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New avenues for integrating information literacy into the curriculum

Abigail Hawkins Gonzales
University of Nevada, Las Vegas

P. S. McMillen
University of Nevada, Las Vegas, psmcmillen.phd@gmail.com

Jennifer L. Fabbi
University of Nevada, Las Vegas, jennifer.fabbi@unlv.edu

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New Avenues for Integrating Information Literacy into the Curriculum

Abigail Hawkins Gonzales
Instructional Designer
University of Nevada, Las Vegas
United States
abbygonzales@gmail.com

Paula McMillen
Education Librarian
University of Nevada, Las Vegas
United States
paula.mcmillen@unlv.edu

Jennifer Fabbi
Head, Curriculum Materials Library
University of Nevada, Las Vegas
United States
jennifer.fabbi@unlv.edu

Abstract: A generally understood mission of library instruction programs is to promote information literacy (IL) and critical thinking across the curriculum. The majority of programmatic IL collaborations with higher education core curricula are found in introductory composition or communication courses. Other more unconventional avenues offer potentially more effective ways to teach students the basic IL concepts and skills. At the University of Nevada, Las Vegas (UNLV), conversations with College of Education faculty helped librarians identify a strategic and unique point of entry for IL instruction. Using the ADDIE model as a conceptual framework, librarians and an instructional designer met with the course coordinators for the Valuing Cultural Diversity course to collaboratively develop tools and assignments that deconstruct and scaffold the research process for students. The systematic approach for identifying this course, developing the partnership, creating the assessment tools, and refining instruction and assignments based on our findings will be discussed.

Introduction

In an environment of rapid technological change and information proliferation, the ability to “recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information” is increasingly important (American Library Association 1989). These information literacy (IL) skills enable learners to master content and extend their investigations, become more self directed, and assume greater control over their own learning. A generally understood mission of library instruction programs is to promote IL and critical thinking across the curriculum.

Library instructional programs continue to seek meaningful ways to infuse IL instruction into both general education and discipline-specific course sequences. At the University Nevada, Las Vegas (UNLV), targeted conversation with College of Education faculty helped us identify a strategic and unique point of entry. Valuing Cultural Diversity, a lower-division course required for all education majors at UNLV, assigns a research paper in which students are asked to critically examine the perspectives of at least one cultural group other than their own. Past experience with this course has shown that students often experience a significant shift of perspective which also carries an affective component. These factors create a potentially robust opportunity to introduce or reinforce key aspects of IL.

This paper outlines how we developed a strategic partnership with education faculty in a rather unlikely venue for IL. We discuss how the partnership was identified, created, and fostered. We also discuss the results of the

partnership, key challenges, and potential solutions. The significance of this collaboration is its potential application to any course utilizing inquiry into diverse perspectives.

Review of Literature

Historically, in moving the higher education IL agenda forward, librarians first aligned themselves with individual classes that included research-based assignments. As library instruction programs became more organized around national IL competencies (e.g., ACRL 2001), they sought more strategic approaches. Common sense dictated working with courses or programs that were required within a department, college or the educational institution as a whole. Obvious targets were general education requirements such as composition or communication courses at the lower division and, in fact, these have been the predominant partners in IL instruction (Jacobson, T.E. & Mackey, T.P 2007; Sult & Mills 2006). Certain problems present themselves in working with these programs, however. Students are at the beginning of their university experience in most cases and still struggling to make the transition from a structured to an unstructured learning environment. Because these courses are often outside the student's major, they are viewed as hurdles to be cleared with the minimal amount of effort invested. Library assignments within this context face an uphill battle for having an impact on student learning.

Although there has been some discussion in the literature of teaching about the role of affect in the learning process, this has not been taken up systematically by the library field. Kuhlthau (2004) notably has articulated the multi-dimensional nature of the information seeking process (ISP) which includes cognitive, physical, and affective components. She suggests that, "...feelings play a critical role in motivating and directing our learning" (p.24, 2004). Her focus, however, has been on librarians recognizing and facilitating the resolution of negative feelings—uncertainty, confusion, frustration—that accompany the initial stages of the ISP process. If indeed affect is a key component of learning, then does it not also make sense to try and harness the potential of positive emotions such as curiosity, passion, or idealism? Doing this might point us in different "strategic" directions. Librarians might instead seek out courses and assignments where students get to pursue inquiries in their subject major of specific interest to them, rather than being assigned a topic in a composition or speech class.

