can assist both librarians and writing instructors who have embraced the Frameworks documents but are perhaps struggling with the issue of assessment as it relates to these documents.

Our Context: An Interdisciplinary Undergraduate Proposal-Writing Course

As a writing center director and a research and instruction librarian, we have been working together closely over the past three years to coordinate our efforts and approaches to integrate our services with instructors' curricula across campus. Our work and contexts are already similar: we work with students from any discipline on campus at every level of developing expertise; we support and supplement formal classroom instruction and assignments through our roles as consultants and guides to unfamiliar and challenging tools, practices, and ways of looking at scholarship; and, most important, we bring expertise in two fields that are often difficult for some in the academy to understand as disciplines themselves because they connect with and apply to every subject discipline.

In spring 2015, we piloted a program to jointly embed Heather James (the librarian) and writing center undergraduate tutors (course-embedded tutors, or CETs) into specific courses taught by targeted faculty who were receptive to this level of integration and course support. One of the courses we worked with was an interdisciplinary undergraduate research seminar taught by a psychology faculty member and offered through the Honors Program in the College of Arts and Sciences. Students enrolled in the class had majors ranging from humanities to science, technology, engineering, and mathematics (STEM) disciplines, and the central project of the course was to develop a research proposal that could be submitted to the Honors Program for possible funding to support the time and materials necessary to complete the research over the summer.

The students enrolled in this course received instruction and mentoring from a wide range of individuals. In addition to working with the psychology instructor who designed and taught the course, each student was also required to find a mentor in their discipline to answer their discipline-specific questions. The course instructor designed a sequence of assignments that culminated in the research proposal: an annotated bibliography, an early draft of a literature review, an updated reference list, a revised draft of a literature review with methods, an initial draft of the entire proposal, and a final revision of the entire proposal. In order to help students integrate their research, reading, and writing with their disciplinary contexts and conventions, they received instruction from and worked individually with the librarian, the CET, and the writing center director. We visited the class together as co-instructors at least five times during the semester, and

students received feedback from Heather, the course-embedded tutor, and the course instructor at various stages throughout the semester. (See Appendix 12-A for an overview.)

While we did not intentionally design our roles in the course as a pilot of the Framework documents in action, we believe that this course, partially through our own efforts and partly through our good fortune, was an excellent example of the curriculum design that both Frameworks prioritize. The assignments were designed with “genuine purposes and audiences in mind” (CWPA, NCTE, NWP 2011, 3), and like Rebecca Kuglitsch (2015) points out, “Research shows that contextualized instruction promotes learning when, as Char Booth says, it ‘connects learning targets to practical needs’” (462). In all, this course allowed us “to collaborate on pedagogical research and involve students themselves in that research; and to create wider conversations about student learning, the scholarship of teaching and learning, and the assessment of learning on local campuses and beyond” (ACRL 2015, 3).

The inclusion of faculty mentors with specialized subject knowledge also speaks to the type of instruction invited by the two Frameworks, by bringing a disciplinary audience into the process and contextualizing our instruction within students’ own areas of research. The two of us were intentional in our efforts to foster transfer and integration among the various components of the course. Furthermore, through the psychology faculty member’s goodwill, we were afforded enough time in the course to go beyond skills-based, lower-level content and get into conceptions of authority, economics of information dissemination, communities of scholars, and choices in creation. Additionally, the entire assignment was given a powerful exigency since each student was writing a research proposal which could actually—but would not automatically—win the student several thousand dollars in grant money to conduct the research over the summer.

Although we recognize this structure may not be easily replicable at other institutions, our retrospective approach to assessment here allows us to get a better picture of students’ dispositional outcomes as well as the changes in their texts, perhaps even more than periodic assessment during the semester would have allowed for, in order to explore the feasibility of a more portable assessment framework. In what follows, we briefly describe our efforts to not only contextualize our local learning outcomes within the national Frameworks, but also to find ways to assess the dispositions so highly valued in those documents.

