



CHAPTER 10

# **Teaching the Frameworks for Writing and Information Literacy:** A Case Study from the Health Sciences

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## **Introduction**

The resurgence of rhetorical concepts in the college composition classroom means university students are introduced to traditional rhetorical concepts regarding ethos or authority as well as concepts of appropriate writing conventions. At the University of Texas at El Paso (UTEP), first-year composition students are also introduced to concepts such as discourse communities and genres that then lead to discussions of writing conventions. Students are asked to analyze textual as well as different media to foster analytical skills, and research projects usually become the basis for additional projects where students are asked to present information in different media and for persuasive

purposes. Thus for me, the knowledge practices, dispositions, and habits of mind articulated in the *Framework for Information Literacy for Higher Education* (hereafter ACRL Framework) and *The Framework for Success in Postsecondary Writing* (hereafter WPA Framework), developed by the Association of College and Research Libraries (ACRL) and the Council of Writing Program Administrators (WPA), the National Council of Teachers of English (NCTE), and the National Writing Project (NWP) respectively, have been inherent in writing courses.

Although the Framework documents articulate previously implicit learning objectives and goals for the writing classroom, the knowledge practices, dispositions, and habits of mind seem to have been identified by other disciplines seeking to foster those dispositions in writing intensive disciplinary courses and in their students. For example, Krest and Carle assert that “writing courses within content areas are the very places instructors can most effectively integrate writing, research and critical thinking, and emphasize the specific developmental skills that neither content nor generic writing courses can cover.”<sup>1</sup> Malcolm also described writing in a sociology course as “the most powerful tool for learning that is available to teachers...Through writing, students must engage the material, struggle with it and make sense of it.”<sup>2</sup> Students in Malcolm’s courses also began analyzing alternative and visual media to include editorial cartoons, comic strips, and advertisements in an effort to “energize[] students, making them more likely to care about completing a strong analysis.”<sup>3</sup> ESL scholarship also grappled with preparing students to enter academic conversations in different genres as exemplified by Shih’s comments that “[s]tudents write in a variety of forms”<sup>4</sup> and that students write to demonstrate knowledge while instructors use writing to prompt “independent thinking, researching and learning.”<sup>5</sup> Furthermore, Shih recognized writing instruction must prepare students “to learn to gather and interpret data according to methods and standards accepted in their fields, to bring an increasing body of knowledge to bear on their interpretations, and to write in specialized formats.”<sup>6</sup> Although the terms vary slightly from those used in the WPA Framework document, they certainly foreshadow expectations such as the ability to analyze and understand audiences to create appropriate texts, the ability to make thoughtful decisions based on analysis, and the ability to identify and compose given the field’s conventions.<sup>7</sup>

Although the conversation regarding these dispositions and habits of mind may have emerged as higher education grappled with developing analytical university graduates, those concepts were also discussed by compositionists and the dispositions and habits were introduced into the writing classroom as outcomes statements were developed. *The Instructor Guide to Undergraduate Rhetoric and Writing Studies* 17<sup>th</sup> edition, developed by the Rhetoric and Writing Studies program at UTEP articulates that the learning

outcomes for first year students “are designed to meet the outcomes statement created by the Council of Writing Program Administrators” adopted in April 2000 and amended in July 2008.<sup>8</sup> The WPA Outcomes preceded the Framework documents and were the first step in making the dispositions and habits of mind explicit within the writing classroom. One further piece of evidence that the habits of mind and information literacy have been curricular elements in UTEP’s undergraduate writing course is the inclusion of workshops with instructional librarians in many first-year writing courses. However, the faculty-librarian partnerships at UTEP were often informal, and developed through word-of-mouth information among the faculty and doctoral students working as assistant instructors in the Rhetoric and Writing Studies (RWS) program. I had participated in such informal arrangements with two instructional librarians for my first-year courses and had discovered their usefulness to incoming university students. Those experiences led me to seek more opportunities to expose students to information literacy in upper-division courses as well and a formalized opportunity arose when the UTEP Library established a Library Information Literacy Course Enhancement Grant.