Working with instructional faculty outside the library presents challenges as well as potential rewards. Whole books have been written about the advantages of and ways to implement such collaborations (Raspa & Ward 2000). Mattessich and Monsey (1992) among others have focused on the mutual benefits derived from collaboration. Friend and Cook (2003) go on to suggest several "defining characteristics" of collaboration:

- Collaboration is voluntary.
- Collaboration requires parity between individuals.
- Collaboration is based on mutual goals.
- Collaboration depends on shared responsibility for participation in decision making.
- Individuals who collaborate share their resources.
- Individuals who collaborate share accountability for outcomes.

Raspa and Ward (2000) also believe that collaborative endeavors between librarians and subject faculty should contain the essential elements of persistence, passion, playfulness, project and promotion. This project has consistently worked toward true collaboration as the model for our relationship with course instructors.

Collaboration and content are not sufficient to ensure a productive partnership. Effective instruction is central to student learning and faculty buy-in. A standard instructional design approach can be used to contextualize what we did. Many educators and designers use the conceptual framework of the ADDIE model to systematically guide the design and development of instruction (Molenda 2003; Peterson 2003). The acronym stands for analysis, design, development, implementation, and evaluation. During the analysis phase, the goal is to understand the learners and the instructional needs. In the design phase educators use information gathered during the analysis phase to inform the content sequence, instructional strategies, and assessment plans (Morrison et al. 2001). Translating the design plans into workable instructional materials occurs during the development phase. The implementation phase is when instructors take these ideas and materials into the classroom. The evaluation phase is ongoing and occurs through all phases. Educators and designers continually evaluate the effectiveness of the design process and instruction. The goal of the evaluation phase is to examine whether students learned the material and how to revise it to improve student learning.

With these concepts and goals firmly in mind—strategic utilization of library resources to teach IL competencies, incorporating affective components of learning, collaboration as the approach, and principles of instructional design—we worked to identify a target for integrating IL competencies into the curriculum. Ideally this

would be a required course for a large number of education majors and would involve an assignment where students had a significant emotional investment in the topic of investigation.

Process

While we approached the faculty of the College of Education with a plan to integrate IL into the elementary and secondary teacher education curriculum in an intentional way, the identification of a course to begin with was not predetermined. The goal of the plan was for UNLV teacher education students to share common experiences to develop IL skills over the course of their program which would be periodically evaluated. The initial step of the plan would be to choose one core course in the teacher education curriculum to address baseline IL competencies. We committed to collaborate with course instructors to implement these competencies by working with students on one assignment within the course and collaborating with the instructors to assess student learning. The ultimate goal of the partnership is to ensure that UNLV teacher education students are successful in their academic pursuits, that they develop skills and dispositions that allow them to become lifelong learners, and that they are able to impart these skills and dispositions to their own students in a developmentally-appropriate way.

We started first by creating a proposal modeled after an established IL collaboration at UNLV. This existing partnership combined with activities within the larger environment gave us the strategic “hooks” needed to sell the proposal. These activities included library participation in the creation of new IL learning outcomes for undergraduate students at the campus level (general education reform) and preparation for the College of Education’s upcoming NCATE evaluation focusing on assessment of student learning. We also mapped the College of Education curriculum to identify strategic avenues for integrating IL competencies. While working through the department chair and committee structures, we were able to educate key faculty and elicit feedback on the teacher education program and determine where research “lives” in the undergraduate curriculum.

The Valuing Cultural Diversity course (EDU 280) emerged as a good starting point in the curriculum to address and assess IL competencies. Past experiences cooperating with course instructors and an existing research assignment made this course a prime candidate for collaboration. In addition, the subject matter of the course is one that potentially evokes strong emotion in students as they examine their own values and beliefs relative to cultural inequities in society. In this course students are asked to write a six-to-seven page “Why paper” to investigate and understand alternative perspectives about why something is occurring, looking particularly at the perspectives of a cultural group different from their own (Sleeter, Torres, & Laughlin 2004). Students are required to use six sources for this paper, two of which have to be from the perspective of individuals within the cultural group being analyzed.

Part of the success of this collaboration was due to the different perspectives and skill sets of each team member. The librarian who originally proposed the plan provided strategic perspective, established relationships with education faculty, and continuity of communication and vision. A new education librarian took the lead in implementing the collaboration, teaching IL skills to students, assessing their work, and coordinating with course instructors. The instructional designer created tools and assignments based on theories of student learning. The instructional design perspective helped bridge, for course instructors, what is often perceived as a gap between subject disciplines and the teaching of IL concepts. The course instructors played the role of subject-matter experts, provided ongoing feedback, and integrated the materials into their curriculum.