National Frameworks, Local Objectives

Before we began teaching the course, we received Institutional Review Board (IRB) approval to systematically gather students' formal writing and informal reflections with the aim of assessing our work in the course. Together with the faculty member leading the course, we articulated outcomes for student learning. Rebecca Nowacek had two primary goals: first, the inclusion of a CET was meant to promote students' engagement with significant revision. Second, her guest instruction during class time would introduce the genre of the literature review and its conventions (including drawing connections among sources and establishing a research gap). Heather aimed to raise students' awareness of the information sources available to them and appropriate for their own work as scholars as well as the economic and social characteristics of access to information and publishing in academia. (Each of us had three specific learning outcomes that are articulated in Appendix 12-B; see Table 12.1.) By the time the course concluded in May, we recognized in the data we gathered an opportunity to retool our initial assessment plans in ways that might not only illuminate those initial learning outcomes, but also explore how we might assess the affective outcomes advocated in the WPA and ACRL Frameworks.

As we worked to connect our initial learning outcomes to both of the Framework documents, we were forced—in ways that were both uncomfortable and ultimately helpful—to confront how difficult it is to line them up in tidy columns. In comparing the scope, purpose, and language used, it appears that the WPA Framework's "Experiences with Writing, Reading, and Critical Analyses" (CPWA, NCTE, and NWP 2011, 6–10) are written in a way that most closely reflects the titles of the six "frames" of the ACRL Framework (ACRL 2015). The WPA Framework "Habits of Mind" (4–6) most closely parallel the "Dispositions" listed within each of the six ACRL frames. Finally, we see the recommendations in the WPA Framework "Experiences" starting with "Teachers can..." (6, 7, 8, 9, 10) as most like the "Knowledge Practices" within each of the six ACRL Framework frames.

Throughout these parallels, we see that both Frameworks are interested in affective outcomes, but given the differing structures of the documents—particularly the ways in which WPA identifies only eight habits of mind but keeps them distinct from experiences, whereas ACRL identifies many more dispositions but embeds them within the six major frames—and the overlapping but not identical language to describe key concepts, our efforts

to bring them into perfect alignment proved difficult. For this reason, we began to develop Table 12.1, which now appears in Appendix 12-B.

In Table 12.1, we have mapped our complementary learning outcomes and connected them to the two disciplinary Frameworks. We were able to connect each local learning outcome to both Frameworks: in the WPA Framework we focused on habits of mind; in the ACRL Framework we identified the overarching frames as a shorthand for their attendant dispositions. Consider, for instance, Rebecca's Learning Outcome #3: that students will "recognize that a lit review must be more than a knowledge dump; it must integrate analyses into a bigger story." Heather's Learning Outcome #6 ("think of published research as scholarly communication and scholarly communication as a conversation"), but also that Learning Outcomes #3 and #6 reflected multiple priorities from both Framework documents.

For the WPA Framework, we see the most closely related and significant connections in the Habit of Mind of "Openness" where students "consider new ways of being and thinking in the world" and "examine their own perspectives to find connections with the perspectives of others" (CWPA, NCTE, and NWP 2011, 4), "Engagement" where students "make connections between their own ideas and those of others" and "find meanings new to them or build on existing meanings as a result of new connections" (4), and "Responsibility" where students "engage and incorporate the ideas of others, giving credit to those ideas by using appropriate attribution" (4). In the ACRL Framework, we see clear connections with the dispositions in the ACRL frames of "Authority Is Constructed and Contextual," in which students display "an open mind when encountering varied and sometimes conflicting perspectives"; "Information Has Value" in which they "respect the original ideas of others" and "see themselves as contributors to the information marketplace;" "Research as Inquiry," in which they "seek multiple perspectives" and "demonstrate intellectual humility"; and "Scholarship as Conversation," in which they "recognize they are often entering into an ongoing scholarly conversation and not a finished [one]" and "understand the responsibility that comes with entering the conversation through participatory channels" (ACRL 2015). It seemed significant too that both Rebecca's and Heather's learning outcomes were inherently affective with language such as "engage," "recognize," "understand," and "think of" when guiding their goals.