The course enhancement initiative encouraged instructors to enhance their courses—usually those with significant research projects—by collaborating with interested librarians to provide greater continuity and emphasis on information literacy as a learning objective in the course. As Lindstrom and Shonrock indicate, faculty-librarian partnerships must share common goals, include competent instructors and librarians for the specific tasks, and the collaborators must communicate throughout the planning process and as the course progresses to ensure a successful teaching collaboration and to provide a fertile learning environment for the students.<sup>9</sup> The Library Information Literacy Grant at my school provided a formalized process where instructors and librarians could communicate and collaborate through course design, during course delivery, and after course completion. Perhaps, most importantly, the grant heralded the library and university’s commitment to provide resources for instructor-librarian collaborations. Integration into specific courses is not new; as Lindstrom and Shonrock report, recent librarian integration into specific courses at Butler University’s College of Business Administration, the University of Auckland Business School, and Penn State University have resulted in long-lasting and effective librarian–instructor relationships.<sup>10</sup> The UTEP library’s goal was to foster similar on-going, long-lasting instructor-librarian partnerships by introducing faculty to the resources available to students and faculty and illustrating how those resources could enhance courses.

This chapter focuses on the formalized and explicit instructor-librarian collaboration in a specialized section of technical writing, and how that partnership initiated curricular and pedagogical changes that brought the Frameworks to the forefront of course design. I discuss how the work in the

classroom, the library, and the learning management system cultivated the abilities, habits, and practices of mind advanced by the Framework documents.

## Technical Writing Course for Health Science Majors

The Technical Writing course at UTEP is a junior/senior level course taught by the Rhetoric and Writing Studies (RWS) program faculty; it is generally available to any interested student, but it specifically satisfies the writing requirement for students in health science programs such as nursing, kinesiology, social work, and health promotions. RWS undergraduate faculty redesigned the course during the 2013–2014 academic year to emphasize rhetorical principles, align course objectives with technical communication goals, differentiate the course from Workplace Writing (another course taught by RWS faculty at the time and required by the College of Business Administration for its students) and provide uniform guidance to advanced RWS doctoral students who also teach the course. Redesign efforts for Technical Writing relied on the Society of Technical Communication's (STC) core competencies, and the resulting course objectives and outcomes merged both an STC and RWS Studies perspective.<sup>11</sup> Not only were course objectives and outcomes revised, but also a variety of available technical writing textbooks were reviewed by undergraduate RWS faculty. As a result, two major textbooks were recommended that reflected the revised course objectives and outcomes. Instructors could then choose one of the two recommended textbooks and adhere to the course objectives and outcomes.

I taught a section of Technical Writing during the fall 2014 semester, and the section was specifically reserved for students accepted into health science majors. The goal for the course was to address this population's disciplinary writing needs more directly rather than teach an overview of technical writing that lacked disciplinary specificity. Such a specialized section had only been offered once before as an online course, and the offering for the fall 2014 semester was a hybrid section where the class met with the instructor once a week for eighty minutes and the remaining coursework was completed online. The RWS program was piloting the hybrid format to allow greater scheduling flexibility to the target student population whose degree plans frequently called for courses with labs and thus limited scheduling options.

Armed with the revised course objectives and learning outcomes, a colleague's syllabus, and a general understanding of the course's target student population, I aligned the newly revised learning objectives with the health sci-

ence specialization. Given the specialization, I selected texts that specifically addressed writing in the health professions: Barbara Heifferon's *Writing in the Health Professions* and Charles Abraham and Marieke Kools's *Writing Health Communication: An Evidence-Based Guide*. These two books offered what the recommended textbooks could not: the document types health professionals are most likely to encounter in their professions as well as an overview of responsible writing in the health disciplines.

The revised course description and learning objectives for the course presented to students in the syllabus were the following:

#### *Course Description*

The primary goal of English 3359 is to develop students' effective communication in technical writing within professional health care contexts. This effective communication is based on an awareness of and appreciation for discourse communities as well as knowledge specific to subject matter, genre, rhetorical strategy, and writing process.

The class presents an approach to communication that helps students determine the most effective strategies, arrangements, and media. You will produce a variety of documents and presentations to gain more confidence and fluency in visual, oral, and written communication.

Another goal of English 3359 is to strengthen your self-learning skills. This means you will be required to work independently to be fully prepared for class and for the writing projects you must complete.<sup>12</sup>

#### *Learning Objectives*

In this course, [students] will

- analyze the rhetorical situation and define the users and/or audience as well as the tasks that the information must support
- apply rhetorical principles to plan and design effective technical documents for diverse media
- research appropriate sources that inform your writing
- compose content appropriate for the users and genre
- revise and edit written work for accuracy, clarity, coherence and appropriateness, and document resources in the health care environment

- apply technological and visual rhetorical skills (e.g., document design, graphics, computer documentation, electronic editing, and content management applications) in the composing process
- publish, deliver, and archive the composed documents as required
- consider the ethical dimension of composing and working within health care organizations
- recognize and respect various cultural attitudes toward and conventions for health care communications
- understand what health literacy is and how it will influence writing
- develop accurate reporting and recording skills of health issues
- work critically and collaboratively to complete projects<sup>13</sup>

Thus, the course retained the RWS perspective that, similarly to the ACRL, recognizes students' increased responsibility to create new knowledge by utilizing pertinent information in a world flooded with data.<sup>14</sup> As a service course, however, the objectives were designed to prepare students to write documents they were likely to encounter in their professions and to incorporate subject-specific content for specific audiences and purposes.