In the *analysis* phase of the ADDIE model, we met initially with the course instructors of the EDU 280 courses and provided a focus group session to identify students’ prior knowledge, misconceptions, and knowledge gaps as evidenced by performance on past assignments. Librarians and course instructors agreed that, as a result of the assignment and library instruction, students would be able to:

1. Investigate alternative perspectives regarding why something is happening
2. Access and begin an inquiry process into another group’s perspectives via scholarly education research and/or primary sources
3. Compare and contrast insider and outsider perspectives and how they provide different views and information on a particular issue

In the *design* phase, we discussed with course instructors how the assignment might be scaffolded to enable student success and to assess their mastery of specific skills. There was a focus on the importance of constructing an effective research question (i.e. “Why” question), identifying author perspective (i.e. insider/outsider), and evaluating sources beyond content relevancy (i.e. currency, bias, scope, accuracy). Course instructors also valued appropriate citation of sources. We planned how we would provide timely, meaningful feedback to students and how we would integrate smaller assignments, designed to build specific IL skills and knowledge, into the overall assessment of the “Why paper.”

In the *development* phase, we created two learning activities. Conversations with instructors during the analysis phase consistently identified articulation of the research question as one of the most challenging parts of the research process. Consequently, we created a concept map assignment to help students formulate their “why” question, identify major concepts, and generate alternate terminology—all key IL competencies. The second major learning activity was the source table assignment. This assignment was an advanced organizer designed to foster critical evaluation of sources. The assignment required that students locate information sources, examine sources for author perspective, evaluate usefulness based on common criteria, and cite the sources in APA format. See Figure 1. Library instructional sessions were based on principles of active learning. Additionally, a website was created with blank copies and evaluation rubrics for each assignment and links to all resources referred to in the library session.

Figure 1

| Tool Used to Access Information ¹ | Source / Format Type ² | Position/Perspective of Writer ³ | Insider (I) or Outsider (O) | APA Citation Information | Why (or why not) is this source of information important to your question? Provide 2 distinct reasons for your decision |
|--|-----------------------------------|---|-----------------------------|--|--|
| Example: UNLV Library Catalog | Book | University history professor & researcher | O | Fixico, D. L. (2006). <i>Daily life of Native Americans in the twentieth century</i> . Westport, CT.: Greenwood Press. | He has written numerous books on Native American life. This book has a chapter that looks at Native American culture and customs related to education. The book explores other aspects of Native American culture which may shed light on student behavior in the classroom. It was published in 2006, so the information is recent. |

¹ Tool used: What tool did you use to find the article, book, or website? (e.g. name of database, internet, library catalog, personal communication, etc.).

² Source type: What format is the information in? Examples: book, scholarly article, magazine article, newspaper article, interview, diary, blog, website, etc.

³ Position/Perspective of writer: Whose voice/perspective am I hearing? What characteristics about the author/voice would help determine his/her insider or outsider status?

The collaboration was *implemented* first through a pilot in a summer session of the course and then throughout a full semester with five sections, including three different instructors and one distance section of the course. As part of the collaboration, course instructors were asked to pre-approve “Why” questions and evaluate the concept maps prior to the library instruction session. Students brought their maps to the session, where they were introduced to various databases that provide access to alternative perspectives. Through techniques such as think-pair-share, small- and large-group discussion, and hands-on practice, students brainstormed the pros and cons of insider and outsider perspectives, formulated and applied search strategies, and evaluated sources. The source table assignment was due to the library instructor one week after the session, and students received feedback and a grade the following week.

The *evaluation* phase ran parallel to all the other phases of the instructional design and collaboration process. Evaluation methods included instructor observation, student and instructor feedback, and analysis of student performance on the assignments. As a result of ongoing evaluation, instructional emphasis shifted from several concepts to a few key concepts and principles. For example, we initially focused on the students’ assumed prior knowledge of the concepts of primary and secondary sources to provide a tie-in to the concepts of insider and outsider perspective. However, after evaluating this strategy in the pilot session and the first full semester of collaboration, we learned that many students did not have a working knowledge of these concepts. Consequently, the terminology was more distracting than facilitative in reaching the core learning outcomes. Also as a result of our findings we collaboratively developed an additional assignment to address students’ skill deficits in critical reading of information sources. Finally, we adjusted the timing of the session to later in the semester (closer to the realistic student start date of the assignment) to make sure the newly-acquired skills were immediate to the students’ need for information.

Results and Discussion

The impact of our collaboration was evidenced at a course, program, and campus level. While librarians are traditionally brought into a course for a single instructional session, we were able to more fully integrate the IL learning experience through this collaboration. By developing short assignments, such as concept mapping and critical evaluation of sources, students were able to begin building their IL skills before actually coming into the library session. Sharing responsibility for the assessment of student research papers also contributed to more meaningful learning. Additionally at the course level, a result of the instruction and assessment was the ability to

quickly identify common misconceptions and learning gaps among students. In analyzing the assessment results of four out of the five sections, we found that that 70% to 80% of students were unable to correctly identify the author's position as a group insider/outsider and to evaluate the information resources beyond content relevancy. Consequently, we revised the instructional materials and number of objectives, clarified the assessment instruments, altered the content and its sequence, and added an instructional activity for students to complete in advance of the library instruction session. Had no formal assessment occurred during the library session, it would have been difficult to make these changes in an informed manner. The impact these changes have on subsequent classes will be assessed after this article goes to print.