As this one example suggests, Table 12.1 ultimately helped make visible what we already felt intuitively: we may have developed our learning

outcomes individually, but collectively we shared the same pedagogical aims. Furthermore, this table illustrates that the Frameworks are indeed capacious enough to encapsulate as well as inform a wide range of local outcomes that might be developed by individual librarians or writing center directors—a welcome conclusion given that underlying purpose of both documents is to support localized determination of learning outcomes and goals.

What We Learned through Our Assessments

When we turned to actually assessing the students' work retrospectively, we had the entirety of their submitted documents. We identified twelve documents in which to track elements that would shed some light on students' progress with our own individual objectives and by extension the priorities of both the WPA and ACRL Frameworks (see Appendix 12-C). Although we had access to the sorts of reflective writing that we might often and easily turn to for insight into students' progress with affective outcomes, we also worked to imagine ways in which we might see textual manifestations of the WPA Framework's habits of mind and ACRL Framework's dispositions by looking at changes (or a lack of changes) in the formally assigned documents over fifteen weeks.

Our approach relied on our detailed knowledge of the assignment designs for the course and asked questions like this one: "If Rebecca's Learning Outcome #3 was met, what would the changes in the student's work over the course of the semester show?" For instance, we hypothesized that we might see evidence of students' engagement and openness by tracking analytical integration of sources within the literature review section of the proposal. On one level, we were looking to see if the writers were "open" (so to speak) to the feedback of the course-embedded tutor, specifically whether the writer engaged with the advice of their peers, the CET, and the course instructor to make connections between sources rather than just dumping a series of summaries. At the same time, the ability to write analytically strong paragraphs might also illuminate students' understanding of scholarly conversation and authority and their own roles within this dynamic. By extension, therefore, we believe success with Rebecca's Learning Outcome #3 shows success in developing openness, engagement, responsibility and the dispositions associated with "Authority Is Constructed and Contextual," "Information Has Value," "Research as Inquiry," and "Scholarship as Conversation" (ACRL 2015).

Because we are particularly interested in the overlaps between our two sets of local learning outcomes, we will not cover all the learning outcomes documented in Appendix 12-B. Instead, we focus on Rebecca's Learning Outcomes #2 and #3 helping students understand that they must establish a gap in the research that the proposal occupies and that literature reviews must be more scholarly conversation than knowledge dump), which intertwine closely with Heather's Learning Outcomes #5 and #6 (to cultivate the ability to identify and evaluate disciplinarily appropriate sources and to see scholarly communication as a conversation). We document in Table 12.2 in Appendix 12-C the ways in which we turned to particular documents (including drafts, final copies, and student reflections) to illuminate work relevant to these outcomes. Here we summarize some of those findings.

Students clearly demonstrated anxiety, documented during mid-semester brainstorming sessions with the peer writing consultant, about their ability to conduct scholarly research for a project of this scope and purpose, concerns closely related to Heather's local Learning Outcome #5 (the ability to identify and evaluate discipline-specific trustworthy sources). To assess this learning outcome, we tracked the degree to which students were willing—even after their first annotated bibliography assignment—to add and delete sources, an action we felt indicated a commitment to choosing the sources that were most appropriate (rather than most ready at hand). In all cases, our analyses indicate that by the time of the annotated bibliography assignment during Week 7, students had used (almost exclusively) peer-reviewed, disciplinarily appropriate scholarly sources throughout their bibliographies and drafts. Between the annotated bibliography assignment and the draft of the literature review due several weeks later, students mainly focused on adding new sources.