As envisioned, students would write about medical and health issues rather than address general research topics. This focus meant that students' research would similarly have to be focused and they would have to critically evaluate sources applicable to their specific disciplines, often those collected in specialized databases. Further, the medical field's protean nature demanded that students learn to locate current and relevant sources and learn to discern the value these sources had for them as both consumers of technical information and future mediators and interpreters of that information to their patients and clients. Information literacy, therefore, became a critical component of the course. Fortunately, I had collaborated with two instructional librarians from the UTEP Library for my first-year composition courses in prior years, so I knew I could rely on their assistance in this upper-division course. My reliance on librarian instruction was further cemented when the UTEP Library announced a campus-wide Library Information Literacy Course Enhancement Grant late in the spring of 2014 to further faculty-librarian collaboration in specific courses during the summer and fall 2014 terms.

## Library Information Literacy Course Enhancement Grant: Designing the Course

Since the Technical Writing section for health science majors had only been offered once before and the fall 2014 semester was the first time I taught the course, I came to realize, as Artman, Friscaro-Pawlowski and Monge argue, that enabling students to take advantage of information resources available to them had to be a “prominent goal in [the course’s] pedagogy and curriculum design.”<sup>15</sup> I applied for the Library Information Literacy Course Enhancement Grant proposing to integrate the instructional librarians into the course and modify both pedagogy and curriculum to emphasize information literacy within the health sciences. The first step was to include both instructional librarians as instructors on Blackboard, the course’s learning management system (LMS). The course included librarian-led workshops during class time to introduce students to medical and legal databases that address ethical and legal issues in the health care industry. As students were introduced to content-specific databases, they also learned about information timelines and the impact those timelines have on the nature of the information available. Students also learned that as the information matures, it is presented in different genres with different levels of review, perspective, and credibility.

I was awarded the grant early in the summer of 2014 and immediately began collaborating with the instructional librarians to restructure the course calendar and revise assignments that would emphasize literacy concepts and allow for librarian-student interactions. The course design also worked to counter the perception that seems to persist, according to Artman, Friscaro-Pawlowski and Monge, that the research process is separate from the writing process.<sup>16</sup> The first step I took to link research and writing was to schedule librarian-led workshops inside the library when the major research project was introduced and again mid-point through the students’ research efforts. Several scaffolding exercises designed to help students formulate research questions and organize their research were originally scheduled, and those remained as part of the course since they also strengthened the bond between researching and writing.

As the course design proceeded, the librarians and I agreed fostering students’ direct access to the librarians was critical. To allow for student-librarian interactions, both librarians were added to the course LMS and several discussion posts where students were required to interact with the librarians were developed. Given the hybrid nature of the course, discussions were primarily written exchanges that further emphasized the link between researching and writing.

To gauge the students' understanding of information production and researching, I devised an end-of-term assignment requiring students to locate an innovation in the health field that had been introduced in the previous 12–18 months and propose a research plan based on the investigative practices they had learned earlier in the semester. Although students were not required to consult librarians for this assignment, they were encouraged to review the materials previously presented and ask the instructor and/or the librarians questions about researching, source relevancy and credibility, and audience as they developed their research plan.

Developing assignments and scheduling librarian intervention was only the beginning of the grant's impact on course design, curriculum, and pedagogy, however. As I developed the course to support the grant's intent and goals, I found my curriculum and pedagogy addressed the Frameworks explicitly. I discuss how the Frameworks, the revised curriculum, and the resulting pedagogy aligned in the next section.