At the program level, one result of this collaboration was an ongoing presence in the curriculum for pre-service teachers. Since this is one of the first courses all pre-service teachers are required to take, this collaboration served to create a common research experience. We specifically targeted this course because the existing assignment required students to find, evaluate, and use information for a clear purpose and as an entrée to research within their discipline. This collaboration will serve as the foundation for further IL integration throughout the curriculum at levels of increasing proficiency. Also, assessment data from the collaboration will now be used as evidence for student learning for NCATE accreditation. The success at the program level is largely attributed to the fact that we approached and addressed an existing student learning need. Rather than pursuing an independent agenda, we identified mutually shared goals, a key aspect of successful collaborations.

The effectiveness of this collaboration has the potential to initiate additional partnerships across campus. Other education faculty members have sought out collaborations with us upon seeing the success from this course. It has also served as a model for how collaborations could be strategically developed, particularly when librarians are in the preliminary stages of partnering with faculty. Having sample proposals, assignments, evaluation rubrics, and testimonials from other faculty makes it easier for faculty to see how the library can be an effective partner in promoting critical thinking and learning among students. Because EDU 280 meets the requirements toward the multicultural strand of the general education program at UNLV, these new student learning outcomes have been integrated into the campus-wide general education assessment plan.

Lessons Learned and Future Directions

As with other strategic efforts to incorporate IL into the curriculum, we encountered issues of sustainability. Matters of communication, instructor capacity, and accountability proved to be areas that needed continual attention. In terms of communication challenges, we felt that faculty communication often reflected a view of our partnership as a cooperative effort rather than a true collaboration. We regularly had to reiterate and demonstrate aspects of effective collaboration such as shared goals, equal standing, and joint responsibility to keep this at a collaborative level.

Another communication challenge was due to the nature of course we selected as a point of entry. Required courses are often taught by a mix of faculty and part-time instructors. That meant we needed to reintroduce and retrain new instructors on a periodic basis. We dealt with this challenge by meeting regularly with the instructional team before, during, and after the term to discuss and evaluate the process and student learning. We also created a visual timeline outlining the timeframe and roles and responsibilities of the instructors, librarians, and students. A possible solution to the turnover challenge is to develop more extensive online learning objects that would replace certain portions of the library instruction sessions (e.g. demonstrations of searches). This would allow more focus on sophisticated search strategies or evaluation of resources. This reduction of library instruction time with students would allow for increased librarian contact with instructors in order to build their capacity to teach IL skills and concepts. Another solution would be to make implementation of the instructional materials more transparent to the instructors through increased documentation. For example, we could offer online curriculum outline, documents explaining the origin of the project, supplemental materials, and instructional guidelines for how to incorporate the IL-related activities. Additionally we could create an online menu of instructional activities that could be used to address particular student knowledge or skills gaps which instructors are encountering. This strategy could also address reaching distance education sections of the course.

Instructor capacity proved to be a challenge throughout the collaboration. Familiarity with IL competencies, knowledge about library resources and search strategies, and awareness of how working relationships with librarians function varied. For example, some of the course instructors were uncomfortable teaching the concept map assignment. To address this, we offered to facilitate the learning activity with the course instructor present. The goal of this was for the instructor to gain confidence in teaching these skills in subsequent semesters. In the fledgling stages of this collaboration, we committed to be flexible by adapting our working style, time

commitments, and instructional materials to meet the needs of individual instructors. Building instructor capacity is also tied to shared accountability for assessment of student learning, which has been an ongoing negotiation in this collaboration. Feedback on how students are learning IL concepts is critical to refining instructional efforts, which is why we are currently taking primary responsibility for evaluating the source table assignment. Ultimately, we will transition this assessment to course instructors once the instruction is stabilized and the instructors have the capacity to effectively evaluate IL competencies.

For many of the students, this may be their first encounter with inquiry into diversity, and because they are able to choose their own topics of inquiry, they are often emotionally engaged. Research studies have focused on the arousal dimension of emotion as a critical factor contributing to enhanced memory and suggest a complex relationship between affect and retention (Bradley, Greenwald, Petry & Lang 1992; Christianson & Loftus 1990; Hamann 2001; Schacter 1996). We would like to further investigate the implications of teaching IL concepts within an emotionally-charged, or engaging, context.

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