Our analysis of documents from this point in the semester also indicates engagement with Heather's local Learning Outcome #6 (think of published research as a scholarly conversation). The students, particularly the STEM students, began to rely on the community of scholars they were exposed to by their faculty mentors, often starting with a publication from their mentor's lab and searching for additional sources in journals their mentors recommended. By the time they reached their references list assignment (an intermediary assignment due between the literature review draft and the full proposal draft), some students had found multiple works by researchers other than their mentors that contributed usefully to their developing proposal. At this same point in the semester, students working in social sciences also began to incorporate older seminal sources into

their literature reviews. As a result, between the first literature review draft and the draft of the full proposal several weeks later, students had made substantial changes in their sources, changing (either by adding or deleting) an average of five sources, even though there was no requirement to make such changes. This finding, we think, offers evidence of students' commitment to utilizing disciplinarily appropriate sources as well as their emergent understanding of scholarship as conversation.

Our assessment of Rebecca's local Learning Outcome #3 (recognizing that a literature review must draw connections among sources rather than just offering a knowledge dump of information) offers another angle of insight into students' emerging abilities to not only eavesdrop on the scholarly conversation taking place among their sources, but to also explain it to others. As explained in Appendix 12-C, in order to assess this learning outcome, we coded for the presence of analytically strong paragraphs—that is, paragraphs that didn't just summarize previous scholarship but also linked it to other findings. We found that in the literature review drafts, the percent of paragraphs that were analytically strong (rated as either 3 or 4 on the scale indicated in Table 12.2) ranged from a low 6 percent to a high of 46 percent; in the final proposal, the percentage of analytically strong paragraphs range from 14 percent to 40 percent. This shift marks a clear improvement on the low end but would seem to indicate less analysis on the high end. However, we are actually quite pleased because that drop is misleading: the second document (the final proposal) is a much longer document that includes sections where it would not be expected for students to include analysis of others' work (such as their proposed methods, researcher background, and dissemination of knowledge). Thus, we see overall an increase in the number of analytically strong paragraphs.

One last way to track students' emerging understandings of scholarship as conversation is visible in Rebecca's local Learning Outcome #2, the ability to identify and occupy a research gap. A comparative analysis of the literature review draft and final proposal indicates that students made a major improvement in their ability to establish a research gap. Not only did students identify a gap and do so in the location readers would, according to John Swales and Christine B. Feak (2004), expect to find it (on average and by mode, students moved from 1 to 3 as explained in Table 12.2), but they also made noticeable improvements in identifying a gap that was actually appropriate for the research project they were proposing (increasing from 2 to 3). We suspect that these two trends may be related: as students developed a more coherent description of the field of

research and the gap they wanted to establish in order to effectively propose their own research, their needs for sources to speak to both the field and the gap became clearer. These findings are particularly exciting to see reflected across the span of the students' work.

Conclusion: An Individual Student's Story and an Invitation

This account provides one model, we hope, of how librarians and writing center directors might use local learning outcomes—driven by the particular needs of specific classrooms—in order to assess our progress toward the outcomes articulated in the national WPA and ACRL Frameworks. In our own case, we are finding that these analyses affirm our sense of the interconnected nature of our learning outcomes as they help us to recognize their influence in our work with individual students. To both close and further demonstrate, we turn to the story of one particular student, a story that both surprised and pleased us.

Matthew (a pseudonym) was a STEM major whose faculty mentor was also running the lab in which the student worked—and would continue to work if his proposal were funded. From the start of the semester, Matthew, although engrossed in the work of his mentor's lab, appeared only minimally interested in what we had to share during instruction; he also seemed closed off to any conversation more abstract or open-ended than direct advice for both his research and writing processes. As a result, if asked to assess this student's disposition toward learning, then we would have said that other than minimal "persistence" and "responsibility" he did not exhibit any of the habits of mind from the WPA Framework (CWPA, NCTE, and NWP 2011), and that "Searching as Strategic Exploration" was the extent of his engagement with the ACRL Framework (ACRL 2015). However, when we changed our means of assessing the affective from our *own* emotional experiences to a retrospective examination of Matthew's *work* over fifteen weeks, we were (pleasantly) surprised by our findings. After tracking the revisions in this student's work over five major assignments, we can identify a deep engagement with the learning outcomes (including the affective dimensions captured in the WPA Habits of Mind) embodied in the two Frameworks, a deep engagement that we rarely felt during conferences.