## Aligning Curriculum and Pedagogy with the Frameworks

As initially designed, course readings and assignments cultivated students' curiosity, one of the WPA habits of mind, by allowing them to research topics within their disciplines. Since the students had already been exposed to their disciplinary content, and in some instances were close to completing their degree program, they understood notions of authority and its construction<sup>17</sup> within the health sciences field. However, I had the opportunity to complicate that understanding through explorations into concepts\* such as audience, purpose, contexts, and culture. For example, students were introduced to the impact cultural differences have on information creation and consumption and audience expectations. I intended that exposure to cultural differences would lead students to consider alternative ways to think about their future patients/clients and realize that their interactions would be informed not only by their own culture, but also by their audience's culture. Further, the course and workshops highlighted information creation and value, concepts found in the ACRL Framework. The workshops introduced students to information relevance and timeliness, and these factors impacted students' research and ultimate credibility as they consumed, assimilated, synthesized, and dissem-

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\* These notions further several experiences recommended by the WPA Framework including "Developing Rhetorical Knowledge," "Developing Critical Thinking Through Writing, Reading, and Research," "Developing Flexible Writing Processes," and "Developing Knowledge of Conventions."

inated information to various audiences. To this end, the course assignments were designed to help students recognize that their research would result in conversations—another key element in the ACRL Framework—with scholars, colleagues, other professionals involved in the medical treatment of their clients/patients, the community at large, and individual clients/patients.

### *Readings and Other Resources*

As previously indicated, the course texts were selected because they addressed the specific writing genres and environments the target students would encounter in their professions. However, the text authors also demonstrated an affinity for the Frameworks. Heifferon, in particular, addresses ACRL frames of authority, information creation and value, and research as inquiry in chapters that address audience and context analysis, ethics, and multicultural environments.<sup>18</sup> Additional readings and videos also complicated the WPA and ACRL notions of authority and knowledge construction for students.<sup>19</sup> Students were provided resources to guide their citation efforts and to help students properly attribute information in their assignments. Students viewed videos to introduce them to concepts of literacy, both in its traditional understanding and as it pertains to health information. The following detailed discussion of the workshops, course assignments based on readings, other resources, and the overall course objectives and their relationship to the Framework documents responds to the fundamental question for this chapter: In what ways does your teaching, in the classroom and in the library, work to cultivate the desired abilities, habits, and practices of mind advanced by the Framework documents?

### *Librarian-Led Workshops*

Two library workshops were scheduled during the semester. Although this is not much more than the oft-criticized one-shot instruction, the hybrid nature of the course did not allow for much flexibility since the class met only once a week for eighty minutes and the remainder of the coursework was completed online. Both sessions however, incorporated several methods discussed in the Hsieh, Dawson, Hoffmann, Titus and Carlin study, including the limited preview method, and active learning during the session.<sup>20</sup> Although the Hsieh et al. study investigated the methods independently of one another, in class, students were encouraged to preview existing library guides, which ideally provided a refresher to students into general library resources and access. During the first workshop, students learned the Boolean connectors, attempted phrase searching, and completed a worksheet to practice search techniques similar to the active learning method Hsieh et al. employed.<sup>21</sup>

The first workshop was scheduled as students were exploring and narrowing their research topic and was intended to help them refine the topic based on available information. Since the course did not focus on primary investigation and research methods, students were encouraged to identify topics that would yield robust, credible, and relevant resources. The second workshop focused specifically on medical and legal databases and helped students further refine their inquiries.

Both workshops were developed and led by the instructional librarians, with additional commentary provided by the instructor to emphasize course requirements or to answer course-specific questions. The ACRL Framework heavily informed the sessions, as the librarians led students from general research to specific research strategies as well as helped students understand the information's value, authority, and relevance. As the librarians explained how information is created and refined over time, students were introduced to the different modes of reporting they could expect to find depending on the issue's timeline. For example, students learned as a topic initially becomes newsworthy, initial reports can be located in news outlets such as newspapers or weekly magazines. Information in these modes is limited to reporting basic facts and is usually reported by journalists rather than subject matter experts. As the topic matures, greater effort is spent on analyzing other instances where similar issues have occurred and information then appears in other genres, such as trade magazines, where the authors may be practitioners rather than generalists, as is the case of news reports. As more time elapses, published materials begin exploring causes and effects; the analysis portion becomes more robust and information can appear as scholarly articles. Scholars and researchers write the latter sources; research methodologies for these sources are also typically more rigorous and final texts are usually subjected to greater scrutiny through peer review.