Specifically, Matthew started the semester focused almost entirely (and not surprisingly) on research coming directly from his mentor's lab; his annotated bibliography (a relatively early assignment in the semester)

included eight peer-reviewed sources, almost all of them from his mentor's lab. Within a week of handing in that annotated bibliography, Matthew had a required brainstorming session with the course-embedded tutor; during that session, he explained that his main concerns were finding more sources and figuring out how to organize his literature review.

When we examine Matthew's incorporation of research into the first actual draft of the literature review, it doesn't look promising: there was no list of references or any discernible citation system; we simply don't know how many sources he was engaging at that point. However, on the references list assignment submitted several weeks later, Matthew had dropped seven of the eight sources in his initial annotated bibliography and added five new sources; these sources included two older but seminal works not published by his mentor, and all six sources appeared to be in closer scholarly conversation. This trajectory toward incorporating a range of relevant sources not published by his mentor culminated in the final draft, where he again dropped one source and added five more—leading to a total, in his final proposal, of ten peer-reviewed sources that were not limited to his mentor's lab but were clearly in scholarly conversation. Thus, we see in Matthew's trajectory of work many of the central concepts of the ACRL Framework that Heather associated with her local learning outcomes in Appendix 12-B: "Scholarship as Conversation," "Research as Inquiry," "Information Creation as a Process," and "Information Has Value" (ACRL 2015).

Similarly, we can see, when we compare Matthew's first peer-reviewed draft of the literature review to the final proposal he handed in at the end of the semester, changes that suggest habits of mind (including those listed in Rebecca's local learning outcomes in Appendix 12-B's Table 12.1, e.g., openness, flexibility, and persistence) that had become difficult for us to see in the week-by-week work of the semester. Whereas we discovered through our coding that over half of the first draft of the literature review was what we called (in the parlance of the class) a chronological "knowledge dump" that did not narrow to the type of gap that Swales and Feak (2004) argue is necessary for this type of literature review, by the final proposal Matthew had put his drastically revised list of sources into an analytical conversation, one that narrowed to the gap his proposed research would seek to fill. In addition to this organizational shift from chronological to analytical, from knowledge dump to establishing and occupying a research gap, the final draft included less jargon and explained the remaining technical terms for the nontechnical audience who would be reviewing his grant proposal.

A careful analysis of the texts Matthew produced over the course of the semester prompted us to see not only persistence, but also openness and flexibility. It was in tracking the revisions that this student's engagement with our learning outcomes became most apparent; like time-lapse photography, the side-by-side comparisons of multiple drafts over fifteen weeks made visible changes that sometimes remained invisible to us during the real time of the semester—changes that were corroborated by Matthew's reflection on his revisions for the final proposal and that helped us to reinterpret our own affective experiences working with a student who demonstrated through his texts, rather than through his interpersonal interactions, the types of dispositions and habits of mind we sought to encourage.

We recognize, of course, that some readers may object to assessing the affective by turning to an analysis of textual features. They would point out that part of the exigency for including habits of mind and dispositions in the new Frameworks is a desire to get beyond the too limited prescriptions of other national standards for writing and research, prescriptions that look for the presence or absence of certain textual features that can be counted and tallied and divorced from the complicated processes of individual learning in local classrooms. All this we acknowledge. We would argue, though, is that our efforts were not divorced from the complicated dynamics of learning in local classrooms, and that to assess the affective in that highly localized context, our efforts have benefited from a triangulation of data: not just student self-reports or instructor impressions, but also efforts to track the development of a piece of writing over time.