Understanding the life cycle of issues allows students to develop knowledge practices articulated in the Frameworks. For example, students learn researching a new topic may mean they will not find much analysis and will have to rely on journalistic reporting. Recognizing the value of this research, given the topic's life cycle, enables students to recognize how "Authority Is Constructed and Contextual," that it has value, and that "Information Creation is a Process."<sup>22</sup>

Similarly, to Artman, Friscaro-Pawłowski and Monge's observations, the librarians and I found students were unfamiliar with multiple resources at their disposal despite the fact they had conducted research within their disciplinary fields prior to taking the writing course.<sup>23</sup> Since the course is a junior/senior level course, students should have completed first-year composition courses where research projects are critical components. Even assuming some students might have tested out of first-year composition courses, my expecta-

tion, borne out by students' responses to an initial assessment asking them to describe their previous writing experiences, was that students had completed research projects in courses both within and outside their disciplines. However, few students indicated familiarity with databases dedicated specifically to medical literature. The activity-based workshop which called for students to identify key phrases and different terms to research their topic seemed to provide students with a new strategy to begin their research. As such, the workshops served to teach the ACRL framework "Searching as Strategic Exploration" since students learned how to narrow or expand their key phrases, and consequently their research results, based on the scope of their proposed research.<sup>24</sup>

### *Assignments*

As expected for a writing course, both major and minor assignments were designed so students would respond in writing. While the response genres varied, and some were specifically designed to foster an understanding of workplace conventions, students were expected to connect readings with their experiences and other courses along with the response environment, thus fostering metacognition and reflection as encouraged by the WPA Framework.<sup>25</sup> This section discusses the relevant assignments and how they cultivated habits and practices articulated in both Frameworks.

### *Discussion Board Postings*

The first assignment was a short, 250- to 300-word discussion post visible by all students in the class asking them to describe their positive and negative writing experiences, articulate their expectations for the course, and identify issues they wanted to learn about writing in general. My goal was to instill a sense of reflection and engagement in the course as well as to establish a sense of responsibility for learning. Students responded with comments regarding improving grammar and mechanics; however, they added comments about missing something in previous writing courses and wanting to learn about writing professionally and efficiently. Reflecting on their experiences and voicing their expectations seemed to set a comprehensive Framework-based environment in the course by encouraging engagement, persistence, responsibility, flexibility and metacognition—the habits of mind the WPA Framework hopes to foster.<sup>26</sup>

A second discussion post asked students to consult with one of the course librarians after the first of two librarian-led workshops. The initial workshop re-introduced the students to library resources, timeliness of information,

and basic searching parameters such as Boolean searches. As a result of the initial workshop and the online library guide resources available through the LMS, students were expected to narrow their topic selection for the research assignments to two or three issues. To help students refine their topics, they consulted librarians and were asked to discuss databases, quality of sources, and appropriateness of sources as well as receive help identifying other sources if needed. Despite the prompts for consultation with the librarians, students' comments were disappointingly superficial. Most students requested confirmation that medical databases were appropriate for their research. From their comments, it became evident the consultation/discussion came too early in their investigation and/or they had not yet probed the value of the sources they were locating.

Once students had begun their researching, a supplemental reading, Emily Martin's "The Egg and the Sperm: How Science Has Constructed a Romance Based on Stereotypical Male-Female Roles,"<sup>27</sup> was introduced; students were asked to reflect on scientific writing's objective value and how authority was constructed in the assigned article and in the sources they had located thus far in their own investigations. This reading was meant to instill skepticism and help students enact the dispositions promoted in ACRL's first frame, "Authority Is Constructed and Contextual."<sup>28</sup> By reviewing a conflicting point of view from one they had commonly understood, and by considering their own sources, the student researchers could begin to unpack notions of authority and refine their questions of inquiry to consider relevance, divergent points of view, and information trends. Most responses to the discussion prompt acknowledged surprise at Martin's differing characterization of the scientific process. Students also seemed to begin to understand how they created an authoritative voice as researchers and professionals through their use of sources, choice of words, and communication with patients and clients.

As a whole, the discussion boards allowed students to reflect upon the information they had been presented and the information they had independently located, as well as enter conversations with each other as they examined texts. These tasks were designed to foster WPA habits of curiosity and engagement in low-stakes assignments where students could "grapple with challenging ideas [or] texts,"<sup>29</sup> "make connections between their own ideas and those of others,"<sup>30</sup> and "take risks by exploring questions, topics and ideas that are new to them."<sup>31</sup>