Our means of assessment illuminated for us areas of strength and areas for improvement. Our focus on these particular habits of mind and frames was determined by the dynamic relationship between our local learning outcomes and the national Frameworks. Every ACRL frame and every WPA habit of mind cannot possibly be incorporated into every course or every session within a course; the priorities of a particular course must instead guide the frames and habits of mind on which teachers focus. However, the Frameworks can serve as a means of drawing connections between the complementary goals of instructors, librarians, and writing center directors. Similarly our means of assessment—a triangulation of analyzing changes in texts, student reflections on revision, and our own impressions of consultations with students—also grow out of the particulars of our local context. We share the details because some of our methods may be directly relevant for readers' pedagogical contexts and because we

hope that readers will be inspired to draw creatively on the dynamic space between local outcomes and national Frameworks to develop their own tailored methods and continue to share them.

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Overview of Instructional Support in the Research Proposal Writing Course

Throughout the 15-week semester, we've worked with students in the following ways:

- During week 3, Heather leads a class session on using library resources and finding literature as part of the overall research process. This session is typical of any number of courses that invite a librarian to introduce and support research skills and tools. Students also submit a preliminary research idea for Heather's review.
- Later in week 3, Heather and Rebecca jointly lead a class session focused on note taking as a conscious process and a type of writing that will ultimately shape the literature review section and the overall proposal. This session is the most explicit discussion of reading that we have with the students, and it includes discussion of nonlinear reading methods.
- By the end of week 4, each student meets with Heather individually to discuss her or his particular research proposal and literature research strategy.
- During week 5, Rebecca leads a class introducing literature reviews as a genre of writing and specifically the "Create a Research Space" (CARS) approach to literature reviews as an effective model for the proposal that students are being asked to write.
- By the end of week 5, students submit an early list of summarized potential sources, and Heather reviews and responds to each with suggestions for continuing their literature research.
- During week 7, Rebecca returns to facilitate peer review of the literature review section of their proposals.
- Also during week 7, each student receives feedback from Heather on his or her annotated bibliography that prioritizes the student's selection and summary of sources; Heather verifies their citations and locates and reads any source texts whose annotations appear questionable in order to confirm or offer criticism of the student's representation of the source.
- During week 8, Heather returns to lead a class discussion on publishing as part of a scholarly conversation, including investigation of journal impact factors and alternative article metrics.

- Finally, during week 14, Rebecca and other experienced members of the Writing Center meet with each student to consult on the draft of the full proposal.

Appendix 12-B

Local Learning Outcomes Mapped to WPA and ACRL Frameworks

Table 12.1

James's Learning Outcomes for Writing	Nowacek's Learning Outcomes for Researching
<p>Learning Outcome #1: Engage in a process of significant revision based on conversations with peers, tutors, mentors, and instructors</p> <p><i>WPA Framework Matches</i></p> <ul style="list-style-type: none"> • Openness • Persistence • Metacognition <p><i>ACRL Framework Match</i></p> <ul style="list-style-type: none"> • Research as inquiry 	<p>Learning Outcome #4: Understand available resources and reasons for limits to access</p> <p><i>WPA Framework Matches</i></p> <ul style="list-style-type: none"> • Curiosity • Metacognition <p><i>ACRL Framework Match</i></p> <ul style="list-style-type: none"> • Information has value
<p>Learning Outcome #2: Recognize that a research proposal requires a lit review that "creates a research space" for their particular project</p> <p><i>WPA Framework Matches</i></p> <ul style="list-style-type: none"> • Responsibility • Flexibility • Metacognition <p><i>ACRL Framework Matches</i></p> <ul style="list-style-type: none"> • Authority is constructed and contextual • Information has value • Research as inquiry • Scholarship as conversation 	<p>Learning Outcome #5: Become familiar with discipline-specific, trustworthy resources and how to identify and evaluate them</p> <p><i>WPA Framework Matches</i></p> <ul style="list-style-type: none"> • Openness • Persistence • Metacognition <p><i>ACRL Framework Matches</i></p> <ul style="list-style-type: none"> • Authority is constructed and contextual • Information has value • Scholarship as conversation • Information creation as process
<p>Learning Outcome #3: Recognize that a lit review must be more than a knowledge dump; it must integrate analyses into a bigger story</p> <p><i>WPA Framework Matches</i></p> <ul style="list-style-type: none"> • Openness • Engagement • Responsibility <p><i>ACRL Framework Matches</i></p> <ul style="list-style-type: none"> • Authority is constructed and contextual • Information has value • Research as inquiry • Scholarship as conversation 	<p>Learning Outcome #6: Think of published research as scholarly communication and scholarly communication as a conversation</p> <p><i>WPA Framework Matches</i></p> <ul style="list-style-type: none"> • Curiosity • Openness • Engagement • Persistence • Metacognition • Responsibility • Flexibility • Metacognition <p><i>ACRL Framework Matches</i></p> <ul style="list-style-type: none"> • Scholarship as conversation • Authority is constructed and contextual • Information creation as process • Research as inquiry