### *Writing for Other Professionals—Research Project*

A research project was introduced, and although its effectiveness has been questioned by compositionists because it is "written to a non-specialist au-

dience,<sup>32</sup> the assignment was deemed useful since it allowed the students to investigate a topic related to their discipline and pertinent to the University's borderland region. The assignment specifically asked students to explore a topic in the El Paso region to help make the effort more relevant to students. Furthermore, since the students might not always find research regarding their selected topic that had been conducted in the El Paso area, they were expected to search strategically, an ACRL frame, for research that could be applied to the border region and to think critically about the specific elements that could be applied to the El Paso region. Thus, students were expected to identify gaps in resources and critically discern disciplinary strategies that had been practiced under different circumstances, yet could be relevant to their specific topic. To achieve this kind of exploration, students would have to understand the different scenarios and how research strategies could be adapted to a borderland setting. Furthermore, the research project established the disciplinary knowledge students would then apply in developing other assignments in different modes and for different audiences. Since the audience for this research project was established as other medical professionals, students practiced the abilities enumerated in the ACRL's "Scholarship as Conversation" frame.<sup>33</sup>

A recursive research-writing process was emphasized since students could modify their research topic and questions of inquiry throughout the semester as their investigation progressed. The project was presented as three separate, but related assignments: a topic proposal memo, an annotated bibliography, and the final project, an informative research paper. The three assignments were designed to scaffold students' efforts. I also intended to introduce students to different writing genres since each assignment followed different conventions: memo, bibliography, and research paper. Students were expected to consider different sources presented in different formats and how each source had relative value in the annotated bibliography and research paper. Finally, students had to practice appropriate attribution in the bibliography and research paper. To further emphasize how their research would inform subsequent assignments, students were also told their research project would serve as the foundation for two other projects: an educational brochure/instruction brochure and proposed health campaign group project.

The first research requirement was a topic proposal memo where students proposed a public health issue relevant to the El Paso, Texas borderland region that was also related to the student's major. Students chose topics such as the link between physical inactivity and chronic diseases, childhood obesity, and childhood asthma. Although these topics were initially broad, the students were allowed to narrow the topic by focusing on specific populations such as Hispanics, the largest minority population in the area. If not related to the major, the researcher had to explain why the topic interested her. As part of the proposal memo, two initial sources had to be presented in APA format;

the sources could be academic journal articles, government sources, or sources from not-for-profit organizations. This assignment was intended to foster several WPA habits of mind: student curiosity, creativity, responsibility, and flexibility. Since this assignment was due after the first information literacy/librarian-led workshop and after student-librarian consultations, students were also able to enact numerous knowledge practices in various ACRL frames. Namely, students explored notions of authority, information creation processes, information value, inquiry, and strategic exploration.

The habits of mind and frames were enacted when students began exploring topics that interested them. Rather than assigning specific topics, students were encouraged to begin their inquiries by considering current topics in the local media, developing unanswered or under-answered questions they had encountered in their disciplinary courses, and forecasting questions they might encounter once they entered the professional workplace. Since the students were responsible for their own research, they had to rediscover the curiosity and creativity that might have attracted them to their selected field of study. Because the research efforts required that students identify sources for their topic, they began exploring who was responsible for creating information within their field of study and within their topic in particular. My feedback regarding their selected sources included comments asking students to consider the timeliness and value of the information. My intent was to help students consider how the initial exploration could lead to strategic exploration that met the scope of their projects. All of these efforts are represented and grounded in the Frameworks.

Once I approved students' topics, their investigations moved to an annotated bibliography. This assignment was designed to encourage students to review, analyze, and synthesize information from multiple types of sources as presented in the library workshops. Citing sources was an important component that the instructor emphasized when discussing this task. However, the annotations were also highlighted as the most valuable element of the assignment for the students' ongoing work. The required annotations summarized the source, explained how the source fit into the student's research, identified the audience for the information and whether that audience was addressed effectively by the source, assessed the thoroughness the source provided the student, and determined whether or not the source furthered the student's inquiry process.

The annotated bibliography was the second opportunity students had to practice the ACRL frames introduced with the topic proposal memo, but in greater depth. As the students' investigations progressed, students were allowed to refine their topic or modify their research questions. Students were also reminded, while they had to produce an annotated bibliography that met the minimum source requirements, the final reference list for their research

paper could include additional or different sources. A key pedagogical practice was the instructor's attempts to consistently remind students that discarding a source in favor of a more relevant or more current source is an integral part of research, discovery, and knowledge creation. Furthermore, recognizing the iterative research process allowed students to "adapt to situations, expectations, or demands."<sup>34</sup> Students were advised to re-examine their initial topic and refine it as they found additional information. The instructor emphasized that topic changes were appropriate and encouraged if students discovered sub-topics they found more interesting or better suited to the assignment expectation than the topic originally proposed.

As the final and major task, the informative research paper, students were to define and clarify their selected problem/condition or issue, summarize previous investigations to inform their reader of current research, identify relations, contradictions, gaps, and inconsistencies in the literature, and suggest the next step or steps in solving the problem. Thus, the research efforts were to culminate with students not merely reporting, but analyzing information and applying it to a specific location and audience. As such, students again had opportunities to enact the knowledge practices and dispositions in the ACRL and WPA Frameworks.

### *Writing for Patients/Clients*

The bulk of the assignments through the research project had been designed with a professional audience in mind. Once the students had completed their research, the focus shifted to writing for patients/clients. Based on their investigations, students were required to develop either an educational brochure or a set of instructions. This assignment was designed to introduce students to their roles as interpreters or mediators of technical information for a lay audience: patients or clients who may or may not have the health literacy and expertise students have achieved. The assignment called for students to create succinct texts incorporating technical information and elements of visual rhetoric—layout, graphics, white space, color, spacing, balance, and contrast—for a specific target population. Through this assignment, students began constructing their own authority in a specific context and began to understand they were creating information differently than they had in the research project. They were also introduced to the value of different genres for different purposes and audiences. Since they were constrained by the brochure or instruction sheet's genre, they had to determine which information would be of most value to their intended and potentially secondary audiences.

The most effective student brochures provided information on a health issue, recommended specific steps, and guided readers to additional resourc-

es. Although the intended audiences could not always be narrowly defined, students understood their brochures had to convey information through both text and images. Three noteworthy submittals addressed varied issues such as lower back pain, suicide prevention for military personnel, and dealing with childhood asthma. In each case, the student developer provided clear and succinct definitions and descriptions of the issue to their readers as well as used images and color to illustrate concepts and accentuate the specific actions they were recommending.

### *Writing for the Community*

The major assignment in the course was a public health campaign proposal. This assignment was a group project where one of the group member's topics would be chosen to develop a public health campaign for the borderland or UTEP community. The proposal would be drafted and presented to a government or not-for-profit organization whose values aligned with the intended benefits of the public health campaign and who would then perhaps fund the proposed health campaign. Students were to incorporate the critical analyses conducted throughout the semester to develop a workplace report for a decision-making audience. The proposal would present the public health campaign's need and purpose, target audience, potential collaborators (other organizations whose authority was recognized in the community, as the ACRL frame notes how such authority is constructed and contextual), distribution channels for the public health information (the ACRL frame of information creation and value), and specific information to be conveyed in the public health campaign. Not only was a final, written report required, but the groups presented their proposals to the class and instructor who assumed the roles of the funding organization's board of directors and executive director, respectively.

Since students completed the proposal in groups, WPA habits of mind including openness, engagement, creativity, persistence, responsibility, flexibility and metacognition were fostered through this final project. To facilitate effective group work, I provided students with potential roles group members could assume and also required that students develop a group contract which all students signed. The contract identified the topic/campaign to be developed, how the students were to meet and collaborate, how the tasks were to be divided among group members, what roles each group member was to assume, and how the group would address perceived infractions by individual group members. I emphasized differing opinions and approaches could strengthen the final proposal and reminded students that the role of devil's advocate was valuable, provided the group was respectful in listening to differing

opinions and engaged with the ideas being presented. Since the topic selected was one student's area of research, by definition the remaining group members would not have the same level of expertise on the topic. However, their varied backgrounds and experiences, along with their own semester-long inquiry projects, prepared them to critically analyze how the information developed for a professional audience had to be interpreted for the community at large. Determining both campaign content and distribution channels challenged the students to think creatively and reflect on the cultural situation the students were asked to address.

The instructor presented guidelines for proposal reports and emphasized the persuasive nature of such reports—the goal was to have the proposal's audience, the class and instructor as board of directors and executive director, approve the health campaign. To achieve a persuasive proposal, students were encouraged to develop guidelines for their collaboration to enact responsible teamwork. They had to, in WPA terms, “persevere” through group member scheduling conflicts and display “flexibility” and “openness” as group members contributed divergent ideas to complete the report and presentation. While general guidelines for report and presentation were provided and discussed in class, students were given flexibility in the appearance of the final report and creativity was fostered through group/instructor interactions where the instructor asked questions regarding the purpose, intended health campaign audience, and other required elements. In many instances, the instructor reminded students to reflect on the research they had conducted regarding the health issue to inform their own presentations.