List of Student Documents and Elements Tracked

Table 12.2

Learning Outcome	Documents Tracked	Elements Tracked
<u>Learning Outcome #1</u> Engage in a process of significant revision based on conversations with peers, tutors, mentors, and instructors	CET brainstorming conference	Gap: Organization: Research: # of Sources: # of Sources changed (-)/(+): Quality of sources (1-4): # of ¶s : Organization—Headings/ Subs: Gap & Loc (1-4): Appropriate to question (1-4): ¶ Analysis (1-4): Proportion of total: Source evaluation:
	Lit Review Draft	# of Sources: # of Sources changed (-)/(+): Quality of sources (1-4): # of ¶s : Organization—Headings/ Subs: Gap & Loc (1-4): Appropriate to question (1-4): ¶ Analysis (1-4): Proportion of total: Source evaluation:
	Full Draft	# of Sources: # of Sources changed (-)/(+): Quality of sources (1-4): # of ¶s : Organization—Headings/Subs (change): Gap & Loc (1-4): Appropriate to question (1-4): ¶ Analysis (1-4): Proportion of total: Source evaluation:
	CET's comments on draft & student summary of conference	Did CET address points tracked in Full Draft?:
	Final Proposal	# of Sources: # of Sources changed (-)/(+): Quality of sources (1-4): Gap & Loc (1-4): Appropriate to question (1-4): ¶ Analysis (1-4): Proportion of total: Source evaluation:
Student response to CET comments and reflection on revisions	Revision conversation:	

Learning Outcome	Documents Tracked	Elements Tracked
<u>Learning Outcome #2</u> Recognize that a research proposal requires a lit review that "creates a research space" for their particular project.	CET brainstorming conference Lit Review Draft Full Draft CET's comments on draft & student summary of conference Final Proposal Student response to CET comments and reflection on revisions	Gap: Gap & Loc (1-4): Appropriate to question (1-4): Gap & Loc (1-4): Appropriate to question (1-4): Did CET address points tracked in Full Draft: Gap & Loc (1-4): Appropriate to question (1-4): Revision conversation:
<u>Learning Outcome #3</u> Recognize that a lit review must be more than a knowledge dump; it must integrate analyses into a bigger story	CET brainstorming conference Lit Review Draft Full Draft CET's comments on draft & student summary of conference Final Proposal Student response to CET comments and reflection on revisions	Organization: # of ¶s : Organization—Headings/ Subs: ¶ Analysis (1-4): Proportion of total: # of ¶s : Organization—Headings/ Subs (change): ¶ Analysis (1-4): Proportion of total: Did CET address points tracked in Full Draft?: ¶ Analysis (1-4): Proportion of total: Revision conversation:
<u>Learning Outcome #4</u> Understand available resources and reasons for limits to access	Librarian Research Consultation (summary by student) CET brainstorming conference	Evidence of search strategy: Research:

Continued

Table 12.2 *Continued*

Learning Outcome	Documents Tracked	Elements Tracked
<u>Learning Outcome #5</u> Become familiar with discipline-specific, trustworthy resources and how to identify and evaluate them	Librarian Research Consultation (summary by student)	Evidence of search strategy:
	Summaries of Sources (small-scale annotated bib)	# of Sources: Quality of sources (1-4): Evidence of evaluation:
	Annotated Bibliography	# of Sources: # Sources changed (-)/(+): Quality of sources (1-4): Evidence of evaluation: Sources in conversation:
	Librarian Feedback to Annotated Bibliography	Did librarian address points tracked in Annotated Bib?:
	CET brainstorming conference	Research:
	Lit Review Draft	# of Sources: # of Sources changed (-)/(+): Quality of sources (1-4): Source evaluation:
	References List (not annotated)	# of Sources: # of Sources changed (-)/(+): Quality of sources (1-4): Evidence of evaluation: Sources in conversation:
Full Draft	# of Sources: # of Sources changed (-)/(+): Quality of sources (1-4): Source evaluation:	
Final Proposal	# of Sources: # of Sources changed (-)/(+): Quality of sources (1-4): Source evaluation:	
<u>Learning Outcome #6</u> Think of published research as scholarly communication and scholarly communication as a conversation	Summaries of Sources (small-scale annotated bib)	Quality of sources (1-4): Evidence of evaluation: Sources in conversation:
	Annotated Bibliography	# Sources changed (-)/(+): Quality of sources (1-4): Evidence of evaluation: Sources in conversation:
	Librarian Feedback to Annotated Bibliography	Did librarian address points tracked in Annotated Bib?:

Learning Outcome	Documents Tracked	Elements Tracked
	CET brainstorming conference	Research:
	Lit Review Draft	# of Sources changed (-)/(+): Quality of sources (1-4): ¶ Analysis (1-4): Proportion of total:
	References List (not annotated)	# of Sources changed (-)/(+): Quality of sources (1-4): Evidence of evaluation: Sources in conversation:
	Full Draft	# of Sources changed (-)/(+): Quality of sources (1-4): ¶ of Analysis (1-4): Source evaluation:
	Final Proposal	# of Sources changed (-)/(+): Quality of sources (1-4): ¶ Analysis (1-4): Source evaluation:

Key to Numeric Values

Quality of sources (1-4):

- 1 = Dubious credibility, questionable publication or website
- 2 = Popular media source
- 3 = Popular media for targeted audiences, trade publications, government websites, etc.
- 4 = Peer-reviewed scholarly sources, government research reports

Research gap established and location in literature (lit) review (1-4):

- 1 = Minimal establishment of a gap exists in the field of research and not well-related to the field of research as discussed in lit review.
- 2 = Gap is established but problematic or needs further clarity and development, questions/unknowns in field articulated throughout the lit review but not cohesively articulated as key identified gap.
- 3 = Gap in research field as described throughout lit review is articulated but not in expected location for rhetorical effectiveness, needs further clarity in establishing the field of research so that it points to the articulated gap.

- 4 = Field of research is clearly and coherently established, and a gap in the research is articulated at a point in the lit review at which it is rhetorically effective so that author can “occupy” the gap with her own research question.

Appropriate to question (1–4):

- 1 = Minimal or tangential relationship exists between whatever is articulated as a gap in the field of research and the student’s own research question, possibly not a specific research question but still a topic as stated.
- 2 = The established gap is clearly related to the student’s research topic but possibly not to the specific research question stated.
- 3 = The established gap in the research field is closely related to the student’s research question, but may be unclear how the student’s research will directly contribute to resolving the gap in the field.
- 4 = The established gap in the research field is directly related to the student’s specific research question; the research question is poised to answer or contribute to important knowledge filling the gap.

Analysis (1–4):

- 1 = No sources in paragraph (¶) are cited, but description or discussion of common knowledge and student-specific information is discussed.
- 2 = “Pearl”: one source is cited discussed or referenced solely in ¶.
- 3 = Multiple sources (two to three) are cited and discussed or referenced in integrated ways that bring out their commonalities and points of difference or building upon each other’s work.
- 4 = Many sources (four+) are cited and discussed or referenced in integrated ways that bring out their commonalities and points of difference or build upon each other’s work.