One of the strongest campaigns expanded on the research and brochure aimed at preventing military personnel suicides. “The Courage to Live” campaign sought to educate military families and soldiers about the warning signs of suicide among soldiers and ultimately to prevent suicides by providing help and removing the stigma associated with seeking help. The campaign was limited to facilities at Fort Bliss, the largest army post in the continental United States and surrounded by the El Paso, Texas community. The proposal relied heavily on the scholarly research conducted, but its strength lied in the adeptness the students demonstrated in translating that research into a proposal that effectively brought information and presented additional resources to a public affected by the health issue: military personnel, their families, and friends.

## Conclusion

Assessing the impact of the Library Information Literacy Course Enhancement Grant at this point is primarily qualitative. Students' comments regarding the first workshop indicate they had not previously been exposed to explic-

it information literacy and were initially uncomfortable with research tasks. The second library workshop was scheduled just before students submitted the annotated bibliography. While this second workshop could not have had a significant impact on that assignment, students would have identified gaps in their research and could ask more specific and critical questions regarding information value and relevance. Unfortunately, students did not take the opportunity to do so—mostly because they had not been prepared to do so by the instructor. Greater schedule coordination along with increased coordination between the instructor and librarians could ensure that the ACRL Frameworks are more effectively integrated into the second or subsequent library workshops.

Including librarian-led workshops, however, seemed to provide students with greater confidence in the knowledge practices required to research effectively and develop alternative strategies when presented with new topics to research. One of the capstone, yet low-stakes tasks, was for students to identify a health topic introduced in the popular media within the last 12–18 months and identify a research plan identifying databases and the rationale for those sources to provide relevant and credible information. The vast majority of students demonstrated mastery of the research strategies and familiarity with appropriate databases.

Since the Frameworks' habits of mind, knowledge practices, and dispositions are so intrinsically entwined with the assignments, it is difficult to assess how well they were cultivated in the students. Final grades provide a quantitative, albeit incomplete, assessment of how proficiently students displayed knowledge practices, dispositions, and habits of mind. Twenty of the twenty-five students who completed the course during fall 2014 earned a B or better and, of these, ten (40 percent) earned an A. I taught the course during the fall 2015 semester without the enhancement grant and included only one librarian-led workshop. Although the assignments were very similar in both classes, the most recent class did not include the capstone research proposal memo. Only 22 percent, or four of eighteen students, earned an A during the fall 2015 semester, and ten of eighteen (55 percent) earned a B. My sense is the explicit inclusion of information literacy and greater involvement by librarians in the course not only augmented the Frameworks' prominence in the course, but also promoted student success. Continued collaboration and additional student reflection may provide additional qualitative data that can help librarians and writing instructors determine how students perceive courses that make the Frameworks' goals explicit and whether the students can envision how certain habits of mind or dispositions may be helpful to them both as they complete their studies and enter the workforce.

## Notes

1. Krest and Carle, "Teaching Scientific Writing," 223.
2. Malcolm, "Analyzing the News," 143.
3. *Ibid.*, 146.
4. Shih, "Content-Based Approaches to Teaching Academic Writing," 617.
5. *Ibid.*, 621.
6. *Ibid.*, 621.
7. WPA, Framework, 1.
8. Salome and Dulin, "The UTEP Instructor Guide to Undergraduate Rhetoric and Writing," 21–23.
9. Lindstrom and Shonrock, "Faculty-Librarian Collaboration," 19.
10. *Ibid.*, 20.
11. Quezada, Donovan, Martin, and Agee, "Mining for Informed Technical Communication Curricula."
12. Quezada, Technical Writing Syllabus, Fall 2014 semester.
13. *Ibid.*
14. ACRL, Framework, 1
15. Artman, Frisicaro-Pawlowski, and Monge, "Not Just One Shot," 94.
16. *Ibid.*, 96.
17. ACRL, Framework, 4.
18. Heifferon, Barbara A. *Writing in the Health Professions*.
19. Martin, Emily. "The Egg and the Sperm."
20. Hsieh, Dawson, Hoffmann, Titus, and Carlin, "Four Pedagogical Approaches." 236.
21. *Ibid.*, 236.
22. ACRL, Framework, 2.
23. Artman, Frisicaro-Pawlowski, and Monge, "Not Just One Shot," 94.
24. ACRL, Framework, 9.
25. WPA, Framework, 5.
26. *Ibid.*, 1.
27. Martin, Emily. "The Egg and the Sperm."
28. ACRL, Framework, 5.
29. WPA, Framework, 5.
30. *Ibid.*, 4.
31. *Ibid.*, 4.
32. Margolin and Hayden, "Reframing the Pedagogy," 603.
33. ACRL, Framework, 8.
34. WPA, Framework, 5.

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